

Report No. BC/MB/02.25.04/2.

Geo-Environmental Report (Tier 2): Land at Abergarwed Farm.

Prepared on behalf of:

Absolute Scaffolding

By:



Copyright.

The copyright relating to this report and the plans and documents therein contained, which have been prepared by Blandford Consulting, is owned by them exclusively, and no such report, plan or document may be reproduced, published or adapted without their written consent. Complete or partial copies may be distributed by the client to facilitate discussions and matters relating to its commission. This report has been researched, prepared and compiled in the context of the purpose stated herein and must not be used in a different context.

BLANDFORD CONSULTING

**HEDD-FAN, 5 PONTSARN CLOSE, PONTSARN, MERTHYR TYDFIL,
SOUTH WALES, CF48 2TW.
TEL: 01443 693353.
EMAIL: SALES@BLANDFORDCONSULTING.COM
WWW.BLANDFORDCONSULTING.COM**

Liability.

Blandford Consulting does not accept any liability other than arising out of the information that forms the basis of this report.

Geo-Environmental Report (Tier 2): Land at Abergarwed Farm.

Contents.

	Page:
1. Introduction	1
2. Brief Description of the Site	2
3. Geology of the Site	2
4. Environmental Issues	3
5. Mining History	3
6. Risk Assessment – Environmental (Tier 1)	5
7. Site Investigation	8
8. Aggressive Chemical Attack	14
9. Discussion and Recommendations	15
10. Qualifications of Authors of Report	17

List of Plans

Drawing No:		Scale:
<i>BC/MB/02.25.04.01.</i>	<i>General Location Plan.</i>	<i>1:50,000.</i>
<i>BC/MB/02.25.04.02.</i>	<i>Geology Plan.</i>	<i>1:10,560.</i>
<i>BC/MB/02.25.04.03.</i>	<i>Detailed Location Plan.</i>	<i>See Plan.</i>
<i>BC/MB/02.25.04.12.</i>	<i>Environmental Review Plan.</i>	<i>1:10,000.</i>
<i>BC/MB/02.25.04.13.</i>	<i>Site Investigation Plan (Current Surface Features).</i>	<i>1:1,250.</i>
<i>BC/MB/02.25.04.14.</i>	<i>Site Investigation Plan (1918 Surface Features).</i>	<i>1:1,250.</i>

Appendices

Appendix I: Geotechnical Logs and Photographs of Window Sampler Probeholes.

Appendix II: Copy of Laboratory Test Results.

Geo-Environmental Report (Tier 2): Land at Abergarwed Farm.

1 Introduction

This report has been prepared on behalf of our client:

*Absolute Scaffolding,
C/o Carl Hendy,
The Coach House,
3 Hill Road,
Neath Abbey,
Neath,
SA10 7NR*

and relates to the above parcel of land at Abergarwed Farm where it is proposed to construct a storage building. The earlier Geo-Environmental Report (Tier 1) prepared for the development identified a risk of contamination being present in the soils as a result of previous uses of the land and recommended intrusive site investigation to assess the risk in greater detail. This report discusses the findings of the intrusive investigation carried out on the land.

The following sources of data were used in the compilation of this report:

- i) The findings of the 'Geo-Environmental Report (Tier 1): Land at Abergarwed Farm', reference no. BC/MB/02.25.04, published by Blandford Consulting;*
- ii) The findings of the intrusive site investigation undertaken at the Site and*
- iii) The archive records of Blandford Consulting.*

The findings of this report are necessarily based upon the data used in its compilation and may be amended in the future in the light of additional material information. The report must only be used in its entirety for its stated purpose.

/Cont....

2 Brief Description of the Site

The plot of land where it is proposed to construct the storage facility, 'the Site' is located in a rural area and is situated on the floor of the Neath Valley, approximately 11km east of the commercial centre of Neath and 7.5m south-west of the centre of Glyn Neath (see Figure 1 and *General Location Plan, drawing no. BC/MB/02.25.04.01*). The Site is located at the eastern fringes of Abergarwed and close to the River Neath and is largely surrounded by a mixture of woodland and agricultural enclosures. The Site is irregular in outline and the proposed storage building has dimensions of approximately 30m by 20m; the planning application site occupies an area of approximately 1.18 hectares within the Site, all of which is fairly level at an elevation of approximately 22m aod (see Figure 1 and *Detailed Location Plan, drawing no. BC/MB/02.25.04.03*).

Figure 1
Aerial View of Site



3 Geology of the Site

The earlier Tier 1 report identified that the Site is situated towards the northern margins of the former South Wales Coalfield and is underlain at shallow depths by strata that sits astride

/Cont....

the boundary between the Upper and Middle Coal Measures. There are no coal seams underlying the Site at shallow depths that are thick enough to have supported underground mining operations. The report also identified that the Site is not affected by any faulting and has on it Made Ground overlying superficial deposits. The Site is not affected by landslip conditions.

4 Environmental Issues

The Tier 1 report identified that no part of the Site lies within an area designated as having a sensitive land use, including designated landscape areas (see *Environmental Review Plan*, drawing no. BC/MB/02.25.04.12).

There are no Control of Major Incident Sites (COMAH), explosive sites, Notification of Installations Handling Hazardous Substances status (NIHHS) or planning hazardous substance consents within 250m of the Site. Most of the Site lies within an area of potentially infilled land (non-water), and a large area of potentially infilled land (non-water) lies immediately to the south.

