Pre Application Consultation Report

Glan Lash Mine Site Extension

May 2019



Bryn Bach Coal Limited

Glan Lash

Shand's Road

Bleanau

Llandybie

SA18 3NA

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1.0 Introduction

Bryn Bach Coal Ltd is applying to Carmarthenshire County Council for permission to mine by surface mining operations 110,000 tonnes of premium quality anthracite from the proposed Glan Lash Extension. The existing site was granted full planning permission by Carmarthenshire County Council on the 25/01/2012 permission No E/24681. This is a Pre- Application Consultation Report as required by The Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016.

The Extension covers 10.03 hectares of land to the north of the current Glan Lash Mine Site and is centred at E261560 N213900. The extension area can be found in a secluded area of land isolated from human habitation. The extension area is separated from the Waunfarlais Road by a topographical ridge that rises 14m above the proposed extension and then falls 19m to Waunfarlais Road. The settlement of Waunfarlais is 440m from the centre of the extension. Blaenau is 900m to the west of the extension and will be shielded by the existing overburden mound. The overburden mound will remain in situ until the restoration phase of the extension. To the south of the extension area is the existing site and washery complex. Llandybie is 840m to the north of the extension. Further visual and noise attenuation can be provided by the positioning of topsoil & subsoil mounds around the site boundary.

The proposed extension is a continuation of the current development and therefore the impacts on the environment and the amenity can be confidently assessed using data gathered during the operational phase of the current site. We have adjusted the site boundary of the proposed extension and excavation limits in order to mitigate the environmental impacts of the proposed extension and protect areas of important natural and built heritage. The extension will not require an increase in plant levels or production hours.

2.0 Public and Community Consultations

Bryn Bach Coal Ltd commenced communications with The Glan Lash Liaison Committee in 2015 regarding their intention to investigate the possibility of an extension to the existing site and the commissioning of a small drilling programme. The committee has been fully informed of all developments concerning the proposed extension at the regular Liaison Committee meetings.
The Liaison Committee which includes Llandybie & Blaenau Community Councillors, local Carmarthenshire County Councillors and local community representatives have all attended a site visit in which the existing operations were viewed and the proposed extension area was walked and discussed.
On the 28/03/19 the Liaison Committee members were issued with Schedule 1B Notices as community consultees under the Town and Country Planning (Development Management Procedure) (Wales)Order 2012.

The Llandybie Community Councillors attended a site visit in November 2018 in which the existing operations were viewed and the proposed extension area walked and discussed.

In November 2018 a leaflet drop was conducted which provided a brief overview of the extension proposal including location and working statement plans. This leaflet was delivered to 75 residential properties surrounding the proposed extension. It contained an open invitation to attend a site visit in order to view and discuss the existing and proposed operations and walk the proposed extension area.

The leaflet also offered the opportunity for anyone concerned about any potential health issues arising from the proposal to contact Environmental Compliance Ltd (ECL).

In order to achieve impartiality Bryn Bach Coal Ltd commissioned ECL to conduct a Health Impact Assessment to assess the potential impacts and any unintended consequences of the proposed extension on health and well-being. The Health Impact Assessment has been included alongside this Environmental Impact Assessment and forms part of the planning application to extend the existing operation in a northerly direction.

Public notices in Welsh & English have been posted at the following locations: - the Shand's and Blaenau road intersection, the site entrance on Shand's road and the Waun Hafog Road and Shand's road intersection. This took place on 25/03/2019.The notices invited members of the public to inspect copies of the proposed application, plans and supporting documents on line, visit www.brynbachcoal.co.uk The notice also informs the public that hard Copies of the Environmental Impact Assessment Non-Technical Summary are also available to view at the Post Office, Memorial Hall, Llandybie. SA18 3UR. Monday-Friday 9.00-17.00 & Saturday 9.00-13.00.

Anyone wishing to make representations regarding this proposed development could write to us by email extension@brynbachcoal.co.uk or by letter to Bryn Bach Coal Ltd, Glan Lash Mine Site, Shand's Road, Blaenau, Llandybie, SA18 3NA by the 30/04/2019.

All relevant Ownership Certificates under the Town and Country Planning (Development Management Procedure) Wales 2012 have been issued to the various land owners on the 25/03/2019.

3.0 Public and Community Responses

3.1Liaison Committee

The Liaison Committee has responded with a letter that supports the planning application to extend the existing mine site in a northerly direction. This letter can be found under Appendix B of this report.

3.2 Llandybie Community Council

The Llandybie Community Council has responded with a letter offering no objections and expressing their support for the proposed extension. This letter can be found under Appendix B of this report.

3.3 Public Responses

Since the posting of the Schedule 1B Public Notices the website statistics show 514 unique visitors have accessed the planning documentation. The planning documents have been downloaded a total of 275 times this has resulted in 1 public response and 2 letters of support from within the Coal Industry. A graph and table demonstrating the web site viewing statistics can be found under Appendix B of this report.

Issue -A response via email was received on the 10/04/19 from local resident Valerie Davies, requesting information regarding the archaeological investigation work in order to ascertain the existence of the Bryncoed Iron Age Fort.

Developers Response- Bryn Bach Coal Ltd confirmed on the 10/04/19 that the archaeological investigation scheme would be a condition of any planning permission and that it would be undertaken in year 3-4 of the development. The response and reply can be found under Appendix B of this report together with the letters of support from within the Coal Industry.

The Schedule 1B Public notice also informs the public that hard Copies of the Environmental Impact Assessment Non-Technical Summary were also available to view at the Post Office, Memorial Hall, Llandybie. SA18 3UR. Monday-Friday 9.00-17.00 & Saturday 9.00-13.00. Between the 25/03/19 and the 15/05/19 there was only 1 request for a copy of the Environmental Impact Assessment Non-Technical Summary. This request was from a resident of Ammanford Road Llandybie, there was no subsequent response.

4.0 Statutory Consultations and Responses

All of the statutory consultees have been issued with a Schedule 1C Notice. This notice comprises a formal request for a pre-application consultation response under article 2D of the Town and Country Planning (Development Management Procedure) Wales 2012.

Consultee	Issues raised	Developer Response	Remarks
Natural Resources Wales	Due to the close proximity of the existing and proposed development to the Afon Lash a Construction Environment Management Plan should be Conditioned and subsequently approved by Carmarthenshire County Council.	The developer is content for this issue to be covered by a Planning Condition.	A consultee response was received on the 30/4/19 and can be found under Appendix C.
	Geoscience- Concerns over the likelihood that the abandoned Ty Uchaf Colliery workings will contain water and therefore clarification is required as to how the water will be collected and treated prior to discharge.	James Associates was instructed to clarify the concerns raised by the NRW. In summary if there were to be an inflow of water from the old workings it would be a one-off event and be dealt with using normal site pumping practices. This event would not require an abstraction licence. The supplementary James Associates report can be found under Appendix C of this report.	
	Landscape- Concerns have been raised about the potential visual impact of the proposed northern extension from 3 points within the Brecon Beacons National Park. Photographic evidence has been requested from Myndd Isaf (4km away), Carreg Dwfn (5km away) and Tair Carn Isaf (7km away) from the northern limit of the proposed extension. The photographs should be taken in accordance with the Landscape Institute Advice Note 01/11.	DLG Ltd was commissioned to photograph and assess the potential visual impact from the 3 points within the National Park. In summary the visual impact of the existing development on the 3 viewpoints has been assessed as **negligible.** There is no significant change to the profile of the site during the working of the proposed extension therefore the visual impact assessment on these 3 viewpoints will remain **negligible.** This assessment can be found under Appendix C of this report. Both the James Associates Report and the DLG Ltd Assessment were submitted to the NRW on 19/6/19. The confirmation email can be found under Appendix C of this report.	
	Ecology- A habitat survey carried out by the CCW in 1994 recorded 0.8ha of M24 Mire Habitat which identified survey area as a possible candidate for a Site of Special Scientific Interest.	Pryce Consultant Ecologists were instructed to address the ecological issue raised in the NRW response. The report was sent to the NRW on the 2/9/19 and can be found under Appendix C of this report. In summary the Pryce Consultant Ecologists surveys of 2016 & 2017 did not find any Meadow Thistle (diagnostic species of M24 habitat) nor has it been found in any subsequent site visits. The conclusion is that the M24 habitat has considerably diminished and has transitioned towards M23 (rush pasture) and M25 (Potentilla erecta mire communities).	

	More detailed information on how the mitigation in the form of translocation will be carried out and its likely success and future management. Issue- The area of habitat suitable to support Marsh Fritillary Butterfly which is to be translocated will require an NRW licence and Ecological Management Plan.	In order to fully answer the above queries, we commissioned a further 2 reports. James Associates considered the effect of ground water and surface water on the woodland and the important M23 and M25 grassland habitats. A soil consultant was also instructed to compare the mineral and moisture content of the proposed translocation and receptor areas. These reports have been appended to the Pryce Consultant Ecologists Report which can be found under Appendix C of this report. In summary The Molina and Rush dominated grassland are a result of significant surface water flows flushing through the woodland into the above grassland areas. The improved enclosed fields are a result of human activity involving drainage ditches and boundary hedge banks. The topsoil and subsoil have essentially the same mineral composition across the site however the moisture content is dependent on the proximity of drainage ditches and human activity. The subsoil is a weathered derivative of the underlying glacial drift which occurs throughout the site and beyond. The area of habitat suitable to support Marsh Fritillary Butterfly will be 76% greater after translocation than the currently available habitat. A detailed Ecological Management Plan will be available before the commencement of site operations. This plan will ensure that any remaining M24 vegetation together with the M23 & M25 vegetation is maintained in a condition to conserve these vegetation communities. Low intensity grazing will ensure that the grassland communities will be in a more favourable condition to support Marsh Fritillaries.	
	Contact is recommended with the Local Authority Ecologist to determine whether further surveys/assessments are required to ascertain any provisions needed to avoid disturbance to Red Kites during the nesting season.	The Pryce Consultant Ecologists report agrees that we will consult and agree a course of action.	
	Impact of mine water discharge from the proposed site to ensure the integrity of controlled waters.	The developer has a current discharge permit; this consent will be maintained for the duration of the proposed extension and it should be noted that the developer has an excellent compliance record.	

	Produce a Construction Management Plan	This document will be prepared prior to the commencement of site operations.	
Carmarthenshire C.C- Environmental Health/Public Protection Dept	Dust: The existing Environmental Permits associated with both the mining and coal washing operations should be reviewed.	No response required; this is accepted by the developer.	A consultee response was received on the 12/04/19 and can be found under Appendix C.
	Dust monitoring stations should be set up in line with the recommendations within the Dust Assessment found under Appendix E of the Environmental Impact Assessment.	No response required and the developer is content for this issue to be covered by a Dust Control Condition.	A consultee response was received on the 17/04/19 from Ruth Thomas (Environmental Health Officer) Ruth Thomas confirmed on the 9/07/19 that the issues raised had been satisfactorily addressed. The emails and supplementary report can be found under Appendix C of this report.
	The above issues can be addressed by inclusion within a Dust Management Scheme that should be conditioned and subsequently approved by Carmarthenshire County Council.	No response required and the developer is content that all the issues can be adequately addressed within a Dust Management Scheme that can be conditioned and subsequently approved by Carmarthenshire County Council.	
	Noise: 5 technical issues were raised relating to the noise level calculations within the Noise Report prepared by Kevan Walton Associates.	Kevan Walton Associates were instructed to address the issues raised in the response. A supplementary report was submitted to Carmarthenshire CC on the 6th June 2019.	
Carmarthenshire C.C- Ecology Dept	After a Pre-Application Consultation site meeting further information was requested regarding how our application sits within the aims and objectives of the ecological sections within the Planning Policy Wales Edition 10. Concerns were also raised that the compensatory mitigation proposals regarding the 2.39ha of wet woodland could possibly result in a loss of habitat should the restoration of the wet woodland not be successful and that any mitigation measures should seek biodiversity enhancement and long-term net gain.	As a result of the concerns raised at the site meeting Bryn Bach Coal Ltd has successfully negotiated with the Glan Lash Mine Site land owner (Davies & Lumber Ltd) to provide an additional 2.39ha of wet pasture alongside the Afon Lash which can be planted up with locally native tree species to provide full mitigation for the wet woodland in a river corridor setting in addition to the reinstatement of the original 2.39ha of wet woodland during the restoration phase. The soil chemistry and moisture characteristics are very similar and certainly suitable to create a wet woodland. Pryce Consultant Ecologists have been instructed to present the additional wet woodland mitigation and assess how our application now sits with the ecological sections of the Planning Policy Wales Edition 10.	This detailed report can be found under Appendix C of this report.
Carmarthenshire CC Planning Department	After a Pre-Application Consultation site meeting further information was requested regarding the percentage sales split between Domestic and Industrial use of the anthracite produced from the existing Glan Lash Mine Site	An analysis of our sales figures from the existing Glan Lash Mine Site show a fall in domestic sales from 42% in 2103 to 25% in 2019. This has resulted in a corresponding rise in industrial sales from 58% in 2013 to 75% in 2019 driven by an increase in	A detailed analysis of the developer's response can be found under Appendix C of this report.

	and how this sits within the aims and objectives of the Planning Policy Wales Edition 10 described under section 5.10 paragraph 5.14.32.	demand from local filter media manufacturers. The industrial use of our production from the Glan Lash Site has been limited to supplying Ibstock Brick for use as a brick colourant and as a filter media to local manufacturers. It should be noted that neither of these uses involve the burning of our anthracite and therefore there are no emissions. It is anticipated that the current percentage uses will continue through the production phase of the proposed northern extension. In order to clarify how the proposed use of anthracite sits within the aims and objectives of the Planning Policy Wales Edition 10 paragraph 5.14.32, we instructed Donald Gray of Darwin Gray Solicitors to give his legal opinion. In summary two Supreme Court Judgements have been referred to and that a planning policy should not be interpreted like an Act of Parliament or a contract as they are intended to give a broad statement of principle. There are two major broad statements of principle concerning mineral development. 1) The Welsh Government wants to remove coal from energy/power generation and that it should be phased out by 2025. Any proposal for opencast, deep mine or colliery spoil disposal in which the coal is to be used for energy/power generation should not be permitted. 2) Although coal has predominately been used for energy/power generation coal has other specific uses. Some uses have been specified and that includes coal used for domestic use. Therefore, any proposal for opencast or a deep mine in which the coal is to be used for other specific industrial uses, including domestic use, then these proposals would need to be considered individually and the policies contained in MTAN 2: Coal applied.	
Carmarthenshire C.C- Landscape Dept	No Response	No response required	

Carmarthenshire C.C- Highways & Transport Dept	No Response	No response required	
Carmarthenshire C.C- Arboriculture Dept	No Response	No response required	
Carmarthenshire C.C- Contaminated Land Dept	No Response	No response required	
Dyfed Archaeological Trust	Bryncoed Iron Age Enclosure. An Archaeological Evaluation to be carried out in order to avoid potentially significant buried archaeology or to mitigate and preserve by record. This evaluation can be delayed until year 4 of the project and as such this evaluation can be conditioned rather than pre-determined.	No response required and the developer is content for this issue to be covered by an Archaeological Condition.	A consultee response was received on the 05/04/19 and can be found under Appendix C of this report.
	WW11 Pillbox. Adequate fencing should be erected around the pill box at a distance of 20m.	No response required and the developer is content for this issue to be covered by an Archaeological Condition.	
	Archaeological Watching Brief. Should be carried out during the removal of all field banks, turfs and topsoil.	No response required and the developer is content for this issue to be covered by an Archaeological Condition.	
	Written Scheme of Investigation. To be prepared by our appointed archaeologist to be approved by Carmarthenshire County Council.	No response required and the developer is content for this issue to be covered by an Archaeological Condition.	
The Coal Authority	The recorded Ty Uchaf underground mine entry might pose a significant risk to land stability and public safety.	James Associates were instructed to address the above concerns. The James Associates supplementary report was submitted on the 7/6/19 together with an email confirming that the photographs of the mine entry show the vertical pit prop and horizontal cross member painted white. In summary it is appreciated that the presence of abandoned mine workings is a consideration in the proposed development. However, it has been assessed that the risks to the general public are no existent and that any risks to the Health and Safety of site personnel will be mitigated against in a formal site-specific Geotechnical Report.	A consultee response was received on the 24/4/19
	The underground mine entry could be located in an area proposed for soil storage.		A consultee response was received on the 27/6/19 confirming that the Coal Authority were satisfied with the comments and conclusions of the James Associates Report and that the issues had been addressed. The Coal Authority responses and the James

			Associates report can be found under Appendix C.
Welsh Government- Agricultural Land Dept	Clarification was needed regards the removal of topsoil from the subsoil storage areas.	Confirmation that the topsoil quantities allow for the stripping of topsoil from the subsoil storage areas to avoid the mixing of soils	A consultee response was received on the 16th April 2019. This response and subsequent clarification can be found under Appendix C.
	Clarification was needed regards the height of the soil mounds.	Confirmation that the sub-soil mounds will be 5m high and the topsoil mounds 3m high. The email confirming the issue have been addressed satisfactorily can be found under Appendix C of this report.	
National Grid	No objections.	No response required.	A consultee response was received on the 4/04/19. The letter stated the National Grid had no objections to the proposed extension. This response can be found under Appendix C.
Welsh Water	The proposed extension is in the vicinity of a 250mm trunk water main. No works should be undertaken until a risk assessment and approved protection measures have been implemented and completed.	James Associates were instructed to complete a risk assessment and assess the risk to the structural integrity of the water main. In summary the water main is at its closest 100m from the proposed developments excavation limit. As a worst-case scenario, a failure in the north wall at this point would extend between 10-15m. The risk has therefore been assessed as **remote** and communicated to Welsh Water 7/06/19. No subsequent communication has been received.	A consultee response was received on the 18th April 2019. This response and subsequent risk assessment can be found under Appendix C.

Appendix A: Consultation Notices

Ownership Certificates

One Certificate A, B, C, or D, must be completed, together with the Agricultural Holdings Certificate and submitted with the standard mineral application form.

N.B. If the application involves underground working you are advised to contact the mineral planning authority as this type of application requires an alternative method of certification.

Certificate of Ownership – Certificate A
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/ the applicant was the owner *(owner is a person with a freehold interest or leasehold interest with at least 7 years left to run)* of any part of the land or building to which the application relates.

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Certificate of Ownership – Certificate B
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/ The applicant certifies that I have/the applicant has given the requisite notice to everyone else (as listed below) who, on the day 21 days before the date of this application, was the owner *(owner is a person with a freehold interest or leasehold interest with at least 7 years left to run)* of any part of the land or building to which this application relates.

Name of Owner	Address	Date Notice Served
Davies and Lumber Ltd.	Penllwynhelig, Waunhafog Rd.,Ammanford SA18 3NA	25/3/2019
Tegid and Rhodri Dafis	Dwylan, Llandodoch, Abertyfi, SA43 3LH	25/3/2019
WJD Davies DH Davies MA Davies	Nirvana, Waunfarlais, Ammanford, SA18 3NG	25/3/2019

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):
		25/3/2019

Certificate of Ownership – Certificate C
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/ The applicant certifies that:

- Neither Certificate A or B can be issued for this application
- All reasonable steps have been taken to find out the names and addresses of the other owners *(owner is a person with a freehold interest or leasehold interest with at least 7 years left to run)*of the land or building, or of a part of it , but I have/ the applicant has been unable to do so.

The steps taken were:

I certify/ The applicant certifies that I have/the applicant has given the requisite notice to everyone else (as listed below) who, on the day 21 days before the date of this application, was the owner *(owner is a person with a freehold interest or leasehold interest with at least 7 years left to run)* of any part of the land or building to which this application relates.

Name of Owner	Address at which notice was served	Date Notice Served

Notice of the application has been published in the following newspaper (circulating in the area where the land is situated):	On the following date (which must not be earlier than 21 days before the date of the application):

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Ownership Certificates (continued)

Certificate of Ownership – Certificate D
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/ The applicant certifies that:

- Certificate A cannot be issued for this application
- All reasonable steps have been taken to find out the names and addresses of everyone else who, on the day 21 days before the date of this application, was the owner *(owner is a person with a freehold interest or leasehold interest with at least 7 years left)* to run of any part of the land to which this application relates, but I have/ the applicant has been unable to do so.