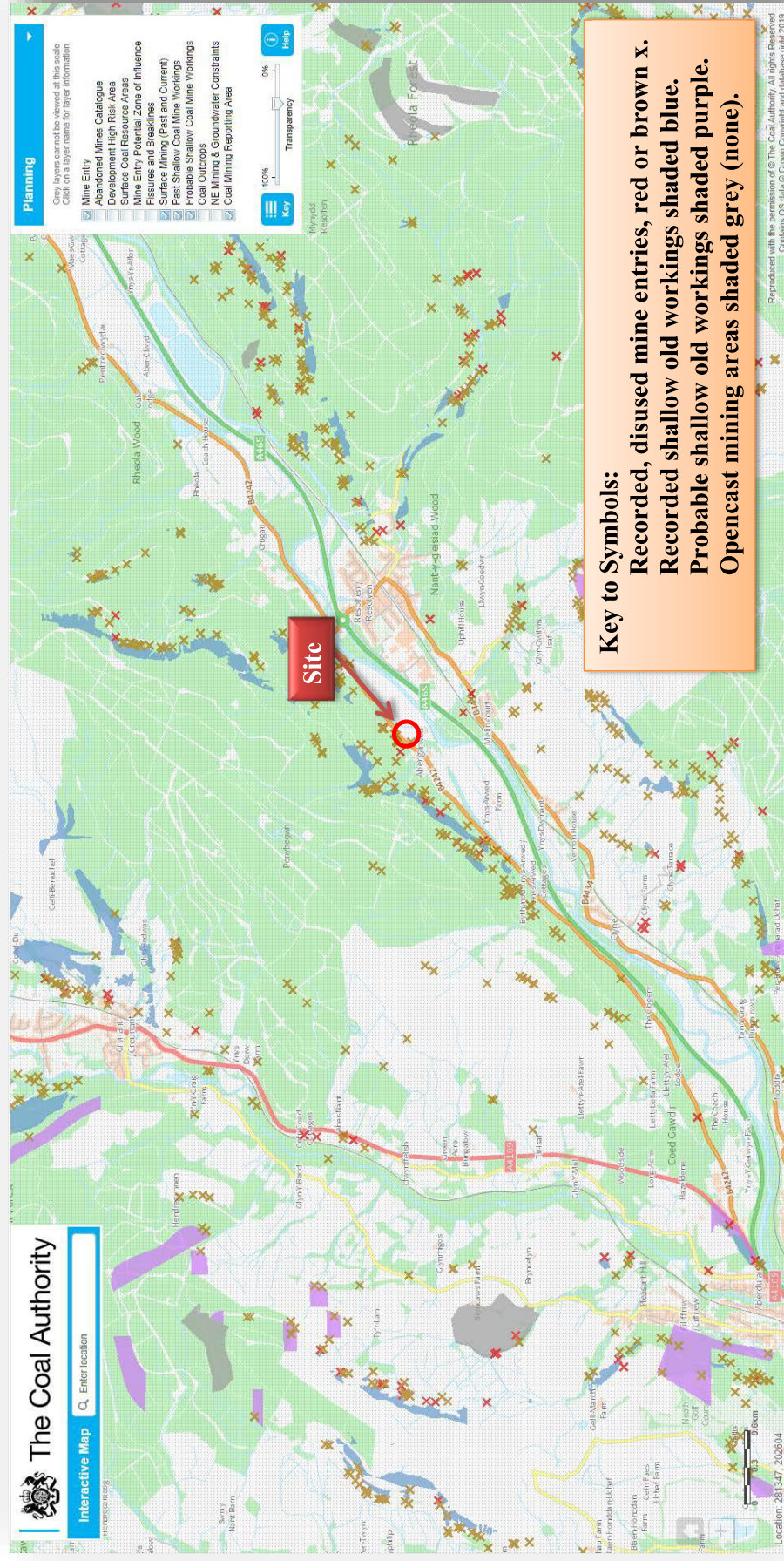
5 Mining History

The Tier 1 report identified that:

-  The Site lies within an area that has been subject to fairly extensive coal mining operations dating back to the nineteenth century.
-  The Coal Authority's interactive on-line map also shows that there are no recorded old workings underlying the Site, shallow or otherwise (see Figure 3).
-  The Coal Authority's mining report identifies that the Site is not affected by any underground mining.
-  The Coal Authority's mining report identifies that there is only one recorded mine entry within the confines of the land holding or within 20m of it.

/Cont....

Figure 3
Print-out of The Coal Authority's Interactive Map
 (Accessed 13th February 2025)



/Cont....

- ✚ There are no active coal mines in the locality, either deep mines or opencast.
- ✚ The Site has not previously been part of an opencast coal site.

6 Risk Assessment – Environmental, Tier 1

6.1 Conceptual Model, Environmental

A conceptual model (see chart below) was developed in order to provide a basis for the Risk Assessment; it was based on the source-pathway-receptor approach. There are a few recorded industrial uses of the Site that could present a source of contamination of the soils therein; namely the tramway line, sidings and colliery spoil that was on the land and also the surface of the Ynys-arwed Colliery in the earlier part of the 20th Century.

6.2 Hydrology and Hydrogeology

The superficial deposits on the Site are classed as high vulnerability Secondary A and the bedrock high vulnerability Secondary A aquifer. The superficial deposits on the Site are of river alluvium.

6.3 Contaminated Soils

Whilst there are identified sources of potential contamination, the nature of the development can be categorised as ‘Commercial’, thereby reducing the potential for interaction between a recognised source and pathway. The use of the Site as a storage unit will prevent contact between end-users and the original soils; a hard surface will be present, whether it is concrete for foundations or tarmac for road/parking, thereby removing any significant pathway between source and receptor.

The Site is already used for commercial purposes and this development of part of the Site will not increase any risks presented to end-users in relation to contaminated soils. The nature of the proposed development will only allow for sensitive end-users to use the Site for short periods of time and infrequently: it is therefore concluded that there is extremely

/Cont....

low potential for either chronic or acute exposure to any contaminants that may or may not be present in the soils therein. During the construction phase workers may come into contact with the soils and so it is essential that they are made aware of the findings of this report and use the appropriate PPE at all times where necessary.

Conceptual Model

Source	Pathway/ Linkage	Receptor	Probability & Consequence	Risk
Soil Tramway Land, sidings, Made Ground/ Colliery Surface	Ingestion/ Dermal Contact	Future on-site users (commercial)	Unlikely/negligible	Low
		Construction workers	Unlikely/negligible	Low Assumes the use of PPE
		Maintenance workers		
		Adjacent commercial/ residential land users	Unlikely/negligible	Low
	Permeation	Subsurface plastic water pipes	Unlikely/negligible	Low
	Vertical Groundwater Migration	Minor aquifer	Unlikely/negligible	Low
Gas Ground gas from infilled canal with unknown material	Horizontal movement through bedrock/soils	Future on-site users (commercial)	Unlikely/negligible	Extremely unlikely to be putrescible material therefore low risk; <i>this should be confirmed with trial pits</i>
Mine Gas Nearby mine entries	No pathway	Future on-site users (commercial)	Unlikely/negligible	Low

Around the 1918 period the Site was occupied with sidings associated with the Ynys-arwed Colliery, creating the possibility that reprofiling of the land used colliery waste from the colliery. The colliery mined the No. 2 Rhondda Seam, a coal seam that has a relatively high sulphur content. Any colliery spoil or spillages associated with colliery may pose a risk of aggressive attack on buried concrete and services.

/Cont....

6.4 Landfill Gases

The Neath Canal was partially in-filled during the latter part of the 20th Century; it is not known what material was used in this process.

Regarding the areas of potentially infilled land (non-water) within a 250m radius of the Site. CIRIA C665 Table 7.1 classes the hazard as low for an off -site landfill (methane and carbon dioxide) more than 50m distant from the Site. Moreover, the infilled area is likely to be filled with colliery spoil from the nearby New Gored Merthyr Colliery, a common practice where very low-cost material has been freely available, so is extremely unlikely to have putrescible material within it. It is therefore considered that no further action needs to be taken in the respect of ground gases.

6.5 Radon Gas

An assessment of the risk from Radon gas has been carried out by obtaining from the British Geological Survey a Radon report. The report identifies the Site as being within an area that is not affected by Radon; the appropriate response for building control purposes is NONE.

6.6 Mine Gases

An assessment of the risk from mine gases has been carried out based on an assessment of geological and mining data that is available in the public domain and broadly following the guidance offered in CL:AIRE. The Tier 1 assessment identified that there are no recorded mine workings in the vicinity of the Site, only 1 remote disused mine entry that poses no risk as a consequence of there being no preferential pathway between it and the Site, and no nearby opencast workings. Figure 13.1 in the CL:ARE guidance is not to be followed blindly: the risk assessment is to be carried out by an assessor applying their professional judgement. Based on the above mining history, the Site is assessed as having a 'low' risk from mine gases, satisfying the first set of parameters in Figure 13.1, a situation that requires no further assessment.

/Cont....

7 Site Investigation

7.1 Site Investigation Programme

A programme of twelve window sampler probe holes were drilled on the Site in order to examine in detail the soil profile and to collect soil samples for laboratory analysis.

Table 1
Details of Soil Sampling

Probehole	Sample No	Depth (mBGL)	Chemical Test
WS1	S26	0.20	Arsenic Cadmium Chromium (hexavalent) Copper, Lead, Mercury pH, Nickel Selenium Zinc, TPH PAH (speciated). <i>See laboratory results for full schedule</i>
	S27	2.00	
WS2	S24	0.40	
	S25	2.50	
WS3	S16	0.20	
	S17	0.70	
WS4	S21	0.30	
	S22	1.00	
	S23	2.00	
WS5	S18	0.50	
	S19	1.10	
	S20	1.50	
WS6	S14	0.30	
	S15	0.70	
WS7	S28	0.60	
	S29	2.85	
WS8	S10	0.60	
	S11	1.20	
	S12	1.70	
WS9	S13	0.60	
WS10	S7	0.40	
	S8	1.20	
	S9	1.80	
WS11	S1	0.40	
	S2	1.00	
	S3	2.00	
WS12	S4	0.50	
	S5	1.10	
	S6	1.50	

The locations of the probeholes were designed to both comprehensively cover the Site and to assess identified features, the infilled canal, former railway sidings and the former coal washery. The locations of the probeholes are shown on the *Site Investigation Plan*

/Cont....

(Current Surface Features) and the Site Investigation Plan (1918 Surface Features), drawing nos. BC/MB/02.25.04.13 and BC/MB/02.25.04.14. Geotechnical logs and photographs of the probeholes are included at Appendix I.

The probeholes investigation and logging was conducted in accordance with Eurocode 7 (Parts 1 & 2) and carried out in general accordance with BS 5930: 2015: Code of practice for site investigations British Standards Institution, BS EN ISO 14688-1:2002+A1: 2013: Geotechnical investigation and testing - Identification and classification of soil - Part 1 Identification and description. British Standards Institution and BS EN ISO 14688-2:2004+A1: 2013: Geotechnical investigation and testing - Identification and classification of soil - Part 2 Principles for a classification. British Standards Institution.

Soil samples were collected from the probeholes and despatched to a suitably accredited laboratory for testing. Sample tubs and pots were filled to capacity, sealed and placed in a cold box for despatch (see Table 1 for details). The testing methodology is described within the test certificate contained in Appendix II to this report.

7.2 The Findings of the Probeholes

The following soils and bedrock were encountered in the probeholes.

TOPSOIL was encountered only in Probehole WS12, where it was found to be comprised of loose, gravelly sand, the gravel is fine and medium sub-angular sandstone. It was found to be 0.25m thick.