The steps taken were:

Notice of the application has been published in the following newspaper (circulating in the area where the land is situated):	On the following date (which must not be earlier than 21 days before the date of the application):

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Agricultural Holdings

Agricultural Holding Certificate
Town and Country Planning (Development Management Procedure) (Wales) Order 2012
Agricultural Land Declaration - You Must Complete Either (A) or (B)

(A) None of the land to which the application relates is, or is part of, an agricultural holding.

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):
		25/3/2019

(B) I have/ The applicant has given the requisite notice to every person other than myself/ the applicant who, on the day 21 days before the date of this application, was a tenant of an agricultural holding on all or part of the land to which this application relates,

Name of Tenant	Address	Date Notice Served

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Ownership Certificates

One Certificate A, B, C, or D, must be completed, together with the Agricultural Holdings Certificate and submitted with the standard mineral application form.

N.B. If the application involves underground working you are advised to contact the mineral planning authority as this type of application requires an alternative method of certification.

Certificate of Ownership – Certificate A
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/ the applicant was the owner *(owner is a person with a freehold interest or leasehold interest with at least 7 years left to run)* of any part of the land or building to which the application relates.

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Certificate of Ownership – Certificate B
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/ The applicant certifies that I have/the applicant has given the requisite notice to everyone else (as listed below) who, on the day 21 days before the date of this application, was the owner (*owner is a person with a freehold interest or leasehold interest with at least 7 years left to run)* of any part of the land or building to which this application relates.

Name of Owner	Address	Date Notice Served
Davies and Lumber Ltd.	Penllwynhelig, Waunhafog Rd.,Ammanford SA18 3NA	25/3/2019
Tegid and Rhodri Dafis	Dwylan, Llandodoch, Abertyfi, SA43 3LH	25/3/2019
WJD Davies DH Davies MA Davies	Nirvana, Waunfarlais, Ammanford, SA18 3NG	25/3/2019

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Certificate of Ownership – Certificate C
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/ The applicant certifies that:

- Neither Certificate A or B can be issued for this application
- All reasonable steps have been taken to find out the names and addresses of the other owners *(owner is a person with a freehold interest or leasehold interest with at least 7 years left to run*)of the land or building, or of a part of it , but I have/ the applicant has been unable to do so.

The steps taken were:

I certify/ The applicant certifies that I have/the applicant has given the requisite notice to everyone else (as listed below) who, on the day 21 days before the date of this application, was the owner (*owner is a person with a freehold interest or leasehold interest with at least 7 years left to run)* of any part of the land or building to which this application relates.

Name of Owner	Address at which notice was served	Date Notice Served

Notice of the application has been published in the following newspaper (circulating in the area where the land is situated):	On the following date (which must not be earlier than 21 days before the date of the application):

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Ownership Certificates (continued)

Certificate of Ownership – Certificate D
Town and Country Planning (Development Management Procedure) (Wales) Order 2012

I certify/ The applicant certifies that:

- Certificate A cannot be issued for this application
- All reasonable steps have been taken to find out the names and addresses of everyone else who, on the day 21 days before the date of this application, was the owner *(owner is a person with a freehold interest or leasehold interest with at least 7 years left*) to run of any part of the land to which this application relates, but I have/ the applicant has been unable to do so.

The steps taken were:

Notice of the application has been published in the following newspaper (circulating in the area where the land is situated):	On the following date (which must not be earlier than 21 days before the date of the application):

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

Agricultural Holdings

Agricultural Holding Certificate
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Agricultural Land Declaration - You Must Complete Either (A) or (B)

(A) None of the land to which the application relates is, or is part of, an agricultural holding.

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

(B) I have/ The applicant has given the requisite notice to every person other than myself/ the applicant who, on the day 21 days before the date of this application, was a tenant of an agricultural holding on all or part of the land to which this application relates,

Name of Tenant	Address	Date Notice Served

Signed - Applicant:	Or signed - Agent:	Date (DD/MM/YYYY):

SCHEDULE 1

Pre-application notices

SCHEDULE 1B

PUBLICITY AND CONSULTATION BEFORE APPLYING FOR PLANNING PERMISSION

Town and Country Planning (Development Management Procedure) (Wales)Order 2012

PUBLICITY AND CONSULTATION BEFORE APPLYING FOR PLANNING

PERMISSION NOTICE UNDER ARTICLES 2C AND 2D

(to be served on owners and/or occupiers of adjoining land and community consultees; and displayed by site notice near the location of the proposed development)

Purpose of this notice: this notice provides the opportunity to comment directly to the developer on a proposed development prior to the submission of a planning application to Carmarthenshire County Council. Any subsequent planning application will be publicised by Carmarthenshire County Council; any comments provided in response to this notice will not prejudice your ability to make representations to Carmarthenshire County Council on any related planning application. You should note that any comments submitted may be placed on the public file.

Proposed development at (a) 10.03 hectares of land to the north of the current Glan Lash Mine Site.

I give notice that (b) BRYN BACH COAL LIMITED

Is intending to apply for planning permission to (C): to mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash Mine Site covering 10.03 hectares over a 6.5-year period.

You may inspect copies of:

- Proposed application;
- The plans; and
- Other supporting documents

on line at (d) www.brynbachcoal.co.uk computer facilities are available to view this information online at (e) Ammanford Library, 3 Wind St, Ammanford SA18 3DN Library,(f) Monday & Thursday 9.00-19.00, Tuesday, Wednesday & Friday 9.00-18.00, Saturday 9.00-17.00. (or) you may view copies of the Environmental Impact Assessment Non-Technical Summary are available to view at(g) the Post Office, Memorial Hall Llandybie, SA18 3UR. Monday-Friday 9.00-17.00 & Saturday 9.00-13.00. Anyone wishing to make representations regarding this proposed development must write to us by email(i) extension@brynbachcoal.co.uk or by letter to(j) Bryn Bach Coal Ltd, Glan Lash Mine Site, Shand's Rd, Bleanau, Llandybie SA18 3NA by (k) 30/04/2019.

Signed …….. Date 25/03/2019

C M JAMES

SCHEDULE 1

Pre-application notices

SCHEDULE 1B

PUBLICITY AND CONSULTATION BEFORE APPLYING FOR PLANNING PERMISSION

Town and Country Planning (Development Management Procedure) (Wales)Order 2012

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Is intending to apply for planning permission to (C): to mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash Mine Site covering 10.03 hectares over a 6.5-year period.

You may inspect copies of:

- Proposed application;
- The plans; and
- Other supporting documents

on line at (d) www.brynbachcoal.co.uk computer facilities are available to view this information online at (e) Ammanford Library, 3 Wind St, Ammanford SA18 3DN Library,(f) Monday & Thursday 9.00-19.00, Tuesday, Wednesday & Friday 9.00-18.00, Saturday 9.00-17.00. (or) you may view copies of the Environmental Impact Assessment Non-Technical Summary are available to view at(g) the Post Office, Memorial Hall Llandybie, SA18 3UR. Monday-Friday 9.00-17.00 & Saturday 9.00-13.00. Anyone wishing to make representations regarding this proposed development must write to us by email(i) extension@brynbachcoal.co.uk or by letter to(j) Bryn Bach Coal Ltd, Glan Lash Mine Site, Shand's Rd, Bleanau, Llandybie SA18 3NA by (k) 30/04/2019.

Signed ..... Date 25/03/2019

C M JAMES

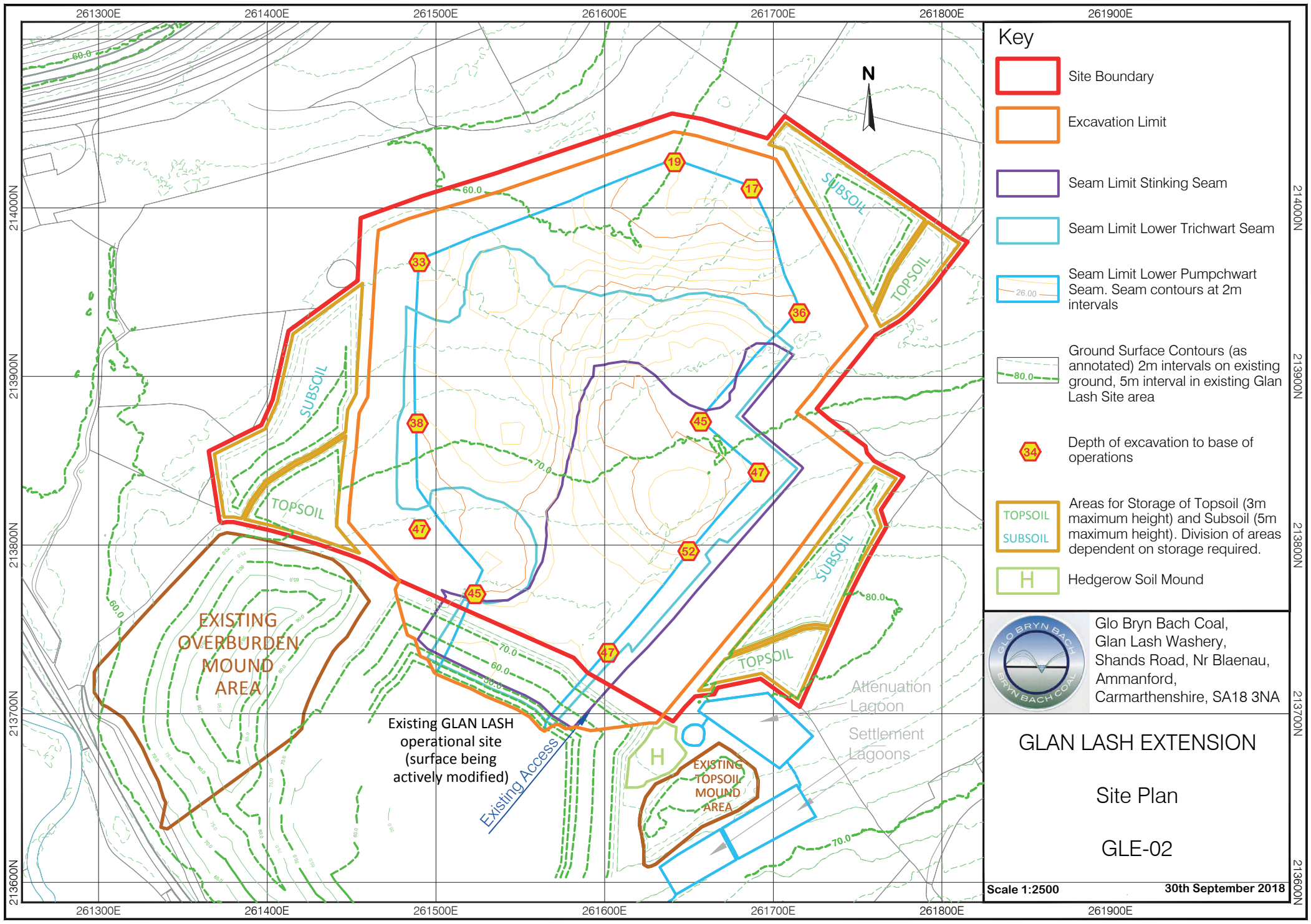
Proposed Extension to Glan Lash Mine Site

Schedule 1B: Publicity and Consultation Before Applying for Planning Permission Notice Under Articles 2C & 2D- Town and Country Planning (Development Management Procedure) (Wales) order 2012.

Notice is given that Bryn Bach Coal Ltd is intending to apply for planning permission to mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash Mine Site covering 10.03 hectares over a 6.5-year period.

This notice provides the opportunity to comment directly to the developer on the proposal prior to submission of a planning application to Carmarthenshire County Council. Any subsequent planning application will be publicised by Carmarthenshire County Council. Comments provided in response to this notice will not prejudice your ability to make representations to Carmarthenshire County Council on any related application. You should note that any comments submitted may be placed on the public file.

The proposed development is an extension to the existing Glan Lash Mine Site, Shand's Road, Bleanau, Llandybie, SA18 3NA. The existing site and proposed extension are illustrated on the plan below.



You may inspect copies of the proposed application, plans and supporting documents on line @ www.brynbachcoal.co.uk

Computer facilities are available to view this information on line at Ammanford Library, 3 Wind St, Ammanford. SA18 3DN. Monday & Thursday 9.00-19.00, Tuesday, Wednesday & Friday 9.00-18.00, Saturday 9.00-17.00.

Hard Copies of the Environmental Impact Assessment Non-Technical Summary are available to view at the Post Office, Memorial Hall, Llandybie. SA18 3UR. Monday-Friday 9.00-17.00 & Saturday 9.00-13.00.

Anyone wishing to make representations regarding this proposed development must write to us by email extension@brynbachcoal.co.uk or by letter to Bryn Bach Coal Ltd, Glan Lash Mine Site, Shand's Road, Bleanau, Llandybie, SA18 3NA by the 30/04/2019

Signed .....

C M JAMES

Date: 25/3/2019

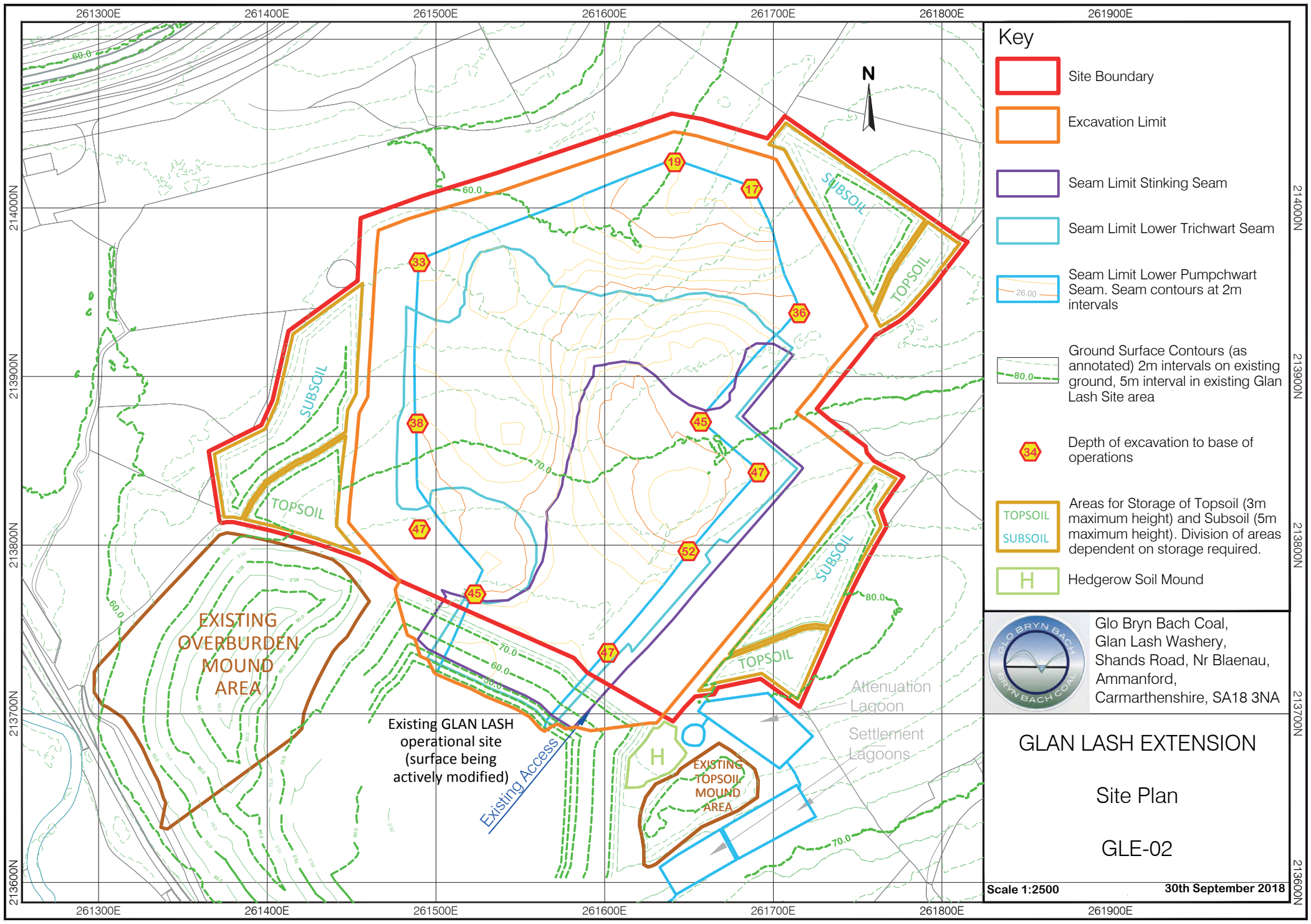
Estyniad Arfaethedig i Safle Mwynglawdd Glan Lash

Atodlen 1B: Cyhoeddusrwydd ac Ymgynghori Cyn Gwneud Cais am Ganiatâd Cynllunio Hysbysiad Dan Erthyglau 2C a 2D- Tref a Gwlad Gorchymyn Cynllunio (Gweithdrefn Rheoli Datblygu) (Cymru) 2012.

Rhoddir rhybudd bod Bryn Bach Coal Ltd yn bwriadu gwneud cais am ganiatâd cynllunio i gloddio gan weithrediadau mwyngloddio arwynebol am 110,000 tunnell o glo caled ffrâm o estyniad gogleddol i Safle Mwynglawdd Glan Lash sy'n cwmpasu 10.03 hectar dros gyfnod o 6.5 mlynedd.

Mae'r hysbysiad hwn yn rhoi cyfle i gyflwyno sylwadau yn uniongyrchol i'r datblygwr ar y cynnig cyn cyflwyno cais cynllunio i Gyngor Sir Caerfyrddin. Bydd unrhyw gais cynllunio dilynol yn cael cyhoeddusrwydd gan Gyngor Sir Caerfyrddin. Ni fydd y sylwadau a roddir mewn ymateb i'r hysbysiad hwn yn amharu ar eich gallu i gyflwyno sylwadau i Gyngor Sir Caerfyrddin ar unrhyw gais cysylltiedig. Dylech nodi y gellir rhoi unrhyw sylwadau a gyflwynir yn y ffeil gyhoeddus.

Mae'r datblygiad arfaethedig yn estyniad i Safle Mwynglawdd Glan Lash, Heol Shand, Bleanau, Llandybie, SA18 3NA. Dangosir y safle presennol a'r estyniad arfaethedig ar y cynllun isod.



Gallwch archwilio copïau o'r cais arfaethedig, y cynlluniau a'r dogfennau ategol ar-lein ar www.brynbachcoal.co.uk

Mae cyfleusterau cyfrifiadurol ar gael i weld y wybodaeth hon ar-lein yn Llyfrgell Rhydaman, 3 Stryd y Gwynt, Rhydaman. SA18 3DN. Dydd Llun a Dydd Iau 9.00-19.00, Dydd Mawrth, Dydd Mercher a Dydd Gwener 9.00-18.00, Dydd Sadwrn 9.00-17.00.

Mae copïau caled o'r Crynodeb Annhechnegol o'r Asesiad o'r Effaith Amgylcheddol ar gael i'w gweld yn Swyddfa'r Post, Neuadd Goffa, Llandybie. SA18 3UR. Dydd Llun-Gwener 9.00-17.00 a Dydd Sadwrn 9.00-13.00.

Os yr ydych yn dymuno cyflwyno sylwadau ynghylch y datblygiad arfaethedig hwn, ysgrifennwch atom drwy e-bost estyniad@brynbachcoal.co.uk neu drwy lythyr at Bryn Bach Coal Ltd, Safle Mwynglawdd Glan Lash, Heol Shand, Bleanau, Llandybie, SA18 3NA erbyn 30/04/2019

Llofnodwyd .....

C M JAMES

Dyddiad: 25/3/2019

SCHEDULE 1C

CONSULTATION BEFORE APPLYING FOR PLANNING PERMISSION

Town and Country Planning (Development Management Procedure) (Wales) Order 2102.

CONSULTATION BEFORE APPLYING FOR PLANNING PERMISSION

NOTICE UNDER ARTICLE 2D

To be served on specialist consultees, as defined by article 2(1) of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012.

Purpose of this notice: this notice comprises a formal request for a pre-application consultation response under article 2D of the Town and Country Planning (Development Management Procedure) (Wales) order 2012.

Proposed development at (a) 10.03 hectares of land north of the current Glan Lash Mine Site.

I give notice that (b) Bryn Bach Coal Limited

Is intending to apply for planning permission to (c): mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash Mine Site covering 10.03 hectares over a 6.5-year period.

A copy of the proposed application, plans and other supporting documents can be viewed on line at (d) www.brynbachcoal.co.uk

In accordance with the requirements of article 2E of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012, a consultation response must be sent to (e) chris@brynbachcoal.co.uk by (f) 30/04/2019.

Signed..... Date 28th MARCH 2019

Appendix B: Public and Community Consultation Responses

Subject: RE: Pre-Application Consultation Response
From: "Lisa J Jones (Public Health)" <LisaJJones@carmarthenshire.gov.uk>
Date: 12/04/2019, 17:28
To: "chris@brynbachcoal.co.uk" <chris@brynbachcoal.co.uk>
CC: Thomas R Boothroyd <TRBoothroyd@carmarthenshire.gov.uk>

Dear Chris,

Thank you for sharing copies of the Environmental Impact Assessment, Health Impact Assessment following your scoping application to extend the mining site. There will be a requirement to review the existing Environmental Permits associated with the mining and washery activities which aim to control those fugitives sources of dust emissions appropriately identified within the Environmental Impact Assessment.

I welcome the recommendation of the HIA to review the particulate monitoring to incorporate sensitive receptor locations when quantifying actual dust concentrations.

No complaints, issues or dust results of concern have been received since the mining operations began and I therefore accept that the existing controls have been effective in controlling dust emissions. I have no adverse comments to make but would recommend that the proposal to submit a dust management plan as outlined in the Dust Impact report is conditioned before any works commence.

Kind Regards
Lisa Jones

From: Chris James [mailto:chris@brynbachcoal.co.uk]
Sent: 28 March 2019 15:52
To: Thomas R Boothroyd <TRBoothroyd@carmarthenshire.gov.uk>
Cc: Lindsey Rendle <LRendle@carmarthenshire.gov.uk>; planningconsultation@coal.gov.uk; SCH Business Support Unit Ammanford <SCHBSUAmmanford@carmarthenshire.gov.uk>; John Ayres <JAyres@carmarthenshire.gov.uk>; swplanning@cyfoethnaturiolcymru.gov.uk; James.cooke@wales.gsi.gov.uk; Steve Welchman <SWelchman@carmarthenshire.gov.uk>; .box.plantprotection <plantprotection@nationalgrid.com>; Technical Services <technicalservices@carmarthenshire.gov.uk>; NDCPlanning@dwrcymru.com; info@dyfedarchaeology.org.uk; Stephen Edwards <StEdwards@carmarthenshire.gov.uk>
Subject: Pre-Application Consultation Response

Dear All,

Further to the Scoping Opinion provided by yourselves under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017,

Please find attached a formal notice defined by article 2D of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012. This notice comprises a formal request for a pre-application response.

A copy of the Environmental Impact Assessment Non Technical Summary, the Environmental Impact Assessment and the Health Impact Assessment can be viewed on line at www.brynbachcoal.co.uk.

Should you require any further information please do not hesitate to contact me.

Regards
Chris James

J A Smallshaws
LMS New Yard
Castle Foregate
Shrewsbury
Shropshire
SY1 2EN

FAO Chris James
Bryn Bach Coal Ltd
Glan Lash Washery
Shands Road
Blaenau
Llandybie
Nr Ammanford
Carmarthenshire
SA18 3NA

24 June 2019

Dear Chris

Re: Bryn Bach Coal – Glan Lash Extension

J A Smallshaw Solid Fuel Distributors wish to support the above planning application.

At a recent meeting with DEFRA Anthracite has been accepted by them as a suitable smokeless fuel due to its clean burning and low Sulphur content.

We supply merchants and customers all over Wales and appliances which will only burn Anthracite products which are the most efficient appliances on the market. We also supply a customer who makes an artificial charcoal from slack waste and Anthracite which is then supplied to customers nationwide.

Some miniature railways also use Anthracite products and the railway market is exempt by DEFRA.

DEFRA is also concerned about fuel poverty in rural areas, Anthracite provides a high calorific fuel and competitive prices to those customers. With production declining there is a long market for Bryn Bach production.

If you require any further assistance with this matter, please do not hesitate to contact me.

Kind regards

pp JEllis

John Watkiss

CoalImP
Association of
UK Coal Importers
and Producers

Planning Services
Carmarthenshire County Council
Civic Offices
Crescent Road
Llandeilo
SA19 6HW

22nd July 2019

Dear Sirs,

Planning Application by Bryn Bach Coal Ltd – Northern Extension to Glan Lash Mine Site

I am pleased to provide a letter of support, on behalf of CoalImP, for the planning application by Bryn Bach Coal Ltd to extend the workings and to mine an additional 110,000 tonnes of coal/anthracite at the Glan Lash Site.

CoalImP (The Association of UK Coal Importers and Producers) represents UK coal producers, major coal users, coal merchants and other infrastructure operators, and its members account for the majority of UK coal production.

I understand that none of the supply from this site would be destined for electricity production. I note that Bryn Bach Coal Limited is the largest supplier of anthracite to the British brick manufacturing industry and is a supplier to the water filtration industry. The remaining 50% of production is used for domestic heating, where anthracite is a smokeless fuel and is therefore exempt from current Government proposals to phase out the most polluting fuels.

In general terms, production of indigenous anthracite for ongoing markets, such as those detailed above, obviates the need for the import of material with the much higher carbon footprint associated with transportation from countries such as Vietnam or China.

Yours faithfully

Nigel Yaxley
Managing Director

CoalImP Registered Office: Dalton House, 60 Windsor Avenue, London SW19 2RR
Company Limited by Guarantee: Registered in England No. 6085440
www.coalimp.org.uk
Telephone 0207 1936108 Mobile 07774 184841 e-mail nigelyaxley@coalimp.org.uk

BRYN BACH COAL LIMITED

Submission – planning permission to (c): to mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash Mine Site covering 10.03 hectares over s 6.5- year period.

When planning was granted for the operation of the Glan Lash Open Cast Site, a requirement of the approval was the necessity to set up a Residents Liaison committee. This committee consists of local residents with the agreement to conduct regular meetings with the officers of Bryn Bach Coal Limited, local authority representatives, local councillors and local residents. The committee has operated as a means of monitoring the ongoing progress of the operation and highlighting any issues raised by local residents.

The first meeting was held on 25/09/2012, and subsequently a further 21 meetings have been held since.

At each meeting the Directors of Bryn Bach Coal Limited have presented a progress report on the operation highlighting key monitoring areas governing dust, noise, visual impact and site traffic. As committee members we have always had the opportunity to question and debate elements of the report, and where appropriate any residents have been welcomed or invited to attend to air any issues they may have had. It is pleasing to report that in the main the key monitoring measures together with working hour practices have been adhered to, and if there has been any variation the Directors of the business have addressed any concerns as a matter of priority. In essence though there has been a minimal amount of complaints/observations during the whole period of the operation.

The Directors of Bryn Bach Coal Limited have to be commended on the speed and empathy with which they have dealt with any complaints that have been raised and at all times have been sympathetic to the local area and residents. They have in fact adhered to all that has been required of them in respect of the committee, including an agreed annual financial donation that has enabled the committee to distribute funds to a number of worthy local causes.

As Chairman, and speaking on behalf of the committee, I wish to record our support for Bryn Bach Coal Limited as they pursue planning approval for the proposed northern extension to the existing Glan Lash Mine Site,

Rob Thomas 8/4/19
Chairman
Glan Lash Open Cast Site Liaison Committee

Subject: Bryn Bach Coal Limited
From: Stuart Griffith <stuart.griffith@llandybiecc.wales>
Date: 24/04/2019, 23:33
To: "extension@brynbachcoal.co.uk" <extension@brynbachcoal.co.uk>

Publicity and Consultation before applying for Planning Permission
To mine by surface mining operations, 110,000 tonnes of premium anthracite on 10.03 hectares over a 6.5 year period

Dear Sir,

The Full Council of Llandybie Community Council considered this proposed development of 10.03 hectares of land to the north of the current Glan Lash Site at last night's meeting.

Having taken due regards to the operation of the current site, the Members are supportive of the proposed development. A site visit for Councillors had been agreed previously, and those that attended reported the following :-

- Well run site
- No issues with previous planning application
- Created and will continue to provide local employment
- Supported local organisations within the community
- Good quality coal produced, and used in an eco friendly manner

Yours Sincerely,

Stuart Griffith
Clerk - Llandybie Community Council
Clerc - Cyngor Cymuned Llandybie

4 Royal Oak Court, Llandybie, Ammanford, Carmarthenshire SA18 2JY
Tel no: 01269 853834 E:mail: Stuart.Griffith@llandybiecc.wales

4 Llys Derwen Frenhinol Llandybie Rhydamman Sir Gaerfyrddin SA18 2JY
Rhif ffon : 01269 853834 E Bost : Stuart.Griffith@llandybiecc.cymru

Wrth adael Cyngor Cymuned Llandybie sganiwyd y neges yma am bob feirws. Mae' Cyngor yn diogelu eich data o ddifrif. Os cysylltwch â Cyngor Cymuned Llandybie mae ein hysbysiad preifatrwydd yn esbonio sut rydym yn defnyddio eich gwybodaeth a ffyrdd yr ydym yn diogelu eich preifatrwydd. Mae'r e-bost hwn ac unrhyw atodiadau yn gyfrinachol ac yn cael eu bwriadu yn unig ar gyfer y person y rhoddir sylw iddynt. Gallant gynnwys gwybodaeth breintiedig a chyfrinachol. Gwaherddir defnydd, datgelu neu gopïo heb awdurdod yn llym ac mae'n bosibl y bydd yn anghyfreithlon. Os ydych wedi derbyn yr e-bost hwn mewn gwall, cysylltwch â ni ar unwaith trwy ymateb i'r anfonwr, a'i ddileu unrhyw atodiadau oddi wrth eich cyfrifiadur.

On leaving Llandybie Community Council this email was scanned for all known viruses. The Council takes the protection of your data seriously. If you contact Llandybie Community Council then our Privacy Notice explains how we use your information and the ways in which we protect your privacy. This email and any attachments to it are confidential and intended solely for the person to whom they are addressed. They may contain privileged and confidential information. Unauthorised use, disclosure or copying is strictly prohibited and may be unlawful. If you have received this email in error, please contact us immediately by replying to the sender, and delete it and any attachments from your computer.

Subject: Re: Bryncoed Iron Age
From: Bryn Bach Coal Extension <extension@brynbachcoal.co.uk>
Date: 10/04/2019, 14:04
To: Valerie Davies <valeriewaunfarlais@gmail.com>

Good Afternoon,

Should we be fortunate to be granted planning permission, the archaeological investigation work will be Conditioned as part of the permission. This is in line with the consultation response from the Dyfed Archaeological Trust. As the proposed working method is phased and progresses from west-east the investigation will not be required until we need to disturb the field enclosure that the Bryncoed iron age fort is within. This would be in year 3-4 after operations commence within the extension area. It should be noted that both the Bryncoed iron age fort and the World War 2 pill box are outside the excavation limit but within the site boundary.

If I can be of any further assistance please do not hesitate to contact me.

Regards
Chris James

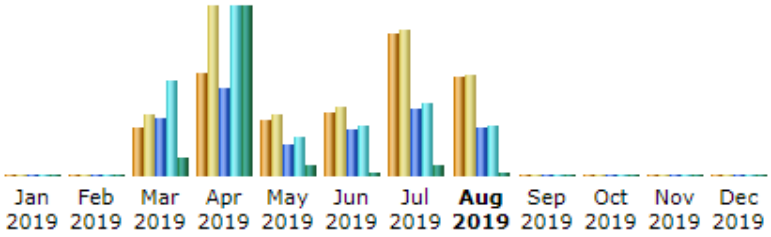
On Wed, 10 Apr 2019 at 12:19, Valerie Davies <valeriewaunfarlais@gmail.com> wrote:

> Dear Mr James,
> Having read the Environmental Impact Assessment of your planning
> extension application, I would be grateful if you could inform me if
> and when you intend to proceed with the advice of the Heritage Report
> in ascertaining the existence of BRYNCOED IRON AGE.
> In anticipation of a prompt response,
> Valerie

Website Visitor Stats For The Northern Extension To The Current Glan Lash Mine Site

Page Views

Monthly history



Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2019	0	0	0	0	0
Feb 2019	0	0	0	0	0
Mar 2019	49	61	138	227	789.70 MB
Apr 2019	103	170	208	402	7.49 GB
May 2019	56	62	73	93	429.81 MB
Jun 2019	63	68	111	117	146.90 MB
Jul 2019	143	147	160	171	507.81 MB
Aug 2019	100	101	113	117	125.61 MB
Sep 2019	0	0	0	0	0
Oct 2019	0	0	0	0	0
Nov 2019	0	0	0	0	0
Dec 2019	0	0	0	0	0
Total	514	609	803	1,127	9.45 GB

PDF Downloads

Downloads

Downloads	Hits	206 Hits	Bandwidth	Average size
/html/resources/eia.pdf	93	0	10.60 GB	116.67 MB
/html/resources/hia.pdf	82	0	284.02 MB	3.46 MB
/html/resources/eia-non-technical-summary.pdf	69	0	852.26 MB	12.35 MB
/html/resources/mineral_form.pdf	31	0	60.03 MB	1.94 MB

Appendix C: Statutory Consultation Responses

Subject: RE: Pre-Application Consultation Response
From: "Lisa J Jones (Public Health)" <LisaJJones@carmarthenshire.gov.uk>
Date: 12/04/2019, 17:28
To: "chris@brynbachcoal.co.uk" <chris@brynbachcoal.co.uk>
CC: Thomas R Boothroyd <TRBoothroyd@carmarthenshire.gov.uk>

Dear Chris,

Thank you for sharing copies of the Environmental Impact Assessment, Health Impact Assessment following your scoping application to extend the mining site. There will be a requirement to review the existing Environmental Permits associated with the mining and washery activities which aim to control those fugitives sources of dust emissions appropriately identified within the Environmental Impact Assessment.

I welcome the recommendation of the HIA to review the particulate monitoring to incorporate sensitive receptor locations when quantifying actual dust concentrations.

No complaints, issues or dust results of concern have been received since the mining operations began and I therefore accept that the existing controls have been effective in controlling dust emissions. I have no adverse comments to make but would recommend that the proposal to submit a dust management plan as outlined in the Dust Impact report is conditioned before any works commence.

Kind Regards
Lisa Jones

From: Chris James [mailto:chris@brynbachcoal.co.uk]
Sent: 28 March 2019 15:52
To: Thomas R Boothroyd <TRBoothroyd@carmarthenshire.gov.uk>
Cc: Lindsey Rendle <LRendle@carmarthenshire.gov.uk>; planningconsultation@coal.gov.uk; SCH Business Support Unit Ammanford <SCHBSUAmmanford@carmarthenshire.gov.uk>; John Ayres <JAyres@carmarthenshire.gov.uk>; swplanning@cyfoethnaturiolcymru.gov.uk; James.cooke@wales.gsi.gov.uk; Steve Welchman <SWelchman@carmarthenshire.gov.uk>; .box.plantprotection <plantprotection@nationalgrid.com>; Technical Services <technicalservices@carmarthenshire.gov.uk>; NDCPlanning@dwrcymru.com; info@dyfedarchaeology.org.uk; Stephen Edwards <StEdwards@carmarthenshire.gov.uk>
Subject: Pre-Application Consultation Response

Dear All,

Further to the Scoping Opinion provided by yourselves under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017,

Please find attached a formal notice defined by article 2D of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012. This notice comprises a formal request for a pre-application response.

A copy of the Environmental Impact Assessment Non Technical Summary, the Environmental Impact Assessment and the Health Impact Assessment can be viewed on line at www.brynbachcoal.co.uk.

Should you require any further information please do not hesitate to contact me.

Regards
Chris James

KEVAN WALTON ASSOCIATES Ltd

Consulting Engineers

Walnut Bank Lodge, Stodday, Lancaster, Lancs., LA2 OAG
Tel: 01524 845299 Mobile 07931 546125
email: kevanwalton@gmail.com

5th June 2019

Carmarthenshire County Council
Dept of Homes and Safer Communities

For the attention of Ruth Southby, Scientific Officer (Noise)

Dear Ms Southby

Further to your correspondence with My Chris James of Bryn Bach Coal may I make the following comments regarding you queries on the noise report I presented in support of the planning application to extend the Glan Lash Mine:

Under Section 3 Method of calculating noise level, reference is made to with respect to a number of Guidance documents. A number of the documents listed are outdated and I would suggest correcting this element of the report to reflect that calculations have been undertaken in accordance with current guidance documentation.

The References at the back of the document are the definitive documents. I have amended Section 3.1 as follows:

3.1 The calculations forming the basis of this report have been undertaken in accordance with the method contained in B.S. 5228-1: 2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites – Part 1: Noise and Calculation of Road Traffic Noise (CRTN).2 Guidance has been taken from the MPS2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England – Annex 2: Noise 3 and Minerals Technical Advice Note 2:Coal, January 2009.

Background noise levels have been determined in accordance with B.S. 4142: 2014 - Methods for rating and assessing industrial and commercial sound.
The sound pressure levels for individual items of plant have been obtained directly from operating plant at a different site owned by the applicant. The noise levels provided are 13 years old and I would therefore request justification from the applicants that this data is relevant and reflects current and proposed practise at Glan Lash Mine. Could we also have a copy of the octave band measurements with respect to the measurements of plat performance please.

The original sound pressure level measurements were taken at a different site operated by the company where the measurements could be taken on level, unobstructed ground with no reflective features and no extraneous sound sources. Plant was the same at both sites and was regularly moved between the 2 sites. Several items of plant are the same model as they were at the time and others have been replaced by similar sized plant from the same

Directors: K S Walton M.Sc., C. Eng., J S Walton, B.Sc.
Associates: R Taylor, Ph.D., T. Norman, B.Sc., C.Eng., P Warrington
Consultant: Professor D Stead, Ph.D., C.Eng.

Company Registered in Scotland No. 157466
V.A.T. No: 653 0709 47

supplier. Over time, earthmoving plant has become quieter and so using the original sound pressure levels gives a conservative assessment. BS 5228 recommends the use of actual measurements but allows the use of data published in the Standard, including those presented in Appendix C The Standard is now 10 years old, 5 years old as Amended, and the data presented in Appendix C is from 2005 therefore 14 years old. It is therefore preferable to use the actual measured data rather than the published data
The octave band measurements for each item of plant are as follows:

Excavator

Frequency(Hz)	Octave
32	47.8
63	59.1
125	66.7
250	66.8
500	69.9
1000	72.4
2000	71.9
4000	67.4
8000	62.7

Dumptruck (ADT)

Frequency(Hz)	Octave
32	43.1
63	49.9
125	58.4
250	64.9
500	68.6
1000	69.5
2000	69.6
4000	66.1
8000	58.3

D6 Dozer

Frequency(Hz)	Octave
32	43.3
63	56.9
125	60.5
250	62.2
500	65.9
1000	70.1
2000	69.2
4000	66.1
8000	62

Where an allowance has been provided for barriers and or soft ground attenuation, can we please have a copy of the calculation that has been applied. I am happy to accept attenuation calculations for a single activity at one noise sensitive dwelling (E.g., Soil stripping at Pen Y Waun Hafog) in order for us to confirm how the levels of attenuation specified have been achieved.