Cement was encountered only in Probehole WS7, it was recovered as loose light grey sand and found to be 0.25m thick.

Made Ground 1 was encountered only in Probehole WS12 where it was found to be comprised of compact, light grey, slightly clayey sandy, fine medium and coarse angular, sub-angular, sub-rounded and rounded GRAVEL and COBBLE of grey sandstone with brick fragment. It was found to be 0.95m thick.

/Cont....

Table 2
Conceptual Soil and Bedrock Model: Thicknesses (m)

Stratum	WS1	WS2	WS3	WS4	WS5	WS6	WS7	WS8
Total Depth	3.00	3.00	1.80	3.00	3.00	3.00	3.00	3.00
Topsoil	-	-	-	-	-	-	-	-
Cement	-	-	-	-	-	-	0.25	-
Made Ground 1	-	-	-	-	-	-	-	-
Made Ground 2	2.00	2.45	>1.80	>3.00	1.95	>3.00	-	1.60
Made Ground 3	-	-	-	-	>1.05	-	2.90	>1.40
Boulder Clay	0.55	>0.55	-	-	-	-	>0.10	-
Bedrock (Coal)	>0.45	-	-	-	-	-	-	-

Stratum	WS9	WS10	WS11	WS12
Total Depth	1.00	3.00	3.00	1.80
Topsoil	-	-	-	0.25
Cement	-	-	-	-
Made Ground 1	-	-	-	0.95
Made Ground 2	>1.00	2.00	0.85	-
Made Ground 3	-	>1.00	1.00	-
Boulder Clay	-	-	>1.15	>0.60
Bedrock (Coal)	-	-	-	-

Made Ground 2 was encountered in all the probeholes with the exception of Probeholes WS7 and WS12. It was found to be comprised of compact, very dark brown, slightly clayey sandy, fine medium and coarse angular, sub-angular, sub-rounded and rounded GRAVEL and COBBLE of grey sandstone, in one case with a small brick fragment. Where the full thickness was proved, it was found to vary between 0.85m and 2.45m thick.

Anecdotally, the Site was levelled using river deposits recovered during the construction of the dualling of the nearby A465(T). The nature of the Made Ground is consistent with river deposits that might have been recovered during engineering works.

/Cont....

Made Ground 3 was encountered in Probeholes WS5, WS7, WS8, WS10 and WS11. It was found to be comprised of soft dark grey and dark brown gravelly CLAY, the gravel is fine medium and coarse angular to sub-angular grey sandstone and brick. Made Ground 3 variously contained coal sand throughout, occasional coal sand and occasional wood fragments. Where the full thickness was proved, it was found to vary between 1.00m and 2.90m thick. The soil is consistent with the former use of the land as a coal washery and railway sidings.

Boulder Clay was encountered in Probeholes WS1, WS2, WS7, WS11 and WS12, it was found to be comprised of soft to firm brown and dark brown, gravelly CLAY, the gravel is fine and medium, sub-angular to angular grey sandstone. Coal sand was present in thin lenses in WS2 and WS12. The probeholes proved a maximum thickness of 1.15m, where the base of the Boulder Clay was proved in WS1 the thickness was found to be 0.55m.

Bedrock (Coal), coal measures was encountered only in WS1, where bright, friable coal was encountered, the probehole proved 0.45m of coal, the base of the seam was not reached.

Groundwater: No phreatic surface was encountered in the probeholes but limited moist conditions were encountered in Probeholes WS6 and in WS10, they are considered to be perched moist pockets in the Made Ground.

7.3 Contaminated Soils Assessment

Soil samples were collected and sent to a laboratory and tested for signs of contamination. As a result of the available data for the Site and the surrounding area the suite of determinants was chosen to include metals, inorganics, organics and asbestos. The concentrations found to be present in the soils were compared directly to the LQM/CIEH S4ULs for Human Health. The results are shown in the tables below, where all values shown are in mg/kg unless stated otherwise. The laboratory test results are included at Appendix II to this report.

/Cont....

Table 3
Metal/Inorganic Laboratory Testing Results
Commercial

	Arsenic	Cadmium	Chromium (Hex)	Copper	Lead	Mercury	Nickel	Selenium	Zinc
Min/Max	2 147	<0.5 1.7	<1	4 1300	13 156	<0.17 1.02	7 42	<1 3	44 357
Guideline Value	640	410	49	68000	2300	1100	980	12000	730000
Guideline Value Source	<i>LQM/CIEH 1-6% SOM</i>								

Values expressed are mg/kg

All of the metal/inorganic compounds are present at concentrations in the soils that do not breach any guideline value.

Table 4(a)
PAH Laboratory Testing Results
Commercial

	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Min/Max	<0.01 0.61	<0.01 0.31	<0.02 1.09	<0.04 3.99	<0.04 3.24	<0.05 3.64	<0.05 3.88	<0.07 1.01
Guideline Value	75000	76000	520000	170	35	44	3900	1200
Guideline Value Source	<i>LQM/CIEH 1-6% SOM</i>							

Values expressed are mg/kg

/Cont....

Table 4(b)
PAH Laboratory Testing Results
Commercial

	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Min/Max	<0.06 3.52	<0.04 1.09	<0.08 5.88	<0.01 0.62	<0.03 3.98	<0.03 1.04	<0.03 5.14	<0.07 7.17
Guideline Value	350	3.5	23000	60000	510	100	22000	54000
Guideline Value Source	LQM/CIEH 1-6% SOM							

Values expressed are mg/kg

All of the individual PAHs are present at concentrations in the soils that do not breach any guideline value.