Barriers

To determine path difference we have drawn cross sections using O.S. DTM data and calculated the path difference using LSS DTM software. We have then used an Excel Spreadsheet for the Barrier attenuation using Maekawa's formula for barriers (column 3) as follows:

Excavator

Path Difference **3.642** **Topsoil**

Frequency	Octave		Weighting	Resultant				Without barrier		
32	47.8	12.2	0	35.6	3.56	3632		4.78	60256	
63	59.1	14.7	0	44.4	4.44	27315		5.91	812831	
125	66.7	17.5	0	49.2	4.92	83390		6.67	4677351	
250	66.8	20.4	0	46.4	4.64	43838		6.68	4786301	
500	69.9	23.3	0	46.6	4.66	45377		6.99	9772372	
1000	72.4	26.3	0	46.1	4.61	40629		7.24	17378008	
2000	71.9	29.3	0	42.6	4.26	18169		7.19	15488166	
4000	67.4	32.3	0	35.1	3.51	3229		6.74	5495409	
8000	62.7	35.3	0	27.4	2.74	548		6.27	1862087	
						266126	54.25		60332781	77.81
				Barrier Attenuation		**24**				

Dumptruck (ADT)

Path Difference **3.642** **Topsoil**

Frequency	1/3 Octave		Weighting	Resultant				Without barrier		
32	43.1	12.2	0	30.9	3.09	1231		4.31	20417	
63	49.9	14.7	0	35.2	3.52	3284		4.99	97724	
125	58.4	17.5	0	40.9	4.09	12334		5.84	691831	
250	64.9	20.4	0	44.5	4.45	28304		6.49	3090295	
500	68.6	23.3	0	45.3	4.53	33638		6.86	7244360	
1000	69.5	26.3	0	43.2	4.32	20837		6.95	8912509	
2000	69.6	29.3	0	40.3	4.03	10699		6.96	9120108	
4000	66.1	32.3	0	33.8	3.38	2394		6.61	4073803	
8000	58.3	35.3	0	23.0	2.30	199		5.83	676083	
						112920	50.53		33927131	75.31
				Barrier Attenuation		**25**				

D6 Dozer

Path Difference		**3.642**		**Topsoil**						
Frequency	Octave		Weighting	Resultant				Without barrier		
32	43.3	12.2	0	31.1	3.11	1289		4.33	21380	
63	56.9	14.7	0	42.2	4.22	16459		5.69	489779	
125	60.5	17.5	0	43.0	4.30	20004		6.05	1122018	
250	62.2	20.4	0	41.8	4.18	15200		6.22	1659587	
500	65.9	23.3	0	42.6	4.26	18065		6.59	3890451	
1000	70.1	26.3	0	43.8	4.38	23924		7.01	10232930	
2000	69.2	29.3	0	39.9	3.99	9757		6.92	8317638	
4000	66.1	32.3	0	33.8	3.38	2394		6.61	4073803	
8000	62	35.3	0	26.7	2.67	466		6.20	1584893	
						107558	50.32		31392479	74.97
				Barrier Attenuation		**25**				

Soft Ground

Soft Ground Attenuation has been determined using Chart 8 from "Calculation of Road Traffic Noise". Distance and average height above ground level was determined using O.S. DTM data and the area calculated using sections generated from LSS DTM Software to determine the average height between the ground +2m and line of site. A height above ground of 2m was included at the source and receptor positions to reflect source and receptor heights.

e.g. Ty Uchaf Farm:, dumptruck & dozer:

Distance = 212m
Area between ground and line of site = 517m^2
Average Height = 2.4m
Soft Ground Attenuation from Chart 8 = - 6.4dB (6dB)

BS4142:2014 specifies the reference time interval for day time noise as being 1 hour. Background noise measurements taken at Llwyn Celyn and Ty Uchaf Farm have not been measured for the hour period. I note that background noise measurements taken in 2011 at Llwyn Celyn for a 20 minutes period have been used in the absence of current data, however I have concerns whether representative background noise measurements provided for Llwyn Celyn and Ty Uchaf Farm reflect the current noise climate at these properties and I would request further justification for using the levels provided in Table *2.*

Although BS 4142:2014 specifies 1hr day time reference time interval for specific sound level it does not specify the reference time interval for day time background noise. It states only *"Ensure that the measurement time interval is sufficient to obtain a representative value of the background sound level...."* Although we try to adopt a 1 hr monitoring period for background noise this is not required by the Standard. In the case of Llyn Celyn I monitored the background noise for about 7 minutes before someone started mowing the weeds in the adjacent field using a tractor (perhaps not co-incidental since I had spoken to the residents earlier in the day and told them I would be returning late afternoon). I immediately stopped

the meter. L_{90} obtained on the 2 occasions are not dissimilar and I have taken the lower of the 2 values.

I note that background noise measurements at the noise sensitive properties were undertaken on Thursday 17th May 2018 when the applicants state the mine is operational. Can I please receive confirmation that the background noise measurements were taken in the absence of any noise associated with the mine operations.

Although the mine was operating on the day, monitoring was undertaken during extended break times or the operations were paused for an appropriate time. The exception to this was Tylegwyn village where there was no perceptible noise for the mine and other contributors such as traffic were the main sound features.

I trust that this addresses the issues adequately. If you require any further information or clarification please do not hesitate to get in touch.



Kevan Walton
M.Sc., C.Eng.

Pre-Application Consultation Reply to Carmarthenshire CC

Planning Department's Response

Bryn Bach Coal Limited

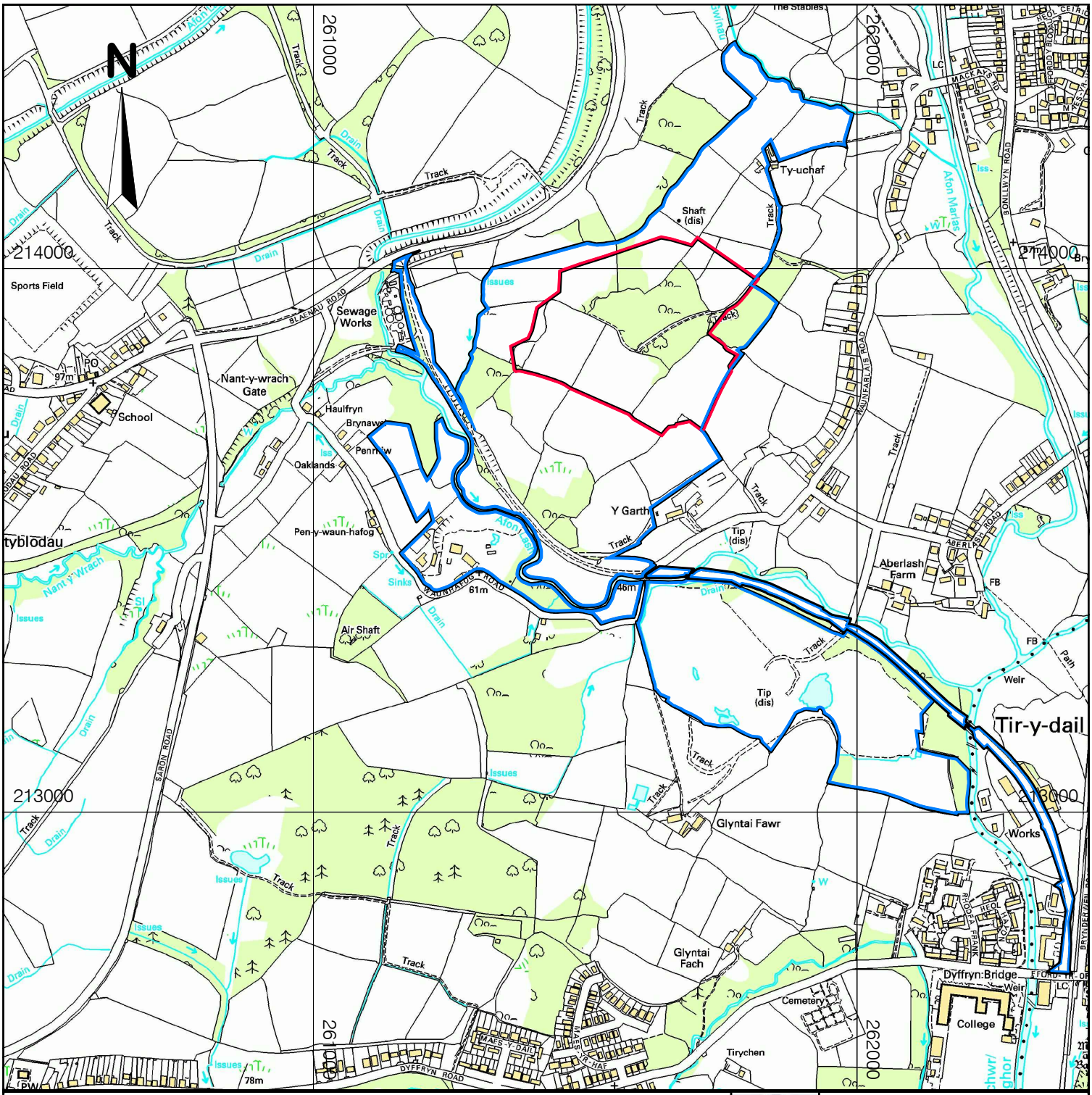
Glan Lash

Shand's Road

Bleanau

Llandybie

SA18 3NA



Legend

Site Boundary (Coloured Red on Outside of area)

Land in Control of the Applicant (Coloured Blue on Inside of area)

Scale Bar

0km 0.2km 0.4km 0.6km 0.8km 1.0km

0.1km 0.3km 0.5km 0.7km 0.9km

18th November 2019

Glo Bryn Bach Coal,
Glan Lash Washery,
Shands Road, Nr Blaenau,
Ammanford, Carmarthenshire, SA18 3NA

GLAN LASH EXTENSION

Development Location Plan
GLE-01 Amendment 1

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Following a Pre-Application Consultation site meeting with Carmarthenshire CC Planning Department, further information was requested regarding the use of the anthracite from our current Glan Lash Mine Site. The percentage split between Domestic and Industrial use was required and how this sits within the aims and objectives of the Planning Policy Wales Edition 10 described under section 5.10 paragraph 5.14.32.

Domestic Use

Our washed and sized anthracite is sold for use in domestic appliances via coal merchants across South Wales, from the Vale of Glamorgan to Cardigan.

The 2017-2018 domestic use sale figures show that 45,000 tonnes of anthracite were sold to domestic customers in South Wales, a large proportion being sold in rural areas where gas is unavailable. This market was supplied by 3 producers, Celtic Energy Ltd supplied 36,000 tonnes, Bryn Bach Coal Ltd supplied 5,000 tonnes and Energybuild Ltd supplied 4,000 tonnes.

Bryn Bach Coal Ltd has shown over the last 2 years a shift in the sales profile, with the natural reduction in domestic use being offset by an increase in demand from the Filter Media markets all of which are locally based in the Ammanford area. This has been driven by a restricted supply of suitable anthracite from Celtic Energy.

We have completed a comprehensive assessment of our sales figures:

Year End	Domestic Use	Industrial Use
2013	42%	58%
2014	39%	61%
2015	41%	59%
2016	38%	62%
2017	40%	60%
2018	26%	74%
2019	25%	75%

The Department for Environment Food & Rural Affairs have requested a "Call for Evidence on Domestic Burning of House Coal, Smokeless Coal, Manufactured Solid Fuel & Wet Wood." The document is attached to this addendum. The various fuels that are burnt domestically have been defined within this document, where anthracite is described as "a form of naturally occurring, mined, high-purity coal, authorised for use in smoke control areas. We are not currently seeking evidence on the use of anthracite." DEFRA is "considering how to encourage consumers to shift from burning the more polluting fuels, towards less polluting fuels such as low sulphur smokeless fuels (anthracite) and dry wood". The Government believes "this will deliver both health and economic benefits for individuals, as well as providing a more pleasant experience for consumers". It is proposed that "the evidence gathered will feed into the Governments Clean Air Strategy" and will "work towards its international commitments and continue to deliver air quality improvements in the UK".

Should the Government be successful in its ambition to increase the use of anthracite for domestic heating then there will be a subsequent increase in demand for anthracite. This increase will coincide with Celtic Energy Ltd exhausting their reserves by mid-summer 2021, with no intention of pursuing further anthracite production. This supply issue will be compounded by the closure of the Ibbenbhurren Mine in Germany and with China and Vietnam having only very limited tonnages available for export.

Even allowing for a continuing decline in domestic use, it is very likely there will be a severe shortage of low sulphur smokeless anthracite for domestic use from 2021 onwards. The anthracite produced from our proposed northern extension will be desperately needed to partially satisfy this shortfall.

Industrial Use

The industrial use of our anthracite has seen a steady increase from 58% of our production in 2013 to 75% by 2019. This is a result of a natural decline in domestic use being compensated by an increase in demand from filter media manufacturers. The industrial use of our anthracite has been limited to supplying brick manufacturer Ibstock Brick as a brick colourant and as a filter media to local filter media manufacturers.

Filter Media

Anthracite filter media is used to filter human drinking water in all major water treatment facilities in the UK and in de-salination plants in the Middle East. There are 3 filter media manufacturers based in Ammanford and they employ nearly 100 people. Western Carbons and EGL Puracite are long standing customers of Bryn Bach Coal Ltd and letters of support have been included in our Environmental Impact Assessment. The increase in demand during 2017 was driven by a restricted supply of suitable anthracite from Celtic Energy Ltd, Bryn Bach Coal Ltd have been able to satisfy this demand along with Energybuild Ltd. However, with Celtic Energy Ltd stopping production in 2021 again there will be a shortage of anthracite for use within the filter media sector. The anthracite produced from our proposed northern extension will be desperately needed to partially satisfy this shortfall.

It must be noted that the anthracite used as a filter medium is not burnt and therefore there are no emissions.

Brick Colourant

Bryn Bach Coal Ltd has a contract with Ibstock Brick PLC to supply anthracite as a brick colourant to factories within the UK. Factories use anthracite with their clay in order to produce the colour, texture and unique appearance that their customers require. A very small amount of anthracite is added to the clay mix, usually between 0.5-1.0%. These individual bricks are then fired in gas kilns, the coal provides the colour and sometimes the black fleck that each factory requires. Ibstock Brick PLC is a long-standing customer of Bryn Bach Coal and have been customers since 2005. A letter of support has been included in our Environmental Impact Assessment and Ibstock Brick PLC will enter into a new contract should we be successful with this planning application. However, with Celtic Energy Ltd stopping production in 2021 again there will be a shortage of anthracite

for use within the brick manufacturing industry. The anthracite produced from our proposed northern extension will be desperately needed to satisfy this shortfall.

It must be noted that the anthracite used as a brick colourant is not burnt and therefore there are no emissions.

Our markets have now been analysed and described in detail. Currently we can anticipate 75% of the proposed anthracite production from the Northern Extension will be used as a brick colourant and as a filter media, with the remaining 25% being sold for domestic use. It can therefore be stated that 75% of the anthracite mined will not be burnt and will not have any emissions. Bryn Bach Coal Ltd has not supplied any coal for power/energy generation purposes since starting to mine anthracite in 1997.

Planning Policy Wales Edition 10

The Planning Policy Wales Edition 10 paragraph 5.14.32 describes other specific uses that coal has, apart from coal's predominate use which was in power/energy generation. These include industrial purposes, steel, speciality carbon markets in the making of concrete and for domestic use. These uses have been described under the umbrella of industrial purposes.

Whilst the use of coal for power/energy generation should not be permitted, should an application come forward for industrial uses then each case should be considered individually under the policies contained in MTAN 2: Coal and should comply with the test outlined in paragraph 45 of MTAN 2.

In order to clarify the above interpretation, we instructed Donald Gray of Darwin Gray Solicitors to give his legal opinion on clause 5.14.32. This legal opinion has been attached to this document. In summary two Supreme Court Judgements have been referred to and that a planning policy should not be interpreted like an Act of Parliament or a contract as they are intended to give a broad statement of principle. There are two major broad statements of principle concerning mineral development.

1) The Welsh Government wants to remove coal from energy/power generation and that it should be phased out by 2025. Any proposal for opencast, deep mine or colliery spoil disposal in which the coal is to be used for energy/power generation should not be permitted.

2) Although coal has predominately been used for energy/power generation coal has other specific uses. Some uses have been specified and that includes coal used for domestic use. Therefore, any proposal for opencast or a deep mine in which the coal is to be used for other specific industrial uses including domestic use then these proposals would need to be considered individually and the policies contained in MTAN 2: Coal applied.

In conclusion we believe our application should therefore be considered individually and the policies contained in MTAN2: Coal applied.

Department
for Environment
Food & Rural Affairs

Call for evidence on domestic burning of house coal, smokeless coal, manufactured solid fuel and wet wood

January 2018

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This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at:

Air.Quality@defra.gsi.gov.uk

or by writing to:

Local Air Quality Team
Department for Environment, Food and Rural Affairs
Area 2C, Nobel House
17 Smith Square

LONDON SW1P 3JR

www.gov.uk/defra

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Introduction

Many everyday activities essential for supporting lives and livelihoods can cause air pollution. The air quality impacts of driving are widely discussed and understood[1], but vehicles are not the only source of air pollution. Generating power, heating homes, industry and agriculture can all contribute, as they generate air pollutants such as particulate matter, nitrogen dioxide and sulphur dioxide.

Domestic burning of house coal, smokeless solid fuels and wood is the single largest source of harmful particulate matter ($PM_{2.5}$) emissions in the UK, at around 40%[2] of the total in 2015. This compares with industrial combustion (17%) and road transport (13%). The tiny particles in smoke can enter the bloodstream and attach to internal organs risking long term health issues as well as having more immediate impacts on some people, such as breathing problems or asthma attacks.

Burning the following domestic solid fuels leads to emissions of $PM_{2.5}$. The main solid fuels burned in the home are:

- House coal (or bituminous coal) – a naturally occurring mined product. $PM_{2.5}$ emissions are higher than from smokeless fuels.
- Smokeless coal (or anthracite) - a form of naturally occurring, mined, high-purity coal, authorised for use in smoke control areas.
- Manufactured solid fuels – fuels manufactured from coal products with other ingredients that have low smoke emissions, however some do have high SO_2 emissions.
- Wet wood – a naturally occurring product. Newly felled wood has a high moisture content and creates a lot of smoke when burned, it has over double the emissions of seasoned or kiln dried wood.
- Seasoned wood – wood that has been left for up to 2 years to naturally air dry.
- Kiln dried wood – wood that has been kiln dried to below 20% moisture.

We are considering how to encourage consumers to shift from burning the more polluting fuels such as house coal and wet wood, towards less polluting fuels such as low sulphur smokeless fuels and dry wood. This can deliver both health and economic benefits for individuals, as well as providing a more pleasant experience for consumers.

[1] The UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations, July 2017

[2] 40% is based upon the calculations in the National Atmospheric Emissions Inventory for 2015, which is the most recent year available. This data is uncertain given the difficulties in accurately estimating the extent and nature of domestic burning, however it is the best available evidence and is informed by a wide range of data sources, including data from BEIS and the stove and wood fuel industries. Of the 40% approximately 35% is domestic wood. http://naei.beis.gov.uk/data/

We are not considering banning domestic burning. The Government recognises that many households have installed wood-burning stoves, and the Government is not seeking to prevent their use or installation. But we are keen to encourage consumers to switch to cleaner wood burning, this will directly benefit consumers in their homes, as well as improving the local environment.

We are therefore considering a range of options to help reduce particulate matter emissions and improve air quality. These options include:

- Consumers who burn house coal switching to alternative fuels (e.g. low sulphur smokeless fuels).
- Consumers switching from wet wood to dry wood.
- Introduction of sulphur limits for all smokeless solid fuels.
- Provision of powers for local authorities to take action for persistent smoke offences, where local amenity is harmed.

The purpose of this Call for Evidence is to gather more information and data on the use of house coal, smokeless coal, manufactured solid fuels and wood for domestic heating as we seek to help householders make cleaner choices when using these fuels to heat their homes efficiently and reduce air pollution.

Forthcoming evidence will feed into the Government's Clean Air Strategy, which will be published for consultation in 2018. This will set out how we will work towards our international commitments and continue to deliver air quality improvements in the UK.

Domestic burning

The restoration of open fires and installations of wood-burning stoves have risen in popularity over recent years. They are now an additional form of heating for many households; for a minority they may be the sole heat source.

Burning wood has aesthetic appeal to many. By shifting to cleaner fuels and appliances, people can protect their own health, and that of their families, neighbours and communities by creating fewer particulate emissions.

For example when wet wood is burned, the heat output is significantly reduced and chemicals from the partially combusted wood build up on the inside of the stove and chimney, which increases the risk of chimney fires. High sulphur solid fuels burn at very high temperatures and can damage appliances and chimneys.

Impacts of residential emissions are generally most significant in built up areas, when combining with a range of other emissions sources. However, particulate matter emissions from solid fuel burning can be significant in rural areas too.

Emissions from domestic burning are not a new problem; the smogs[3] of the 1950s primarily related to the emissions from burning coal in UK cities from industrial and domestic premises, led to the development of the Clean Air Act and the establishing of Smoke Control Areas across the country. In Smoke Control Areas it is illegal to sell or use (burn) unauthorised fuels except if they are to be used in an exempt appliance. While domestic burning and other emissions have reduced significantly since the 1950s, the evidence on the adverse health impacts from air pollution has also grown during that time, showing that even at today's lower levels significant harm can be caused. Since 2005, we have seen an increase in the emissions from the domestic sector. We believe this is largely down to an increase in the popularity of open fires and wood-burning stoves. The purpose of this call for evidence is to raise awareness of this trend and consider the effects of possible government interventions to encourage a switch to cleaner fuels. This call for evidence is designed to improve the data available to the Government.

Through this call for evidence, we are interested in exploring how many households are burning solid fuels as either their main fuel or as a secondary fuel, the implications of any changes, and what support may be required to encourage these households to switch fuel type, in line with the Governments' policies.

Existing controls – smoke control areas

Smoke control areas are specific areas, designated by local councils, where it is illegal to allow smoke emissions from the chimney of your building. In these areas you can only burn authorised fuels or use an appliance which has been exempted for use in the area.

Anecdotal evidence would suggest that awareness of, and compliance with, smoke control area legislation in these areas is low and that many perceive the problem of domestic burning to no longer be an issue with regards to pollution.

We are interested to know if the provision of additional powers, for example to issue fixed penalty notices for persistent smoke offences, would assist local councils in increasing compliance with legislation where local amenity is harmed.

Smokeless solid fuels

In addition to house coal, smokeless coal and wood there are a number of manufactured solid fuels which are marketed as 'smokeless solid fuels'. These are manufactured using a mixture of pulverised coal, other ingredients such as waste biomass and binding agents which are re-formed into briquettes. The Clean Air Act 1993 regulates the sulphur content of smokeless solid fuels which can be used in smoke control areas to 2% sulphur. However there are a number of smokeless solid fuels which are marketed for sale outside smoke control areas and where the sulphur content can be significantly higher. High

[3] Smog is a mixture of air pollutants, originally named for the mixture of smoke and fog in the air found especially in cities, that makes the atmosphere difficult to breathe and harmful for health. We now know that smog includes a wide range of air pollutants, including smoke, gases and particulate matter.

sulphur content fuels are harmful to human health and the environment. In addition they can also cause damage to stoves and chimneys.

There is no requirement to label products with their sulphur content, therefore consumers would find it difficult to identify these when purchasing fuel, due to inadequate information at the point of sale and lack of knowledge of the harm cause. They may therefore purchase these in good faith

As government already regulates the sulphur content of all liquid fuels, we are minded to review and extend the sulphur content limit to all smokeless solid fuels to ensure that consumers don't switch from house coal to a more polluting high sulphur manufactured smokeless fuel. We are seeking views on whether there should be legislation which sets specific limits, and if so what these should be.

Anthracite is a naturally occurring, mined, high-purity form of coal, and is approved for use in smoke control areas because of low emissions of particulate matter. We are not currently seeking further evidence on the use of anthracite.

What action has already been taken?

As a first step we have been raising consumer awareness of the issue and developing quality standards for fuel; we are working with industry to launch a new industry-led 'Ready to Burn' standard for dry wood because wet wood can have over twice the emissions of dry seasoned wood.

We have also developed guidance to help inform consumers of what they can do to reduce their impact when burning solid fuels at home such as burning less often, switching to cleaner fuels or moving to a cleaner burning/more efficient appliance. We are working with Local Authorities to ensure this message is available for householders at a local level.

We have worked with chimney sweep organisations to provide advice to consumers in their own homes. They have developed an informative guide which provides clear advice on the procedures to follow when lighting a stove to minimise smoke emissions.

We welcome proactive initiatives already taken by industry such as the Ecodesign-ready brand launched earlier this year which enables consumers to identify which stoves are tested to the emissions standards of the Ecodesign provision due to be introduced in 2022.There are now over 300 Ecodesign ready stoves available and retailers are working hard to promote awareness of the benefits.

However more needs to be done if emissions from domestic burning are to be reduced.

Timing and duration of the call for evidence

The call for evidence will be published for a period of four weeks from the publication date

at: https://consult.defra.gov.uk/airquality/domestic-burning-of-wood-and-coal

You can respond using the online survey at the above link. If you would prefer not to respond online, you can respond:

By email: Air.Quality@defra.gsi.gov.uk

Or by writing to:

Local Air Quality Team
Department for Environment, Food and Rural Affairs
Area 2C, Nobel House
17 Smith Square
LONDON SW1P 3JR

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Questions

We are seeking information and data on the use of house coal, smokeless coal, manufactured solid fuels and wood for domestic heating as follows:

i) House coal, smokeless coal and manufactured solid fuels

The Government is considering what further steps can be taken to encourage households away from burning solid fuels over the longer term and make a change to cleaner fuels as a stepping stone towards this goal. **This approach would see:**

- **a move away from using house coal towards using less polluting fuels in the domestic setting by only allowing the sale of low sulphur smokeless coal and solid fuel**
- **applying appropriate sulphur standards (2% or less) to all smokeless solid fuels**

Data so far suggest that this would be cost neutral to the consumer; whilst there may be a small uplift in costs to purchase cleaner fuels, they will burn more efficiently due to their higher calorific value. The background evidence document published with this call for evidence provides further information.

The Government is interested to understand the impact on businesses from a shift towards cleaner fuels, as set out above.

ii) Wood fuels

Many people are unaware that burning newly felled wood with a high moisture content ('wet wood') is not only inefficient (as the energy from the fire has to drive off all the water in the wood) but also creates more smoke and harmful particulates. Dry wood produces

less smoke and more heat when burned, and thereby provides a more pleasant experience for consumers.

As there are currently no mandatory quality or labelling standards for wood moisture content, people may also be unaware that they are buying wood that is too wet to burn straight away and requires further seasoning before use.

The Government is considering a way of reducing the use of wet wood. The solution being considered would not affect those people who have the space for large deliveries of unseasoned (wet) wood and who then season (air dry) it themselves. However, the sale of smaller quantities (more likely to be used immediately) would be limited to dry wood to ensure that people are not inadvertently burning wet wood. This would limit the harm caused to themselves, their neighbours, their stove and the environment.

We are considering limiting sales of wood to only dry wood where this is sold in smaller sizes of packaging that does not lend the wood to being seasoned before use. For instance, in packaging of up to 2m^3 (a large dumpy bag).

Section 1 – Introduction: about you

Q1. What is your name?

Q2. What is your email address?

Q3. What is your organisation:

- Academic
- Distributor e.g. retailer
- Fuel Supplier <10 employees
- Fuel Supplier 10 - 49 employees
- Fuel Supplier =>50 employees
- Householder/individual
- Industry Body
- Local Authority
- NGO - Industry
- NGO - Environmental
- Other - please specify

Q4. Would you like your response to be confidential?

- Yes
- No

Section 2 - House Coal, Smokeless Coal and Manufactured Solid Fuels - for retailers/consumers/users

Q5. The Government is seeking to build on its evidence base on the use of bituminous or "house" coal, smokeless coal and manufactured solid fuel. We welcome evidence and views from individuals and companies on the following areas:

a. How many households use house coal and/or smokeless coal and solid fuel to heat their home?
   - 0 - 99,999
   - 100,000 - 199,999
   - 200,000 - 299,999
   - 300,000 +

b. How reliant they are on these particular forms of heating?
   - Is it their primary source?
     - 0 - 24 % households
     - 25 - 49 % households
     - 50 - 74% households
     - 75 - 100% households
   - Is it secondary heating?
     - 0 - 24 % households
     - 25 - 49 % households
     - 50 - 74% households
     - 75 - 100% households

c. How many of those burning coal are from low income groups?
   - 0 - 24 % households
   - 25 - 49 % households
   - 50 - 74% households
   - 75 - 100% households

Please supply relevant evidence.

Q6. Do you have any evidence on the likely costs and benefits to consumers of:

a. switching from house coal to low-sulphur smokeless solid fuels;
b. applying sulphur standards to smokeless solid fuels.

Please supply relevant evidence.

Q7. Do you have any evidence to suggest which fuels people would switch to if they were unable to purchase house coal?
   - Kiln dried wood (i.e. below 20% moisture)
   - Seasoned wood (i.e. left to air dry for 2 years)

- Wet wood (i.e. newly felled)
- Smokeless coal or anthracite
- Manufactured solid fuels
- Gas
- Electricity
- Oil
- Other (please specify)

Q8. Do you have any evidence to suggest that limiting sales of coal products to low sulphur smokeless fuel would have a particular impact on the following groups of individuals?

a. Low income households
b. Rural dwellers
c. Urban dwellers
d. Other please specify

Please supply relevant evidence.

Q9. Do you have any evidence on potential adverse impacts to consumers or the environment of limiting sales of coal products to low sulphur smokeless fuel?

a. Yes – please supply evidence
b. No

Q10. Do you have/can you share any evidence of the volumes/locations of sales of:

a. House coal
b. Smokeless coal or anthracite
c. Manufactured solid fuel

Please supply relevant evidence.

Section 3 - Wood fuels - for retailers/consumers/users

Q11. Do you have any evidence of:

a. How many households use wood as a way of heating their home?
    - 0 - 99,999
    - 100,000 - 199,999
    - 200,000 - 299,999
    - 300,000 +

b. How reliant they are on this particular form of heating?

    i. Is it their primary source?

    - 0 - 24 % households
    - 25 - 49 % households
    - 50 - 74% households

- 75 - 100% households

ii. Is it secondary heating?

- 0 - 24 % households
- 25 - 49 % households
- 50 - 74% households
- 75 - 100% households

c. How many of those burning wood are from low income groups?

- 0 - 24 % households
- 25 - 49 % households
- 50 - 74% households
- 75 - 100% households

Please supply relevant evidence

Q12. Do you have any evidence to suggest which fuels, if any, people will switch to if they are unable to purchase smaller volumes of wet wood?

- Kiln dried wood (i.e. below 20% moisture)
- Seasoned wood (i.e. left to air dry for 2 years)
- Wet wood (i.e. newly felled) - larger volumes
- Smokeless coal or anthracite
- Manufactured solid fuels
- Gas
- Oil
- Other (please specify)

Q13. Do you have any evidence on the likely costs and benefits to consumers of switching from wet wood to dry?

Q14. Do you have any evidence to suggest that limiting sales of wood (up to $2m^3$) to only dry wood would have a particular impact on the following groups of individuals?

a. Low income households
b. Rural dwellers
c. Urban dwellers
d. Other please specify

Please supply relevant evidence

Q15. Do you have any evidence on potential adverse impacts to consumers or the environment of switching to dry wood?

a. Yes – please supply evidence
b. No

Q16. How long, in your opinion, should wood be stored for before it can be used?

a. Use immediately
b. One week
c. 3 months
d. 6 months
e. 1 year
f. longer (please specify)

Q17. Burning treated wood or waste wood such as pallets, old fence posts or furniture can emit harmful fumes due to coatings applied. From your experience, would you consider the burning of treated waste or waste wood to be a common practice?

a. Very common
b. fairly common
c. neither common nor rare
d. fairly rare
e. very rare
f. don't know

Q18. What do you feel are the main reasons why people burn treated waste wood?

a. For warmth
b. Because it is a free fuel
c. To dispose of the waste wood
d. To ensure it's put to good use/ isn't wasted
e. Because they don't know what impact it might have
f. Other (please specify)

Section 4 - House Coal and Smokeless Coal and Manufactured Solid Fuels - for suppliers - businesses

Q19. What impact would the cleaner fuels proposals have on your business?

Q20. How long would your business need to adjust:

a. My business could do it immediately,
b. it would need 1 – 2 years
c. it would need 3 – 5 years
d. it couldn't adjust
e. I don't know

Q21. Do you think there is enough capacity in the UK solid fuels market to supply enough low sulphur smokeless solid fuels, if consumers switched to these from burning house coal?

a. Yes
b. No

Please supply evidence.

Q22. What should a sulphur limit be set at?

a. 1%
b. 2%
c. other - please specify

d. don't know

Please give the reason(s) for your answer.

Q23. Do you have any evidence on the prevalence of the use of high-sulphur petroleum coke in the manufacture of solid fuels?

a. Yes – please supply evidence
b. No

Q24. Do you have any evidence on the composition of smokeless coal and solid fuels and details on the pollutants, for example, metals or polycyclic aromatic hydrocarbons (PAHs), emitted when they are burnt?

a. Yes – please supply evidence
We would particularly welcome quantitative data
b. No

Section 5 - Wood fuels - for suppliers - businesses

Q25. What impact would the wood fuels proposals have on your business?

Q26. How long would your business need to adjust:

a. My business could do it immediately
b. it would need 1 – 2 years
c. it would need 3 – 5 years
d. it couldn't adjust
e. I don't know

Q27. Do you think there is enough capacity in the UK for the sustainable kiln dried and seasoned wood fuel market to supply consumers switching from buying wet wood in quantities of under $2m^3$?

Q28. From your experience, what percentage of wood sold to domestic customers

a. in volumes less than $2m^3$ (a large dumpy bag) is:
    - wet
        - 0 - 24%
        - 25 - 49%
        - 50 - 74%
        - 75 - 100%
    - dry
        - 0 - 24%
        - 25 - 49%
        - 50 - 74%
        - 75 - 100%

b. in volumes greater than $2m^3$ is:
    - wet

- 0 - 24%
- 25 - 49%
- 50 - 74%
- 75 - 100%

- dry
  - 0 - 24%
  - 25 - 49%
  - 50 - 74%
  - 75 - 100%

Q29. We are considering a cut off of 2m^3 for the sale of wet wood to households. Do you have any evidence for or against such a cut off?
What limit do you think a cut-off should be set at?

- Bags/nets only
- Up to 1 m^3
- Up to 2 m^3
- All wet wood
- Other (please specify)

Q30. From your experience, what volume of wood sold to domestic customers can be stored away from rain/elements to ensure it remains dry?

Q31. How big do you think the wood fuels market is in terms of the volume of both wet and dry wood sold?

a. volume of wet wood sold
b. volume of dry wood sold

Section 6 - Local powers to tackle air pollution from smoke

Local authorities often receive nuisance complaints as a result of outdoor and indoor burning (for example irresponsible use of bonfires, chimineas, fire-pits, allotment fires and chimneys). This harms local amenity by creating smoke.

The Government is not seeking to hinder the routine household practices of garden waste bonfires[4] or garden barbecues, nor discourage the practice of Bonfire Night or firework celebrations.[5]

Q32. Should government consider giving powers to local authorities to issue fixed penalty notices against those responsible for creating persistent smoke pollution to the environment, where there is harm to local amenity?

a. Yes
b. No

Q33. From your experience, what duration or frequency of smoke emissions would be considered as 'persistent'?

Section 7 - General - evidence

It is difficult to precisely quantify the air quality impact of domestic burning due to a large range of uncertainties, for example: what fuel is used, how frequently people burn and what appliance, if any, is used.

The attached background document provides information about Particulate Matter emissions and sets out the Government evidence in this area so far.

Q34. Do you have any additional evidence to add to this or wish to comment on the Government's data?

Q35. Do you have other evidence that could inform Government policy? If so, please attach it here.

Section 8 - General - comments

Q36. Do you have any additional comments/views that you wish to provide on the content of this call for evidence?

[4] Other options for disposal of garden waste e.g. composting should be considered as a preferred alternative to burning. Please note burning of household waste, treated wood and waste treated with pesticides can give off toxic fumes.

[5] The Government has previously published a guide on organising safe bonfire and firework celebrations, including advice on materials which should not be burned.
https://www.gov.uk/government/publications/celebrating-bonfire-night

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23 October 2019

Direct Line: 029 2082 9115
Email: dgray@darwingray.com

Our Ref: JDG/53/11
Your Ref:

Dear Sirs

Glan Lash OCCS Mine Extension

You have asked as for our opinion on Planning Policy Wales (Tenth Edition) ("PPW") and in particular paragraph 5.14.3 of PPW on the planning application to permit the extension of the Glan Lash OCCS bearing in mind the intended uses of the anthracite which would be mined.

We understand that the Mineral Planning Authority believe that there is some ambiguity in paragraph 5.14.3.

Before we make any specific comments it is worthwhile emphasising that the Courts of England and Wales have had to consider planning guidance on numerous occasions and have set out the approach one should take when interpreting any planning guidance. We do not believe there should be any difference of approach in considering PPW compared to say a local development plan. If anything PPW sets out more general principles and outcomes which should underpin planning policy in Wales.

There are two Supreme Court judgments in 2011 and 2017 which have been applied in subsequent cases. They say that planning policy should not be interpreted like Acts of Parliament or contracts as they are intended to give broad statements of principle. Those cases are *Tesco Stores Ltd v Dundee City Council* [2012] UKSC 13 and *Secretary of State for Communities and Local Government v Hopkins Homes Ltd* [2107] UKSC 37.

The legal principles are usefully summarised by the High Court in *Richborough Estates limited and Others v Secretary of State for Housing, Communities and Local Government* in 2018 where the honourable Mr Justice Dove said at paragraph 39 of the judgment:

"The legal principles when addressing a question of this kind are as follows:

i) The question of the interpretation of a planning policy is a question of law for the court: see Tesco Stores v Dundee City Council [2012] UKSC 13; [2012] PTSR 983.

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ii) The task of interpretation should not be undertaken as if the planning policy were a statute or a contract; the approach must recognise that planning policies will contain broad statements of policy which may, superficially, conflict and require to be balanced in reaching a decision: see Tesco Stores at paragraph 19 and Hopkins Homes (in the Supreme Court) at paragraph 25. Planning policies are designed to shape practical decision making and they should be interpreted with that practical purpose clearly in mind. They have to applied by planning professionals and the public for whose benefit they exist, and are primarily addressed to that audience.

iii) It is important that the language of the policy is read in its proper context when textual interpretation is required: see Tesco Stores at paragraphs 18 and 21. That context will include the subject matter of the policy and its planning objectives. It will also include the wider policy framework within which the policy sits and to which it relates.

iv) Often policies will call for judgment to exercised as to how they apply in the particular factual circumstances of the case: see paragraphs 19 and 21 of Tesco Stores. It is important to distinguish between the interpretation of policy which requires judicial analysis, and the exercise of judgment in the application of policy which is a matter for the decision-maker: see Hopkins Homes (in the Supreme Court) at paragraph 26."

The reference to Hopkins Homes is to the judgment of the Supreme Court mentioned above.

Turning now to PPW we consider that the following paragraphs are also relevant to determine the policy set out in paragraph 5.14.32 and the principles which would be relevant to any application:

5.10.13: This states that it is Welsh Government policy to remove coal from energy generation. In effect the policy is to reduce the use of coal as the paragraph goes on to say that coal fired generation should be phased out by 2025. Clearly this is talking about commercial use of coal for energy production rather than domestic use.

5.10.14 This states that proposals for opencast development should not be permitted but then goes on to explain that they may be permitted in "wholly exceptional circumstances". This paragraph relates back to paragraph 5.10.13 as it ends with the statement that any proposals in the context of climate change emissions reductions targets and for reasons of national energy security so clearly relates to the commercial production of energy using coal.

5.14.1 This recognises that society needs and will continue to need a wide range of minerals and gives examples of the use of minerals outside energy production. This is in contrast to paragraphs 5.10.13 and 5.10.14 which set out a different policy in relation to power generation.

5.14.2 This sets out the balancing exercise the mineral planning authority should undertake when considering an application which is covered by the policy in 5.14.1 and the factors that should be taken into account. The factors are not necessarily compatible: For instance on the one hand there is the principle to safeguard mineral resources but on the other hand there is a need to reduce the impact of mineral extraction. This is a balancing exercise which the High Court Judge mentioned in the *Richborough Homes* case mentioned above (see sub-paragraph 39(ii) set out above).

5.14.19 This paragraph states where necessary, planning authorities should provide a clear guide to where non-energy mineral extraction is likely to be acceptable and include policies which protect sensitive environmental designations or historic features and environmental and resource

protection. The subsequent paragraphs (other than 5.14.32) do not give examples of coal for non-energy production.

We have set out paragraph 5.14.32 in full below:

> *"Coal has predominantly been used for energy production, however coal has other specific uses. These include use for industrial purposes in the steel industry, in speciality carbon markets, in the making of concrete and for domestic use. Coking coal, for example, which is largely imported is used in coke manufacture for the steel industry and directly in blast furnaces. Whilst the use of coal for energy generation should not be permitted if, exceptionally, planning applications come forward for industrial uses for coal then each case would need to be considered individually and the policies contained in MTAN 2: Coal applied, including the test outlined in paragraph 45 of MTAN 2."*

Applying the approach set out in the *Richborough* case mentioned above we do not think the reference to the use of coal for energy production should be interpreted as referring to the domestic use of coal. The principle is set out clearly in paragraph 5.10.13 and that is to phase out commercial production of energy through the use of coal. The principle being applied relates to the commercial use of coal for energy production and that can only refer back to the principle set out in paragraph 5.10.13.

That is not to say that the extraction of coal for domestic use or some other commercial use should be permitted. As paragraphs 5.14.14 and 5.14.32 state any proposal to extract coal should take into account the requirements of MTAN2.