Table 5(a)
Aliphatic Hydrocarbon Laboratory Testing Results
Commercial

	Ali C5 – C6	Ali C6 – C8	Ali C8 – C10	Ali C10 – C12	Ali C12 – C16	Ali C16 – C21	Ali C21 – C35
Min/Max	<0.01	<0.01	<1 <10	<1 <10	<1 26	<1 64	<1 988
Guideline Value	2400	5200	1300	6000	42000	140000	140000
Guideline Value Source	LQM/CIEH 1-6% SOM						

Values expressed are mg/kg

/Cont....

Table 6
Aromatic Hydrocarbon Laboratory Testing Results
Commercial

	Aro C5 – C7	Aro C7 – C8	Aro C8 – C10	Aro C10 – C12	Aro C12 – C16	Aro C16 – C21	Aro C21 – C35
Min/Max	<0.01	<0.01	<1 3	<1 23	<1 68	<1 94	<1 413
Guideline Value	15000	33000	2000	11000	35000	28000	28000
Guideline Value Source	LQM/CIEH 1-6% SOM						

Values expressed are mg/kg

All of the individual aromatic/aliphatic hydrocarbon fractions are present at concentrations in the soils that do not breach any guideline value.

7.4 Water Resources

The Site is not within a designated Drinking Water Safeguard Zone nor within a Groundwater Source Protection Zone. No groundwater was encountered in the site investigation and no evidence was found of downward percolation of surface water through the soils and down to bedrock. The site investigation found no evidence of a pathway from the soils to any groundwater resource.

8 Aggressive Chemical Attack

The soil samples collected from the site investigation were subjected to laboratory tests to determine the aggressive chemical environment for concrete (see Table 8 below). The concrete class has been determined from the “BRE Special Digest 1: Concrete in Aggressive Ground, Part 1: Assessing the Aggressive Chemical Environment”. The Site has been developed previously and so is classed as a brownfield site for the purpose of this assessment.

/Cont....

The test results identified the following:

pH range:	6.48 – 9.10
Sulphate (water soluble 2:1 extract):	<001 – 0.8

Of the twenty-nine soil samples tested, only one had a pH value of less than 6.50 (6.48), the result was from a sample taken at a depth of 2.50m, much deeper than a foundation would extend to: the sample has been excluded from the assessment. From Table C2 of the digest the Design Soil Class has been determined to be Class DS-1. When groundwater mobility, soil type, provenance and the lowest pH from the laboratory tests are all taken into consideration the Aggressive Chemical Environment for Concrete Classification (ACEC) is defined as Class AC-1s.

There are no buried statutory services at the Site, consequently, we have not carried out any assessment in respect of the potential impact of the soil conditions on buried services. If, however, it is planned to introduce a mains water supply to the Site, a separate risk assessment should be carried out before any services are installed, and the individual service providers/installers should be made aware of this report and its findings.

9 Discussion and Recommendations

9.1 Contaminated Soils

The laboratory results show that the concentrations of the contaminants tested for, all fall below the relative guideline values and are therefore considered not to pose a significant risk of harm to any sensitive receptor given that there is no identified source of contamination. No asbestos material was encountered during the site investigation. It is considered that no further action needs to be taken in this respect.

If material is to be removed from the Site as part of the redevelopment, a copy of this report should be shown to all contractors involved.

/Cont....

9.2 Mine Gases

A previous assessment of the risk from mine gases following the CL:AIRE guidance found the risk from mine gases to be 'low,' requiring no further action.

Conceptual Model Revised

Source	Pathway/ Linkage	Receptor	Probability & Consequence	Risk
Soil Tramway Land, sidings, Made Ground/ Colliery Surface <i>None present</i>	Ingestion/ Dermal Contact	Future on-site users (commercial)	Unlikely/negligible	Extremely Low
		Construction workers	Unlikely/negligible	Extremely Low Assumes the use of PPE
		Maintenance workers		
		Adjacent commercial land users	Unlikely/negligible	Extremely Low
	Permeation	Subsurface plastic water pipes	Unlikely/negligible	Extremely Low
Gas Ground gas from infilled canal with unknown material <i>None present</i>	Vertical Groundwater Migration	Minor aquifer	Unlikely/negligible	Extremely Low
	Horizontal movement through bedrock/soils	Future on-site users (commercial)	Unlikely/negligible	Extremely Low
Mine Gas Nearby mine entries	No pathway	Future on-site users (commercial)	Unlikely/negligible	Low

9.3 Water Resources

The geology beneath the Site, when taken in context with the hydrology and hydrogeology, means that there is only an extremely limited potential for any contamination to reach a sensitive water receptor. The site investigation identified the absence of a shallow phreatic surface and found the soil to be Boulder Clay, which tends

/Cont....

to inhibit the downward percolation of rainwater. It is considered that there is no significant risk in this respect as there is no source of contamination, nor any significant pathway, therefore no further action needs to be taken in this respect.

10 Qualifications of Authors of the Report

Dr Malcolm Blandford is a Consultant Geologist and Fellow of the Geological Society of London and has over 40 years' experience of studying the geology of and mining operations across South Wales. Dr Blandford worked in the coal mining industry for 16 years before entering private practice where, amongst other matters, he was responsible for the exploration for opencast sites, colliery extensions and proposed new collieries, for assessing methane emissions from coal seams, methane transmission through strata and the potential for in situ coal seam combustion. Dr Blandford has advised on Coal Bed Methane licence applications and has extensive experience of exploration practice, of interpreting coal mining records, and of assessing the occurrence and movement of coal mine gases. Dr Blandford has variously undertaken and/or project managed a large number of site investigation programmes and environmental assessments.

David Blandford has a Master's degree in Environmental Risk Management and a Bachelor's degree in applied industrial science with particular regard to the environmental implications of the paper making processes. Since graduating with his Master's degree, David Blandford has been employed full time undertaking environmental assessments and the related site investigation works.



**David Blandford,
Environmental Consultant.**



**Dr Malcolm Blandford,
Consultant Geologist.**

Report Date 18th June 2025.

***Blandford Consulting,
Consultant Geologists and Geotechnical Engineers,
Hedd-fan, 5 Pontsarn Close, Pontsarn, Merthyr Tydfil, CF48 2TW.
Tel. No. (01443) 693353. Fax. No. (01443) 693351.***

PLANS



HEDD-FAN,
5 PONTSARN CLOSE,
PONTSARN,
MERTHYR TYDFIL,
SOUTH WALES,
CF48 2TW.

BLANDFORD CONSULTING

Geologists Working With The Environment....

Study on Land at Abergarwed Farm, Abergarwed.

General Location Plan.

Plan Scale: 1:50,000.

Key to Symbols:



Approximate Position of Site.

Note:

North is at top of plan.

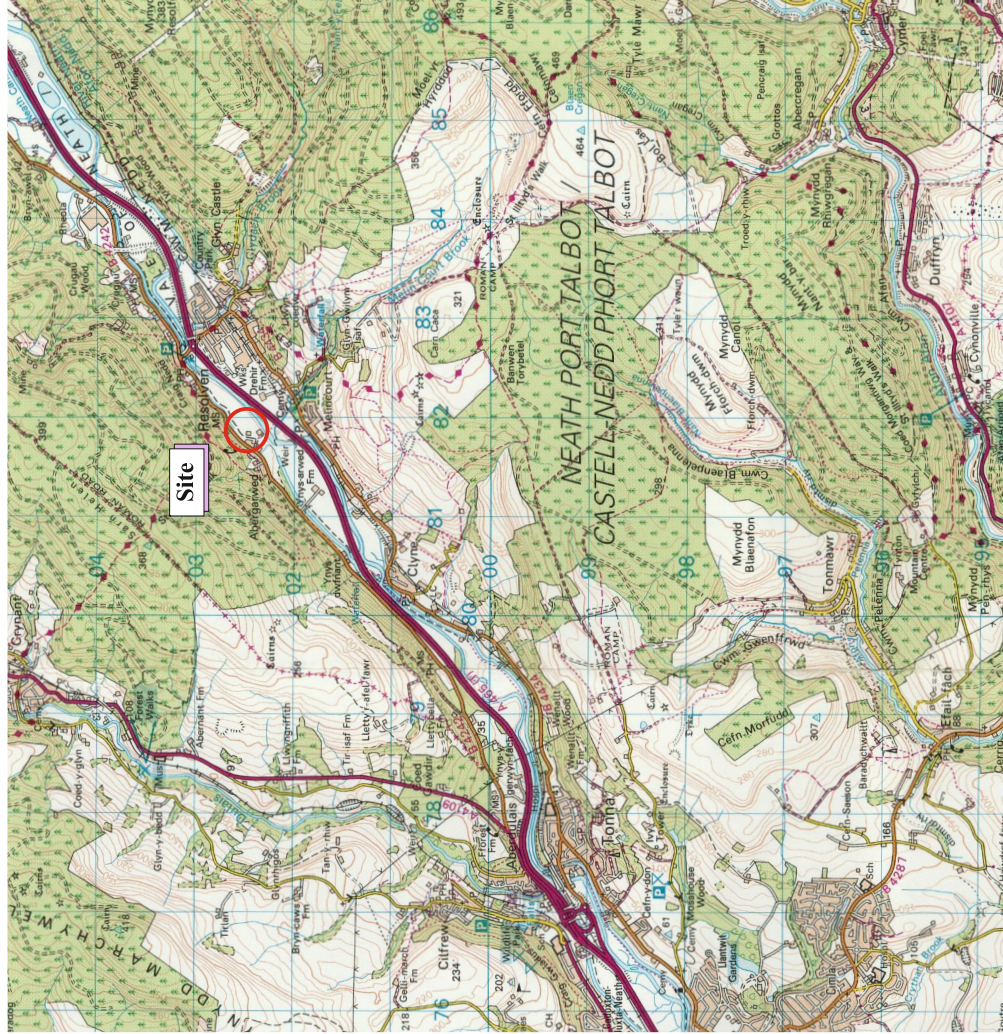
© Crown Copyright Reserved



THE ENTERPRISE CENTRE,
MERTHYR INDUSTRIAL PARK,
PENTREBACH,
SOUTH WALES,
CF48 4DR.

BLANDFORD CONSULTING

Drawing No: BC/MB/02.25.04.01.



Geology Plan.

Plan Scale: 1:10,560.

Key to Symbols:



Approximate Position of Site.

© Crown Copyright Reserved

THE ENTERPRISE CENTRE,
MERTHYR INDUSTRIAL PARK,
PENTREBACH,
MERTHYR TYDFIL,
SOUTH WALES,
CF48 4DR.

BLANDFORD **CONSULTING**

Drawing No: BC/MB/02.25.04.02.

Study on Land at Abergarwed Farm, Abergarwed.

Detailed Location Plan.

Plan Scale: See Plan.

Key to Symbols:



Approximate Position of Site.

Note: North is at top of plan.