Factors that might be relevant are:

- Whether the proposal relates to an existing or new scheme;
- The period during which the scheme would be permitted;
- Any environmental gains that might be achieved through restoration;
- The commercial use of the coal and whether there are any alternative substitutes and when those substitutes might be available if not immediately available;
- The distance which are coal extracted might be transported;
- The safeguarding of employment, and
- The consequences for the end users if coal were not supplied including supplies of coal from other locations and the environmental consequences of those supplies.

Yours faithfully

DARWIN GRAY LLP

Subject: Pre-application consultation for the Northern extension of Glan Lash Mine
From: Ruth Southby <RSouthby@carmarthenshire.gov.uk>
Date: 17/04/2019, 15:30
To: "chris@brynbachcoal.co.uk" <chris@brynbachcoal.co.uk>
CC: Thomas R Boothroyd <TRBoothroyd@carmarthenshire.gov.uk>

Good afternoon Chris,

Thank you for forwarding your pre-application consultation response with respect to the proposed Northern extension to the current Glan Lash mine site. I have now had an opportunity to review the Environmental Noise Assessment and have a number of queries I would like to raise with the author;

- Under Section 3 Method of calculating noise level, reference is made to with respect to a number of Guidance documents. A number of the documents listed are outdated and I would suggest correcting this element of the report to reflect that calculations have been undertaken in accordance with current guidance documentation.

- The sound pressure levels for individual items of plant have been obtained directly from operating plant at a different site owned by the applicant. The noise levels provided are 13 years old and I would therefore request justification from the applicants that this data is relevant and reflects current and proposed practise at Glan Lash Mine. Could we also have a copy of the octave band measurements with respect to the measurements of plat performance please.

- Where an allowance has been provided for barriers and or soft ground attenuation, can we please have a copy of the calculation that has been applied. I am happy to accept attenuation calculations for a single activity at one noise sensitive dwelling (E.g., Soil stripping at Pen Y Waun Hafog) in order for us to confirm how the levels of attenuation specified have been achieved.

- BS4142:2014 specifies the reference time interval for day time noise as being 1 hour. Background noise measurements taken at Llwyn Celyn and Ty Uchaf Farm have not been measured for the hour period. I note that background noise measurements taken in 2011 at Llwyn Celyn for a 20 minutes period have been used in the absence of current data, however I have concerns whether representative background noise measurements provided for Llwyn Celyn and Ty Uchaf Farm reflect the current noise climate at these properties and I would request further justification for using the levels provided in Table 2.

- I note that background noise measurements at the noise sensitive properties were undertaken on Thursday 17th May 2018 when the applicants state the mine is operational. Can I please receive confirmation that the background noise measurements were taken in the absence of any noise associated with the mine operations.

If you would like to discuss this e-mail in greater detail, please contact me at this address.

Regards

Ruth Southby
Swyddog Gwyddonol (Swn)/Scientific Officer (Noise)
Cartrefi a Chymunedau Mwy Diogel / Homes and Safer Communities
Ffôn / Tel: 01269 598208 Ext: 5608

Rydym yn croesawu gohebiaeth yn Gymraeg a Saesneg. / We welcome correspondence in English and Welsh.

learning

Pryce Consultant Ecologists

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Ammanford
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18th November 2019

Application for permission for an extension to the Glanlash Surface Mine

ADDENDUM to
ECOLOGICAL MANAGEMENT PLAN issued in October 2018
and
RESTORATION PROPOSALS PLAN GLE6 issued 26th March 2019
addressing
1. Ecological planning considerations
2. The area of wet woodland located within the site

Dear Chris,

Thank you for inviting me to respond to the Mineral Planning Authority's concerns regarding the proposed Glanlash Extension mine, near Llandybie, Carmarthenshire, which is shown on figure 1. I can confirm that, in its early stages, the prospective mine site area was curtailed and redesigned due to the findings of the ecological surveys and assessment that we have been carrying out since 2016 which included, among other factors, the discovery of a population of the European protected Marsh Fritillary butterfly and of an area of degraded NVC M24 vegetation, a grassland type of high ecological significance that qualifies as a '*Habitat of Principal Importance for Conservation of Biological Diversity'* under section 7 of the Environment (Wales) Act 2016. Pre-Application Consultations with the Planning Authority as well as with Natural Resources Wales, Butterfly Conservation and other conservation interests during this period, have resulted in ongoing modifications to the scheme that have sought to address the concerns of all parties.

Legislation and Designations
Firstly, we should reiterate that the wet-woodland located in the centre of the site was originally thought by the Planning Authority's ecologists to qualify as Ancient Semi-Natural Woodland (ASNW) but was shown on both map evidence and on the paucity of the number of 'indicator species' that this is not actually the case.

Despite the fact that in recent years the mature trees have largely been removed and regeneration currently amounts mainly to young alder and willow regrowth and bramble colonization, the woodland nevertheless qualifies as '*wet woodland'* which is also listed as a '*Habitat of Principal Importance'* under section 7 of the Environment (Wales) Act. Section 6 of the Act requires that public authorities must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems. The Planning Authority therefore needs to be assured that the removal of the woodland at Glanlash will not result in any habitat loss and, indeed, will seek to result in biodiversity enhancement.

The proposals are fully compliant with both the conservation of the wet woodland *Habitat of Principal Importance*, as well as the Authority's Biodiversity Duty and on completion of the mining operation will actually result in a substantial gain in the area of wet woodland when compared to that which currently exists.

Planning Policy

Section 6.4 of Planning Policy Wales edition 10 (PPW 10) outlines the Welsh Government's policies on biodiversity and ecological networks. The proposed mining operation, if permitted, will result, in the medium to longer terms, in a very considerable biodiversity gain. In particular, it presents the opportunity to considerably increasing the area of woodland, including wet woodland, within and around the site as well as to reinstate marshy grassland formerly of considerable biodiversity value and rarity but now long-neglected and thus currently very degraded. Furthermore, the reinstatement of this grassland is a step towards the goal of bringing more Marsh Fritillary habitat into favourable conservation management in line with the Marsh Fritillary Special Planning Guidance which Carmarthenshire County Council is seeking to extend to include the Glanlash Extension area. The scheme will result in both habitats at least doubling in area and will ensure their positive conservation management until at least 2037.

The new wet woodland plantings will also increase the area and density of the woodland corridor that lines the Afon Lash and will connect with existing and new habitat links that will result when the mine site is restored. This will further the Welsh Government's aspirations set out in PPG 10 towards the reversing of a decline in biodiversity as well as contributing to its goals of social well-being set out in the Future Generations Act 2015. The Glanlash scheme has already increased the area of land available for public access for relaxation and other quiet pursuits by opening the reclaimed Tir-y-dial Tip, an area reinstated as an early part of the original scheme, as well as by permitting access along Shands Road which connects with other areas in the vicinity already used for such activity. The proposals also fit well into the Welsh Government's emerging Green Infrastructure plan for encouraging the multifunctional benefits of green infrastructure.

Extents and temporary woodland loss

The wet woodland at Glanlash extends to 2.39ha (excluding the disturbed, open areas and internal trackways shown on figure 1). It is therefore proposed to plant an equivalent area in nearby unmanaged, often Himalayan Balsam infested fields, adjacent to the Afon Lash (fields 1, 2, 3 and 4 on figure 1), together with two fields (fields 5 and 6) which currently support horse-grazed, semi-improved rush-grassland. The total area available in these fields is 2.998ha as detailed on figure 1. All the land proposed for planting is currently of low ecological interest.

Details are yet to be agreed but, after the completion of mining operations and when the site is restored, the plantings currently proposed, including woodlands of all types to be established on the restored mine site, will, in total, amount to almost double the woodland area that it will be necessary to remove. In total, the scheme will result in the establishment of approximately 11.697ha of woodland and ecological networks both within the site and the surrounding area.

It should be noted that the woodland within the site, including the wet woodland, will only be lost temporarily for the duration of the mining operation and will be reinstated following the completion of these works. The planting of the wet woodland off-site will compensate for this short-term loss and will remain as a permanent feature after the mining project is completed. Moreover, an equivalent area of wet woodland will be re-created in the backfilled mined area using standard well-proven restoration techniques including the replication of suitable wet surface hydrology.

The increase in woodland area also contributes to the long-term net benefit in countering climate change by locking up an increased amount of carbon.

Soil conditions

The Authority's ecologists were concerned that soil conditions at both the existing wet woodland site and the land into which planting would take place must be broadly similar. To address this point, you commissioned top-soil and sub-soil analyses at three locations in the wet woodland and at locations in each of four mitigation fields adjacent to the Afon Lash which it was thought would be suitable for mitigating the temporary loss of the wet woodland within the site. The sampling locations are shown on figure 1 and the results of the analyses at appendix 1. Soil chemistry and moisture characteristics at all sites are broadly similar and certainly suitable to create wet woodland in fields 1, 2, 3 and 4, thus confirming their suitability to create new woodland and enhance the existing ecosystems and biodiversity.

Fields 5 and 6 were not sampled but the preponderance of rushes over much of their areas would also indicate their suitability to create wet woodland. However, if, at the time of planting, it is considered that the soils would benefit from increasing their moisture content, minor works to impede surface drainage will be undertaken which might include, for example, the construction of low bunds that follow the topographic contours which would inhibit run-off and encourage water to soak into the soil.

Prior to planting, particular attention will be paid to ensuring that the soil hydrological conditions of the proposed wet woodland areas match the hydrological conditions of the original wet woodland site.

Planting stock

Planting stock for all woodland planting including wet woodland creation will comprise only of locally native species, where possible raised from local seed sources. The predominant species to be planted will be Grey Willow (35%) and Common Alder (35%) with Downy Birch (5%), Pedunculate Oak (5%), Hazel (5%) and Hawthorn (5%) in any drier patches. Smaller proportions of other species such as Holly, Aspen, Guelder Rose, Rowan and Alder Buckthorn (together totaling 10%) will also be included. It is anticipated that Bramble will become established by natural means as well as various herb-layer species, depending upon small-scale soil and wetness conditions. Management and replacement of failures will follow standard practice and will, in the case of off-site mitigation plantings, continue from the beginning of the mining operation until the end of the aftercare period (anticipated to be a total of seventeen years) and, in the case of plantings to be undertaken within the reinstated mine site, for the ten year aftercare period.

Himalayan Balsam

Fields 3 and 4 are currently infested with Himalayan Balsam, the control of which will form part of the management of the new plantings. The ground will be strimmed and cleared of existing dead and spent plants prior to the planting of wet woodland stock in the winter of 2019/20. Following tree planting, balsam seedings and young plants will be pulled by hand or strimmed every month from the end of April before they come into flower and set seed, taking care not to damage newly planted saplings. This action will be repeated every month during the growing season until, towards the end of the year, plants are no longer germinating and becoming established. Ongoing management will commence the following spring and will again include monthly pulling/strimming. This process will be repeated for at least three years. Thereafter, monthly checks will be undertaken between May and October and any new seedlings will be removed by hand or strimmed. Once the saplings become well established and the tree canopy closes, balsam will tend to be discouraged but management will continue to include regular checks and the removal of newly germinated plants.

Wet woodland establishment on restored mine site

Details are yet to be agreed but, after the completion of mining operations and when the site is restored (in about seven years' time), the plantings currently proposed together with wet woodland to be established on the restored site could, in total, amount to about double the area of the wet woodland that will be removed as a result of working the Extension site. This will be achieved on the restored mine site by creating a suitable landform where necessary, and diverting natural surface drainage to irrigate the wet woodland plantings. With careful landform engineering during site restoration following the cessation of mining operations, it should be possible to replicate conditions which promote inhibited surface water drainage and ultimately lead to the establishment of wet woodland where required. Future management during the aftercare period will always ensure that an effective, controlled hydrological regime is maintained.

Soils storage during the mining operation

On the commencement of the various phases of the mining operation, soil bunds will be constructed to a maximum of 3m in height and, for the whole duration of site operations, will be managed to ensure that notifiable weeds do not become established. Woodland soils and hedgebank material will be stored separately from grassland soils and will be used for the re-establishment of similar habitats to those from which they were derived.

Aftercare maintenance and management

The aftercare period for the woodland areas will start following the completion of mining, backfilling, soils replacement and planting operations and will continue for ten years thereafter. In effect this will ensure that the wet woodland plantings to be established in fields 1-6 will benefit from seventeen years of aftercare management. This is also true for all the other habitats that will be retained around the peripheries of the site including the NVC M24 grassland, as well as the grassland to be translocated as turves.

Habitat connectivity
The new wet woodland plantings as proposed will considerably increase the area and density of the woodland corridor currently lining the Afon Lash in the vicinity of the mine site. This, together with the woodland that will be established on the mine site when it is restored, will be linked by existing retained habitat corridors that will be augmented by the re-establishment of corridors temporarily disrupted by the mining operation together with the provision of new links where they had not previously been present. Wide hedgerows will link existing and newly established woodlands and will also provide means for mobile fauna to more easily travel between foraging areas and breeding sites without the necessity to stray far from cover.

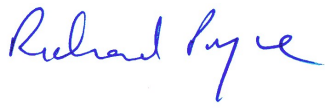
Ecological Management Plan
Future management of retained and created habitats will be detailed in an Ecological Management Plan which will be available before the commencement of site operations within the extension site. This Plan will provide the strategy and prescriptions to achieve long term management enabling the enhancement and positive conservation management of retained, newly created and restored habitats. This approach will deliver a long-term net gain for biodiversity which will extend from the commencement of the Extension mining operation until the end of the ten years aftercare period – an anticipated total of seventeen years.

Other environmental considerations
A large proportion of the production of high-quality anthracite from Glanlash supplies industrial customers including those that require the product for filtration systems. If not mined at Glanlash, to satisfy this market would require the importation of coal from the Far East with all the environmental and social implications that such a cheaply produced product transported over such a long distance entails. The continued mining of anthracite at Glanlash therefore also contributes to the Welsh Government's aspirations of economic resilience set out in the Future Generations Act 2015.

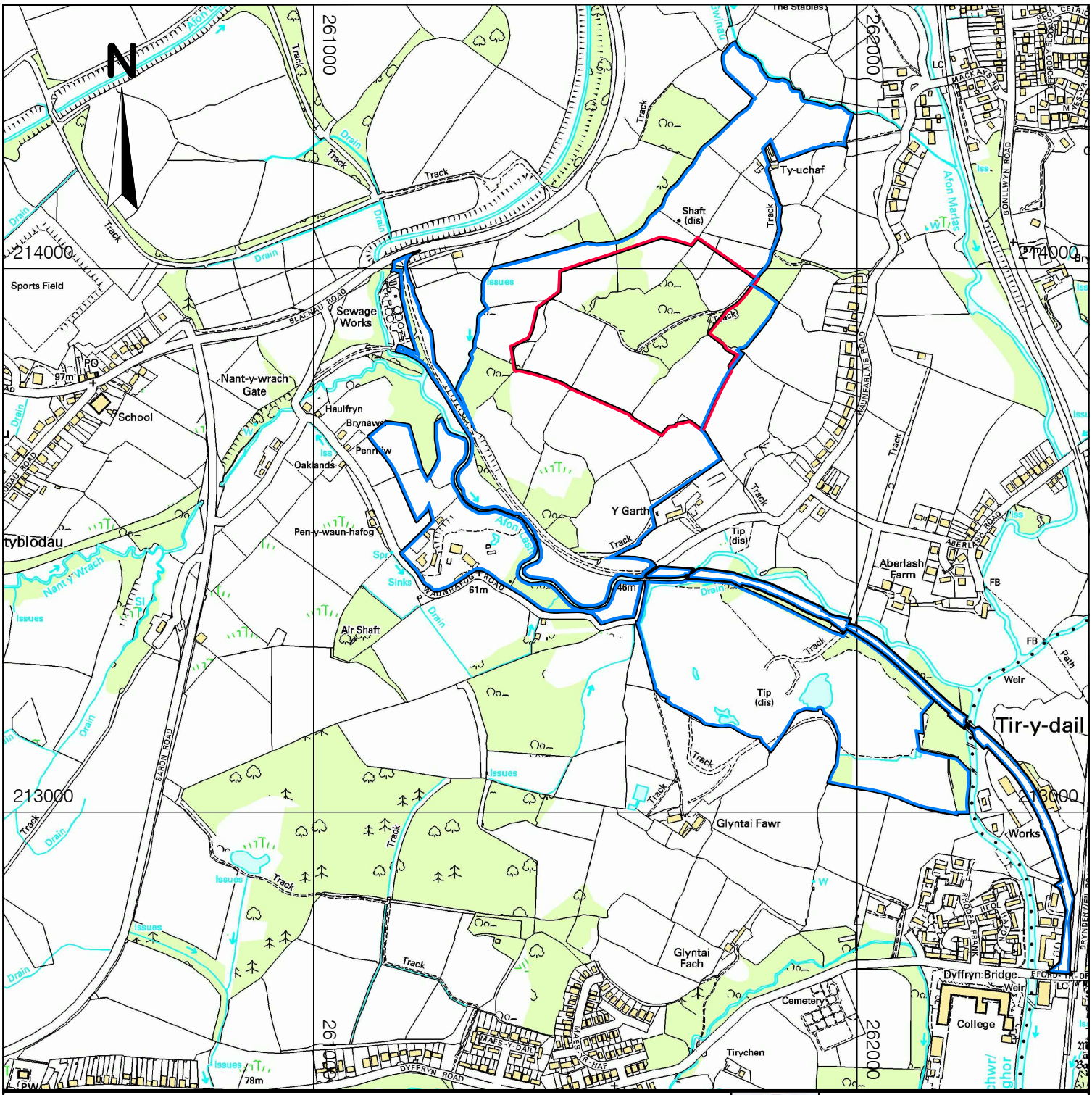
A decision will be made in due course as to the nature of the restoration of the existing coal washery site.

If you require any additional information please do not hesitate to contact me.

Yours sincerely



Richard Pryce



Legend

Site Boundary (Coloured Red on Outside of area)

Land in Control of the Applicant (Coloured Blue on Inside of area)

Scale Bar

0km 0.2km 0.4km 0.6km 0.8km 1.0km

0.1km 0.3km 0.5km 0.7km 0.9km

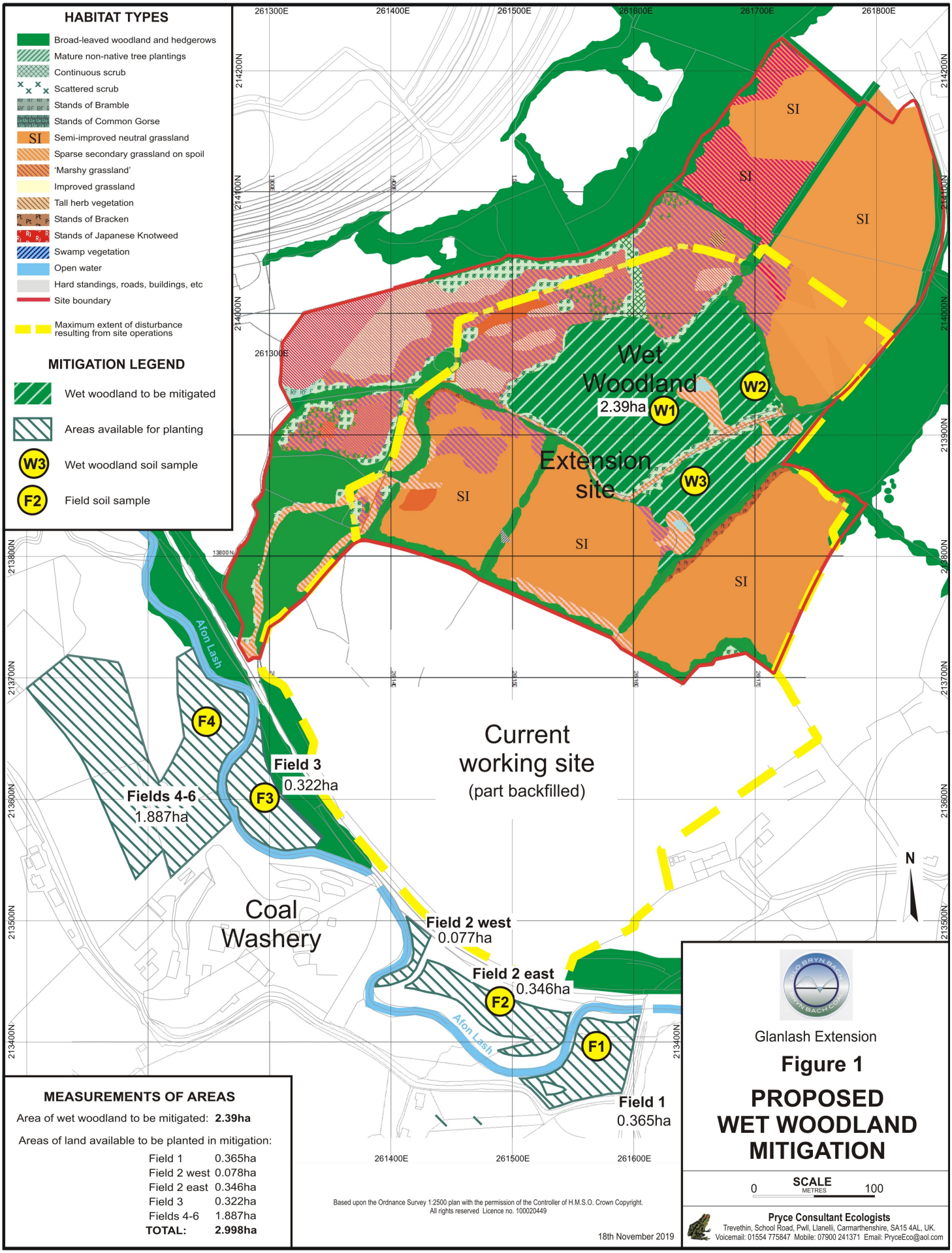
18th November 2019

Glo Bryn Bach Coal,
Glan Lash Washery,
Shands Road, Nr Blaenau,
Ammanford, Carmarthenshire, SA18 3NA

GLAN LASH EXTENSION

Development Location Plan
GLE-01 Amendment 1

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HABITAT TYPES
Broad-leaved woodland and hedgerows
Mature non-native tree plantings
Continuous scrub
Scattered scrub
Stands of Bramble
Stands of Common Gorse
SI
Semi-improved neutral grassland
Sparse secondary grassland on spoil
'Marshy grassland'
Improved grassland
Tall herb vegetation
Stands of Bracken
Stands of Japanese Knotweed
Swamp vegetation
Open water
Hard standings, roads, buildings, etc
Site boundary
Maximum extent of disturbance resulting from site operations
MITIGATION LEGEND
Wet woodland to be mitigated
Areas available for planting
W3
Wet woodland soil sample
F2
Field soil sample
261300E
261400E
261500E
261600E
261700E
261800E
214200N
214100N
214000N
213900N
213800N
213700N
213600N
213500N
213400N
Wet Woodland
2.39ha
W1
W2
W3
Extension site
Current working site
(part backfilled)
Afon Lash
F4
Field 3
0.322ha
Fields 4-6
1.887ha
F3
Coal Washery
Field 2 west
0.077ha
Field 2 east
0.346ha
F2
F1
Field 1
0.365ha
N
MEASUREMENTS OF AREAS
Area of wet woodland to be mitigated: 2.39ha
Areas of land available to be planted in mitigation:
Field 1 0.365ha
Field 2 west 0.078ha
Field 2 east 0.346ha
Field 3 0.322ha
Fields 4-6 1.887ha
TOTAL: 2.998ha
Based upon the Ordnance Survey 1:2500 plan with the permission of the Controller of H.M.S.O. Crown Copyright. All rights reserved Licence no. 100020449
18th November 2019
Glanlash Extension
Figure 1
PROPOSED WET WOODLAND MITIGATION
SCALE
METRES
0
100
Pryce Consultant Ecologists
Trevethin, School Road, Pwll, Llanelli, Carmarthenshire, SA15 4AL, UK.
Voicemail: 01554 775847 Mobile: 07900 241371 Email: PryceEco@aol.com

APPENDIX 1

Soil analyses

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 1 TOPSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362401/01

Crop

Analysis	Result
pH	6.5
Phosphorus (ppm)	5
Potassium (ppm)	79
Magnesium (ppm)	80
Calcium (ppm)	2162
Sulphur (ppm)	1
Manganese (ppm)	87
Copper (ppm)	10.8
Boron (ppm)	1.13
Zinc (ppm)	8.6
Molybdenum (ppm)	0.07
Iron (ppm)	599
Sodium (ppm)	23
C.E.C. (meq/100g)	14.9
Org. Matter - DUMAS (%)	9.8

Additional Comments

Laboratory Notes
Small Sample – Analysis carried out using non-standard methods which may impact on the validity of the final result.

Please Note
Whilst every care is taken to ensure that the Results from Analysis are as accurate as possible, it is important to note that the analysis relates to the sample received by the laboratory, and is representative only of that sample. No warranty is given by the laboratory that the Results from Analysis relates to any part of a field or growing area not covered by the sample received. It is important to ensure that any soil, leaf, silage or fruitlet sample sent for analysis is representative of the area requiring analysis and that samples are obtained in accordance with established sampling techniques. A leaflet containing instructions on how to take soil, leaf, herbage, silage and fruit samples for analysis is available from the laboratory on request.

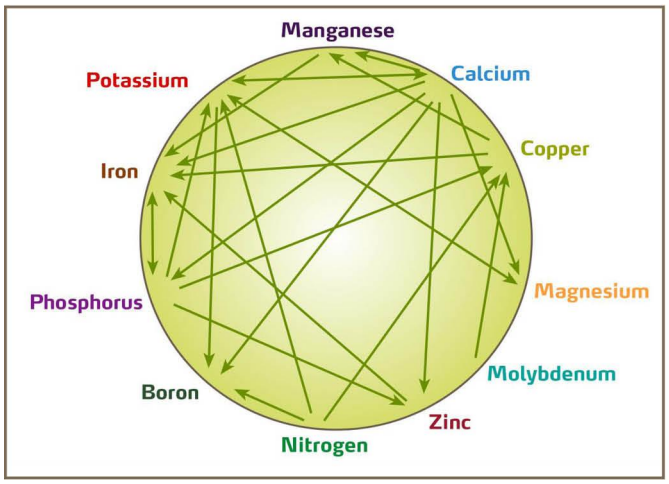
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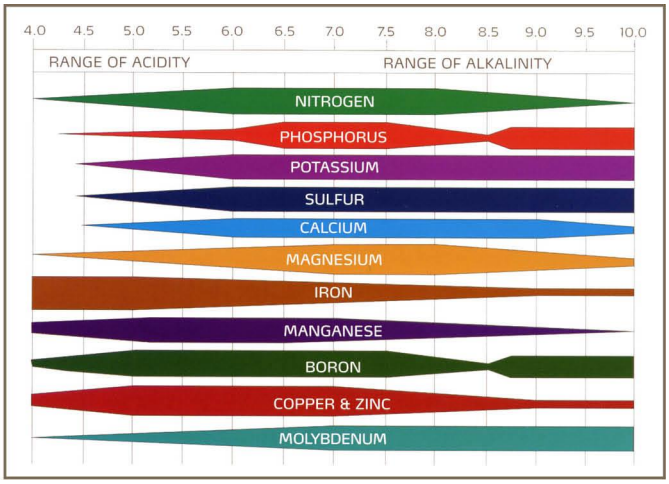
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 1 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362401/01		
Crop			





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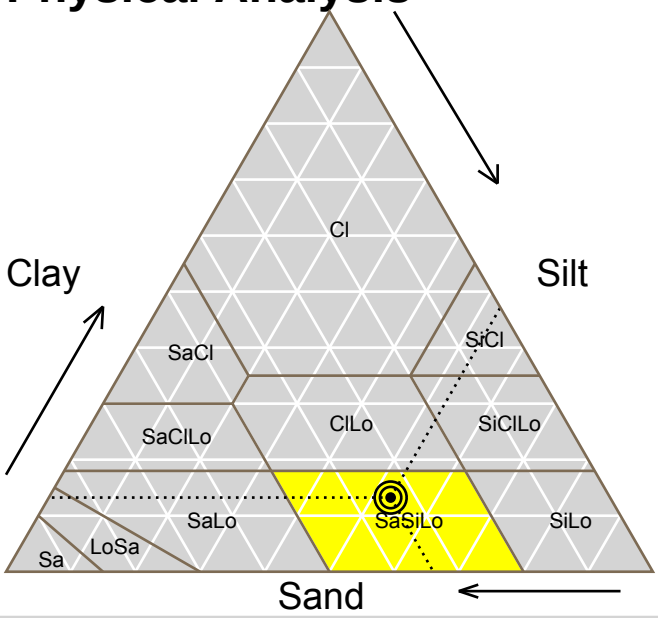
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 1 TOPSOIL
Sample No E362401/01
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	33.92
Silt	52.84
Clay	13.24
Soil Type	SaSiLo Sandy Silt Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	5.7	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
Fungal activiy declines
Bacteria thrive
Nutrient cycling drops

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Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 1 SUBSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362401/02

Crop

Analysis	Result
pH	6.8
Phosphorus (ppm)	3
Potassium (ppm)	46
Magnesium (ppm)	57
Calcium (ppm)	2317
Sulphur (ppm)	1
Manganese (ppm)	112
Copper (ppm)	8.7
Boron (ppm)	0.96
Zinc (ppm)	5.6
Molybdenum (ppm)	0.10
Iron (ppm)	545
Sodium (ppm)	23
C.E.C. (meq/100g)	14.7
Org. Matter - DUMAS (%)	7.0

Additional Comments

Laboratory Notes
Small Sample – Analysis carried out using non-standard methods which may impact on the validity of the final result.

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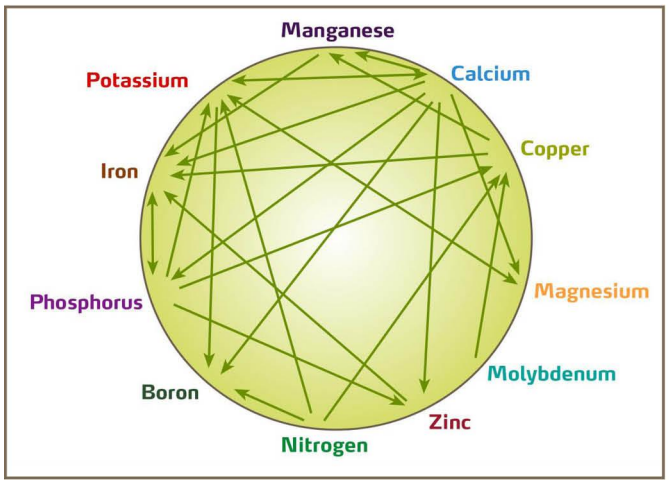
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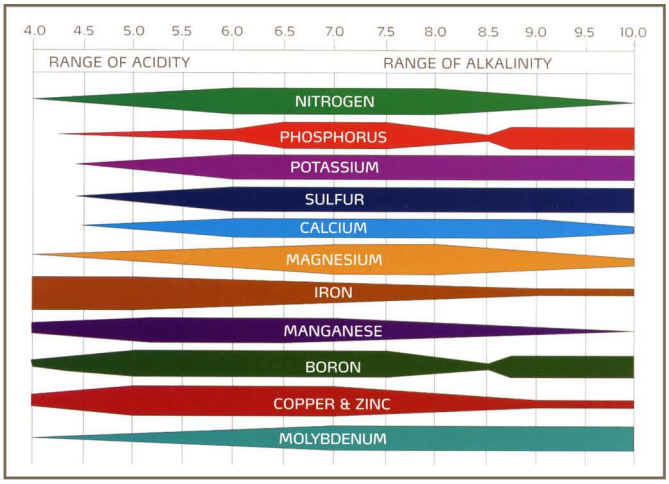
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 1 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362401/02		
Crop			





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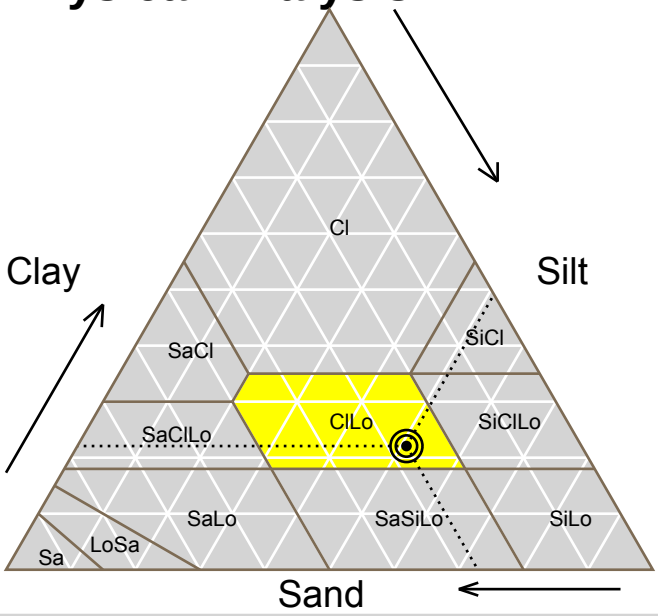
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 1 SUBSOIL
Sample No E362401/02
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	27.05
Silt	50.87
Clay	22.08
Soil Type	ClLo Clay Loam

Property	Assessment
Available Water	Medium to High
Drainage Rate	Medium to Slow
Inherent Fertility	Medium to High
Potential C.E.C.	Medium to High
Leaching Risk	Moderate to Low
Warming Rate	Medium

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	4.1	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
Fungal activiy declines
Bacteria thrive
Nutrient cycling drops

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Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref WOODLAND 1 TOPSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362401/03

Crop

Analysis	Result
pH	4.5
Phosphorus (ppm)	9
Potassium (ppm)	55
Magnesium (ppm)	94
Calcium (ppm)	694
Sulphur (ppm)	4
Manganese (ppm)	20
Copper (ppm)	5.1
Boron (ppm)	0.62
Zinc (ppm)	19.4
Molybdenum (ppm)	< 0.01
Iron (ppm)	1149
Sodium (ppm)	23
C.E.C. (meq/100g)	9.2
Org. Matter - DUMAS (%)	13.4

Additional Comments

Laboratory Notes
Small Sample – Analysis carried out using non-standard methods which may impact on the validity of the final result.

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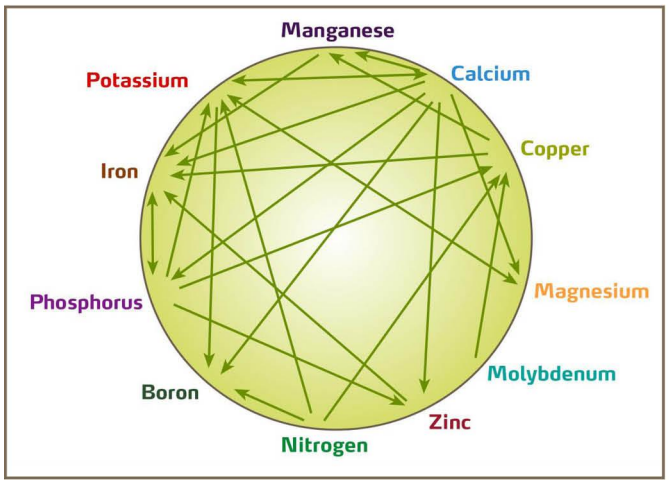
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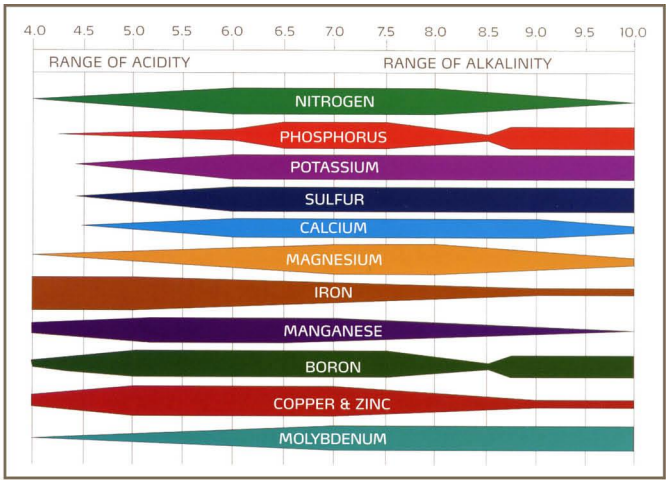
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 1 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362401/03		
Crop			





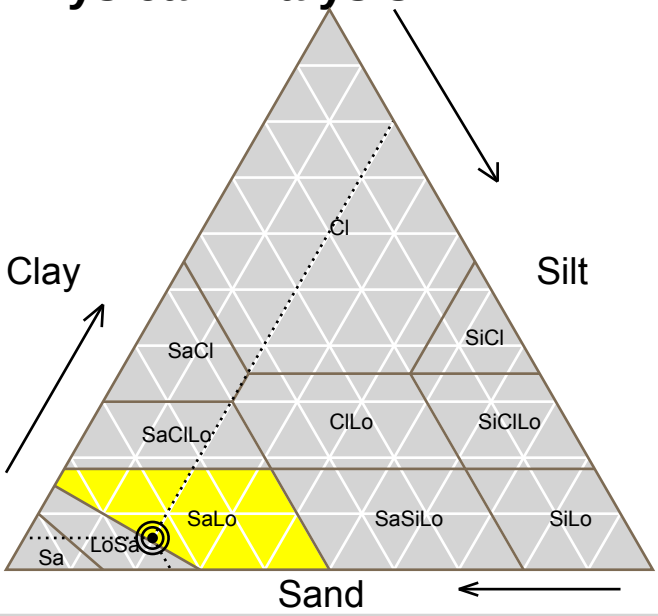
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 1 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362401/03		
Crop			

Physical Analysis



Analysis	Result (%)
Sand	74.51
Silt	19.82
Clay	5.67
Soil Type	SaLo Sandy Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	7.8	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

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Nutrient cycling drops

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Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref WOODLAND 1 SUBSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362401/04

Crop

Analysis	Result
pH	4.6
Phosphorus (ppm)	5
Potassium (ppm)	28
Magnesium (ppm)	46
Calcium (ppm)	325
Sulphur (ppm)	4
Manganese (ppm)	6
Copper (ppm)	2.0
Boron (ppm)	0.49
Zinc (ppm)	3.6
Molybdenum (ppm)	0.02
Iron (ppm)	1624
Sodium (ppm)	21
C.E.C. (meq/100g)	4.5
Org. Matter - DUMAS (%)	3.2

Additional Comments

Laboratory Notes
Small Sample – Analysis carried out using non-standard methods which may impact on the validity of the final result.