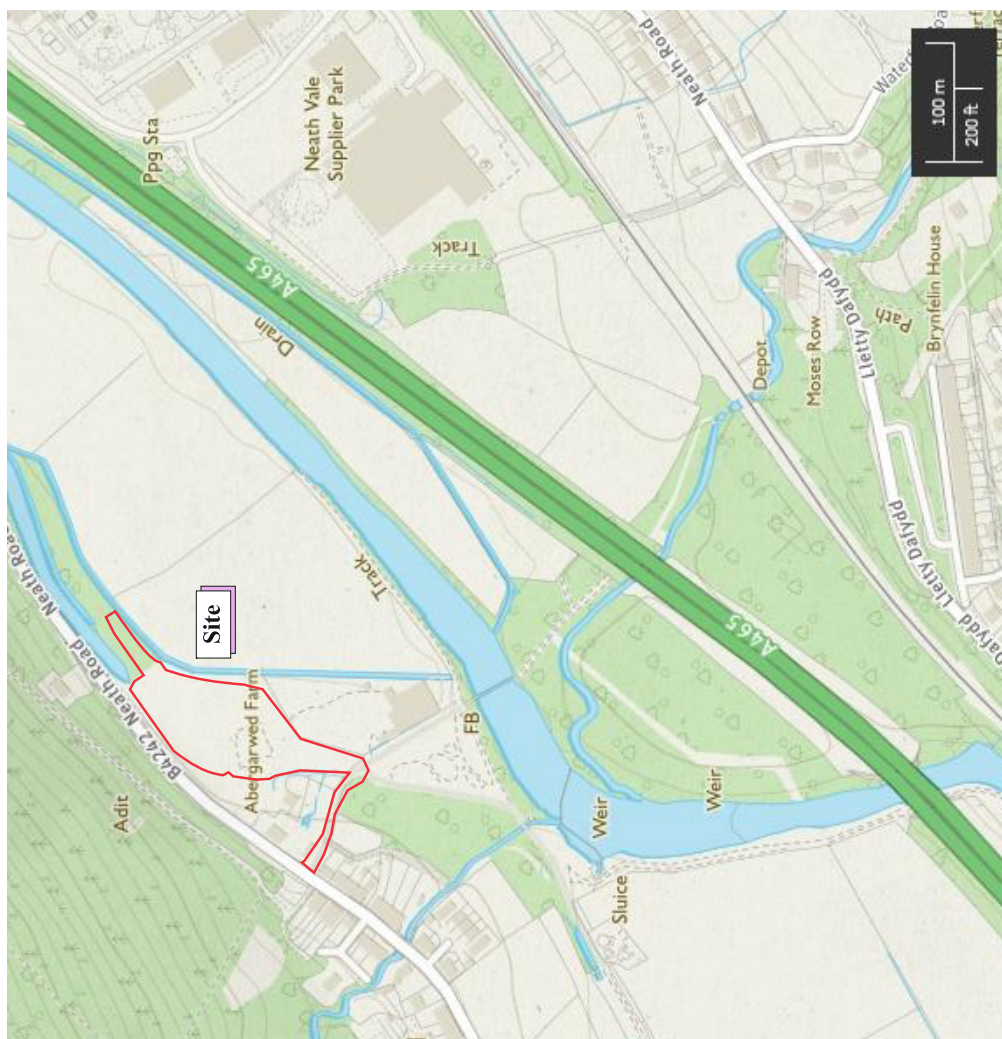
© Crown Copyright Reserved



THE ENTERPRISE CENTRE,
MERTHYR INDUSTRIAL PARK,
PENTREBACH,
MIDLETON ROAD,
SOUTH WALES,
CF48 4DR.

BLANDFORD CONSULTING

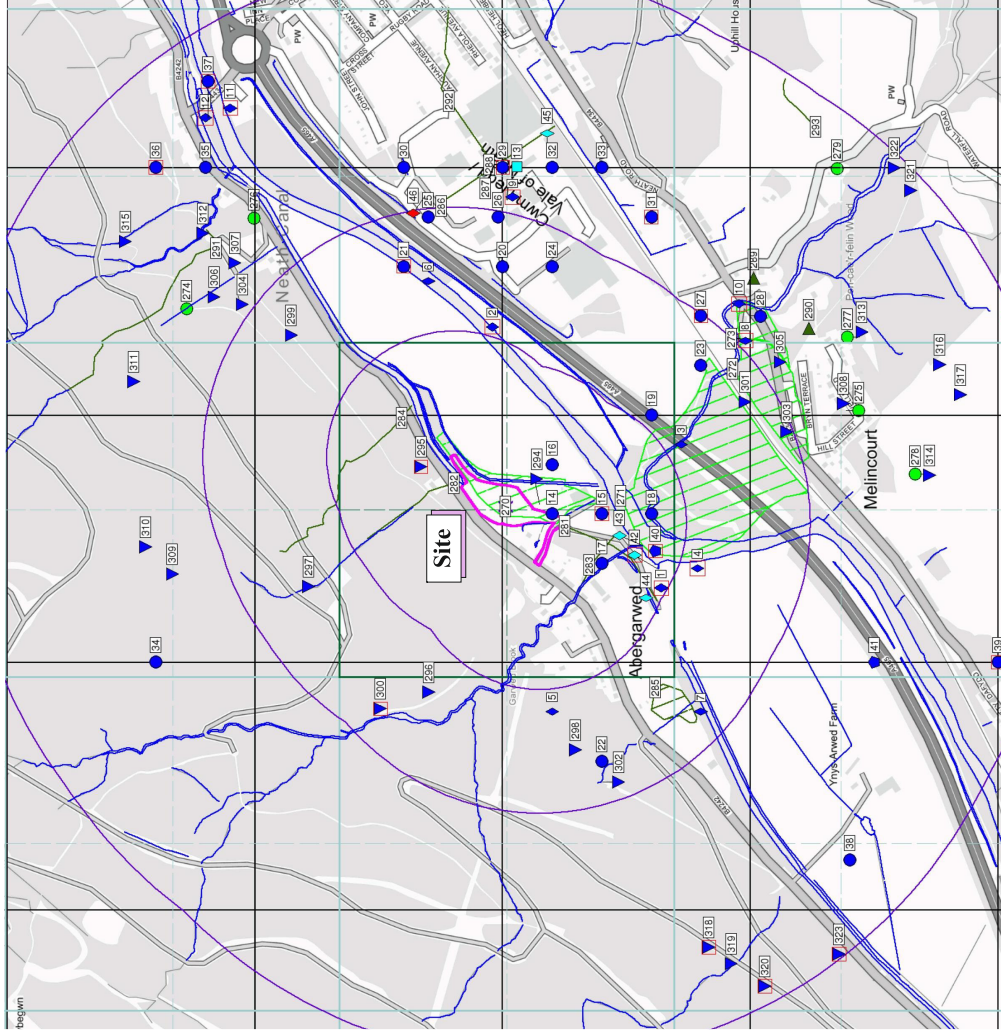
Drawing No: BC/MB/02.25.04.03.



Environmental Review Plan.

Key to Symbols:

• **Approximate Site Boundary.**



Data supplied by:

 **LANDMARK**
Information Group

BLANDFORD CONSULTING

Geologists Working With The Environment....

© Crown Copyright Reserved

Drawing No: BC/MB/02.25.04.12.

Study on Land at Abergarwed Farm, Abergarwed.

Site Investigation Plan (Current Surface Features).

Plan Scale: Approx. 1:1,250.

Key to Symbols:

— Site Investigation Boundary.

— Planning Application Boundary.

● Window Sample Hole Location.

Notes:

North is at top of plan.

Locations are approximate
and should not be scaled.

Data supplied by:

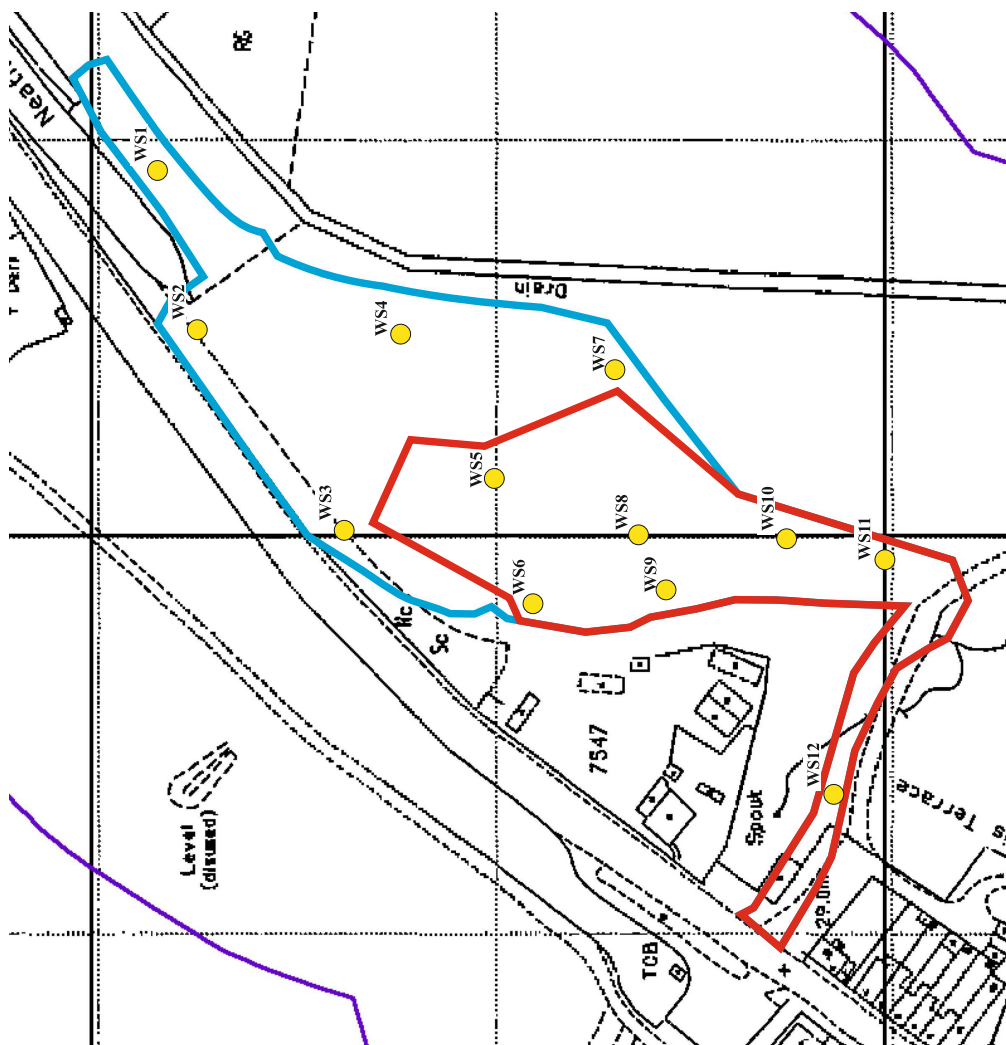


© Crown Copyright Reserved

THE ENTERPRISE CENTRE,
MERTHYR INDUSTRIAL PARK,
PENTREBACH,
SOUTH WALES,
CF48 4DR.

BLANDFORD CONSULTING

Drawing No: BC/MB/02.25.04.13.



Study on Land at Abergarwed Farm, Abergarwed.

Site Investigation Plan (1918 Surface Features).

Plan Scale: Approx. 1:1,250.

Key to Symbols:

- Site Investigation Boundary.
- Planning Application Boundary.
- Window Sample Hole Location.

Notes:

North is at top of plan.

Locations are approximate
and should not be scaled.

Data supplied by:



© Crown Copyright Reserved

THE ENTERPRISE CENTRE,
MERTHYR INDUSTRIAL PARK,
PENTREBACH,
SOMERSET ROAD,
SOUTH WALES,
CF48 4DR.

BLANDFORD CONSULTING

Drawing No: BC/MB/02.25.04.14.