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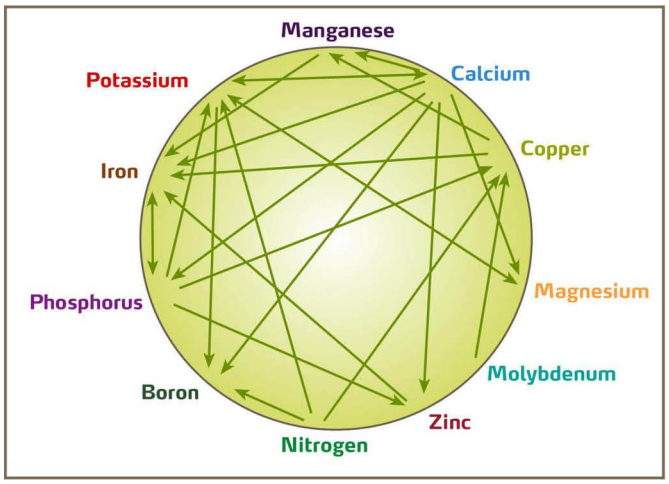
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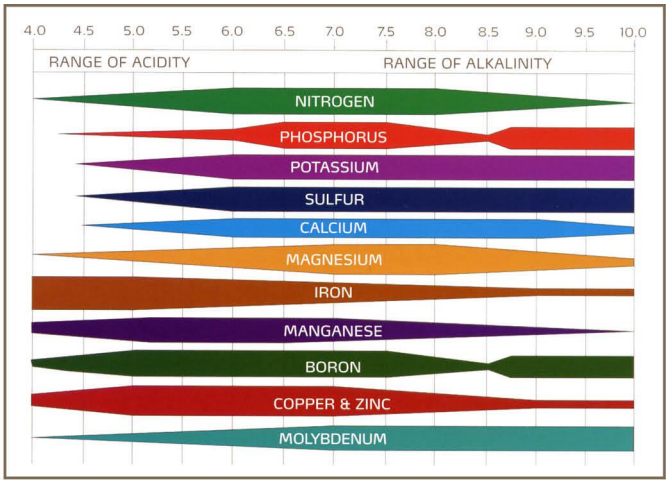
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 1 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362401/04		
Crop			





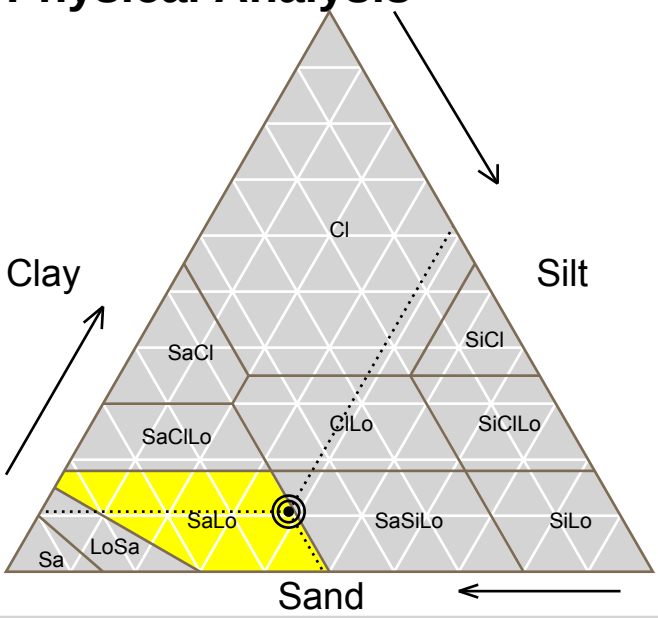
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 1 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362401/04		
Crop			

Physical Analysis



Analysis	Result (%)
Sand	50.94
Silt	38.33
Clay	10.73
Soil Type	SaLo Sandy Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	1.9	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



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Fungi thrive
Bacterial activity declines
Nutrient cycling drops

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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 2 TOPSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362402/01

Crop

Analysis	Result
pH	5.2
Phosphorus (ppm)	7
Potassium (ppm)	54
Magnesium (ppm)	81
Calcium (ppm)	1238
Sulphur (ppm)	1
Manganese (ppm)	73
Copper (ppm)	8.7
Boron (ppm)	0.82
Zinc (ppm)	10.9
Molybdenum (ppm)	0.08
Iron (ppm)	735
Sodium (ppm)	41
C.E.C. (meq/100g)	11.9
Org. Matter - DUMAS (%)	8.8

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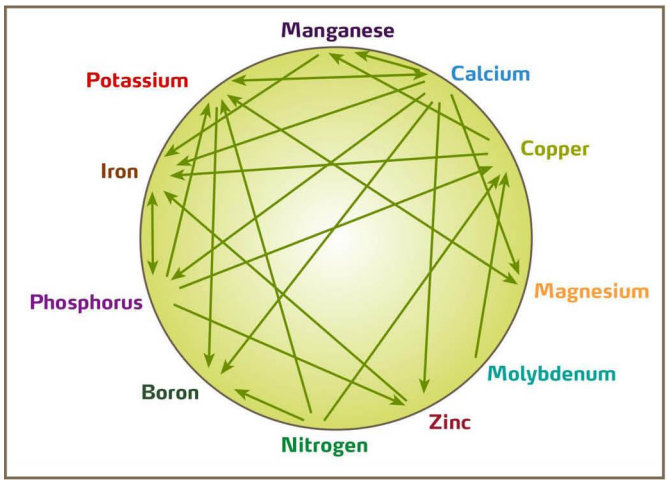
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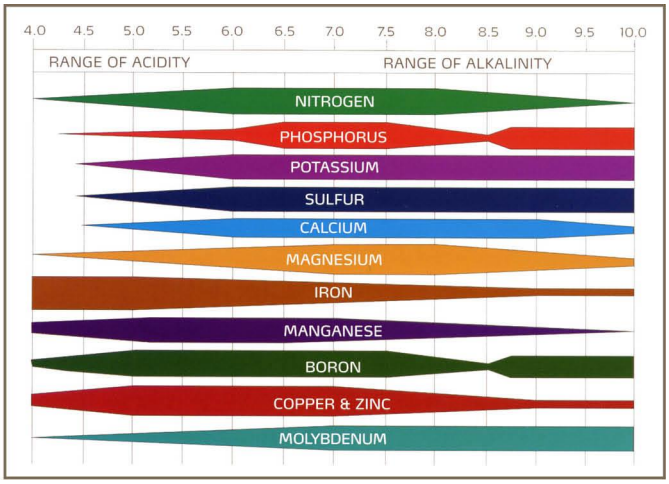
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 2 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362402/01		
Crop			





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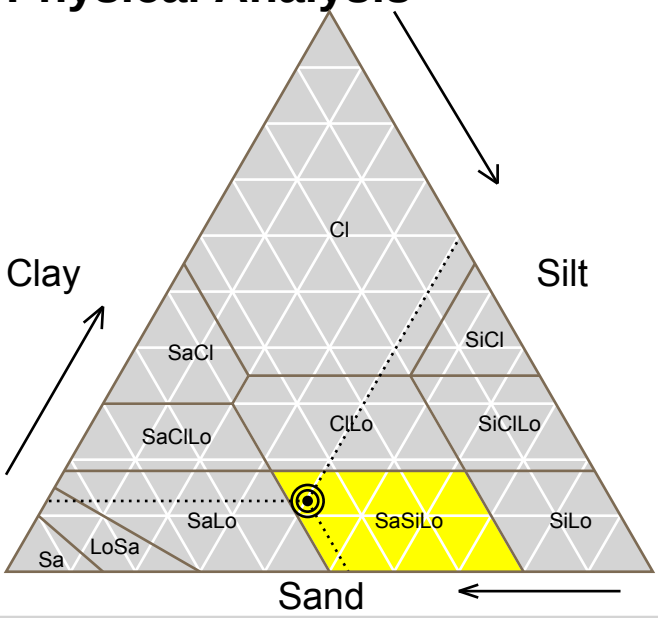
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 2 TOPSOIL
Sample No E362402/01
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	47.06
Silt	40.31
Clay	12.63
Soil Type	SaSiLo Sandy Silt Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	5.1	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



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Fungi thrive
Bacterial activity declines
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 2 SUBSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362402/02

Crop

Analysis	Result
pH	5.4
Phosphorus (ppm)	2
Potassium (ppm)	28
Magnesium (ppm)	53
Calcium (ppm)	1503
Sulphur (ppm)	1
Manganese (ppm)	63
Copper (ppm)	8.4
Boron (ppm)	0.72
Zinc (ppm)	5.6
Molybdenum (ppm)	0.11
Iron (ppm)	524
Sodium (ppm)	21
C.E.C. (meq/100g)	12.9
Org. Matter - DUMAS (%)	6.0

Please Note

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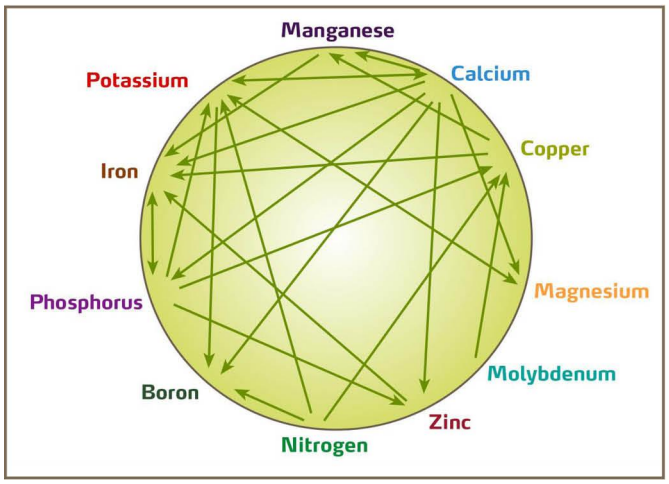
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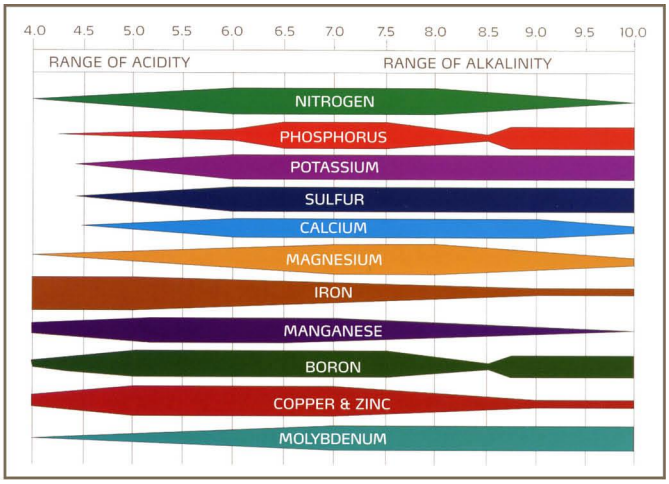
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 2 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362402/02		
Crop			





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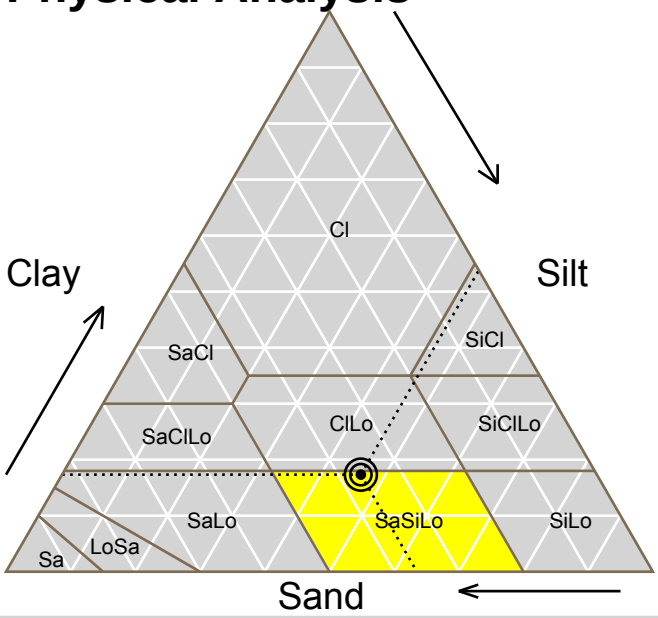
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 2 SUBSOIL
Sample No E362402/02
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	36.48
Silt	46.19
Clay	17.33
Soil Type	SaSiLo Sandy Silt Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	3.5	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
Fungal activiy declines
Bacteria thrive
Nutrient cycling drops

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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref WOODLAND 2 SUBSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362402/03

Crop

Analysis	Result
pH	4.8
Phosphorus (ppm)	5
Potassium (ppm)	28
Magnesium (ppm)	57
Calcium (ppm)	434
Sulphur (ppm)	3
Manganese (ppm)	8
Copper (ppm)	2.9
Boron (ppm)	0.49
Zinc (ppm)	3.2
Molybdenum (ppm)	0.02
Iron (ppm)	1399
Sodium (ppm)	26
C.E.C. (meq/100g)	5.1
Org. Matter - DUMAS (%)	3.4

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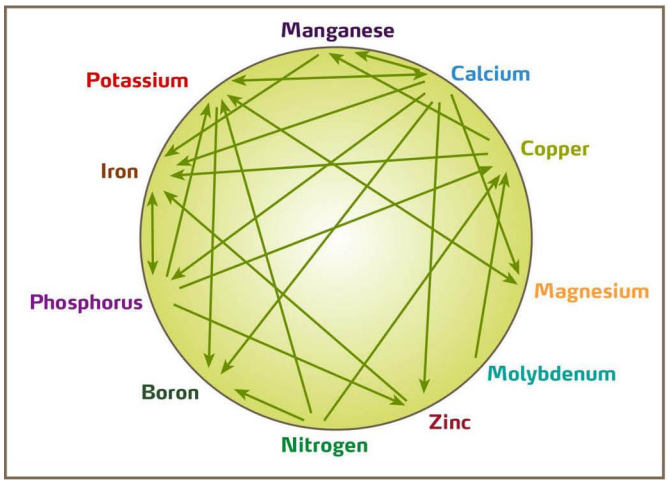
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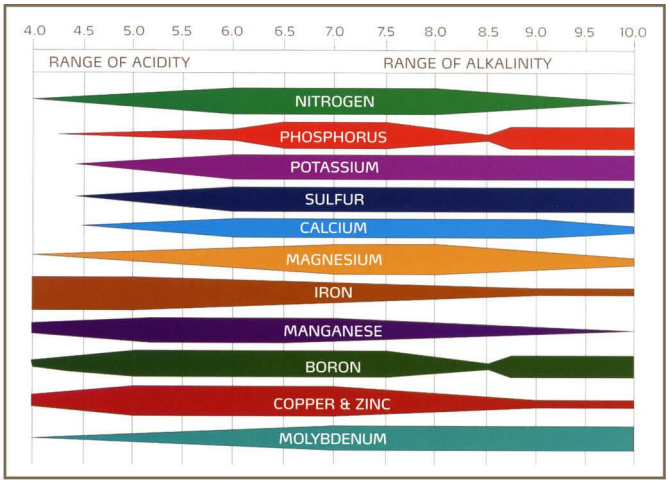
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 2 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362402/03		
Crop			





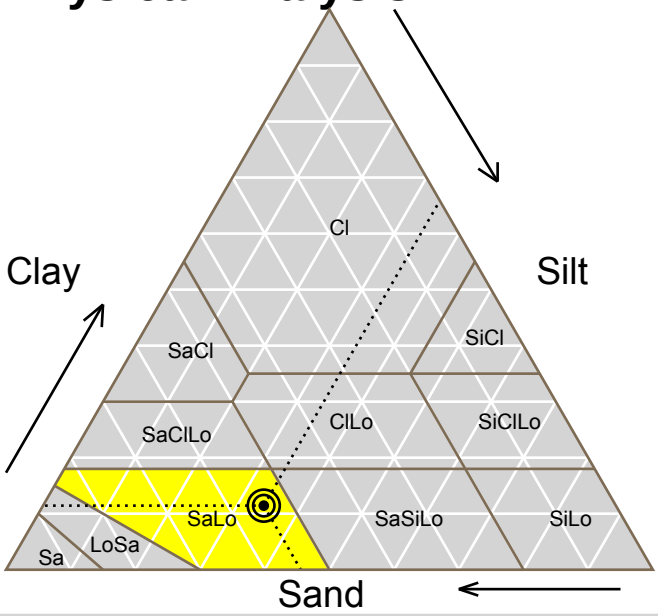
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 2 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362402/03		
Crop			

Physical Analysis



Analysis	Result (%)
Sand	54.43
Silt	34.13
Clay	11.44
Soil Type	SaLo Sandy Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	2.0	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
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Bacteria thrive
Nutrient cycling drops

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Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref WOODLAND 2 TOPSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362402/04

Crop

Analysis	Result
pH	7.7
Phosphorus (ppm)	40
Potassium (ppm)	86
Magnesium (ppm)	60
Calcium (ppm)	3178
Sulphur (ppm)	3
Manganese (ppm)	77
Copper (ppm)	9.4
Boron (ppm)	1.22
Zinc (ppm)	53.6
Molybdenum (ppm)	0.05
Iron (ppm)	699
Sodium (ppm)	23
C.E.C. (meq/100g)	16.6
Org. Matter - DUMAS (%)	7.4

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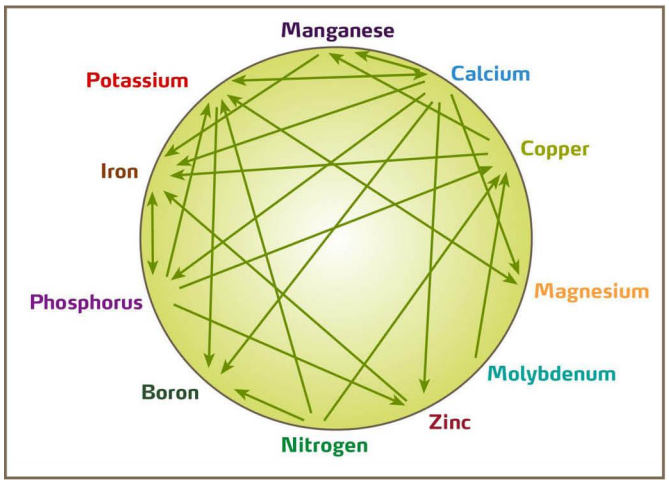
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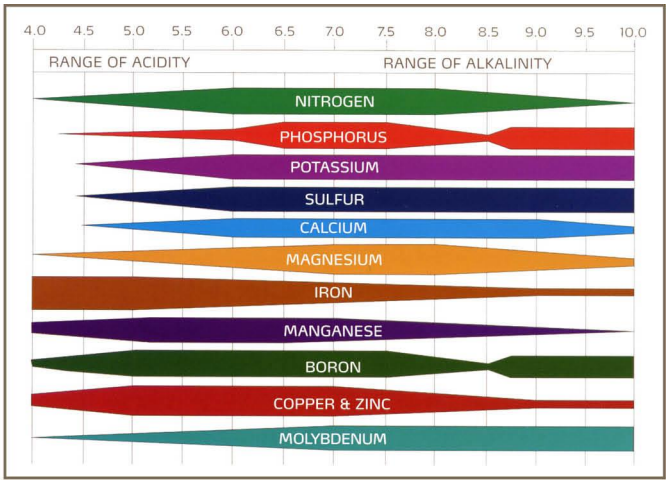
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 2 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362402/04		
Crop			





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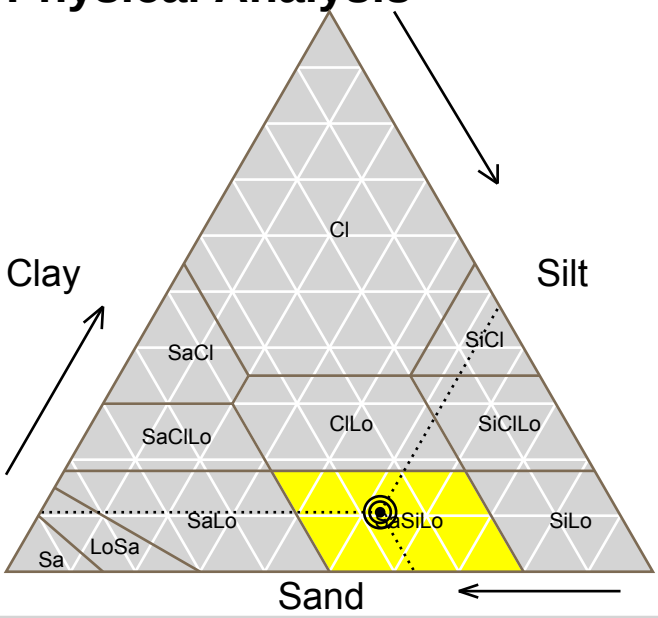
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref WOODLAND 2 TOPSOIL
Sample No E362402/04
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	36.85
Silt	52.53
Clay	10.62
Soil Type	SaSiLo Sandy Silt Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	4.3	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

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Bacteria thrive
Nutrient cycling drops

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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 3 TOPSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362403/01

Crop

Analysis	Result
pH	4.8
Phosphorus (ppm)	9
Potassium (ppm)	96
Magnesium (ppm)	158
Calcium (ppm)	642
Sulphur (ppm)	2
Manganese (ppm)	55
Copper (ppm)	9.6
Boron (ppm)	0.75
Zinc (ppm)	12.8
Molybdenum (ppm)	0.10
Iron (ppm)	1164
Sodium (ppm)	18
C.E.C. (meq/100g)	9.6
Org. Matter - DUMAS (%)	13.4

Please Note

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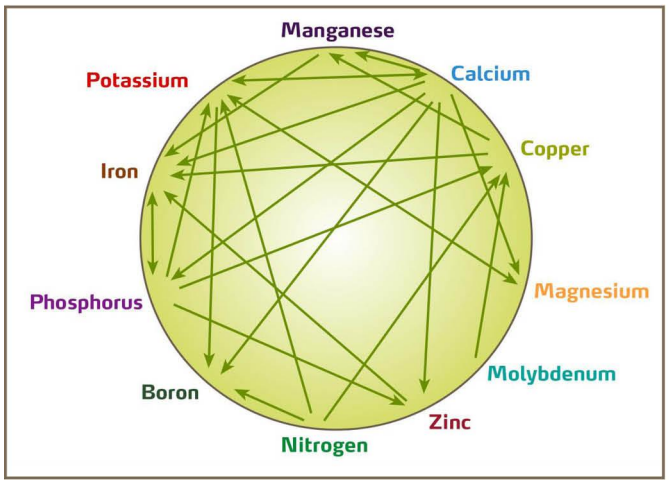
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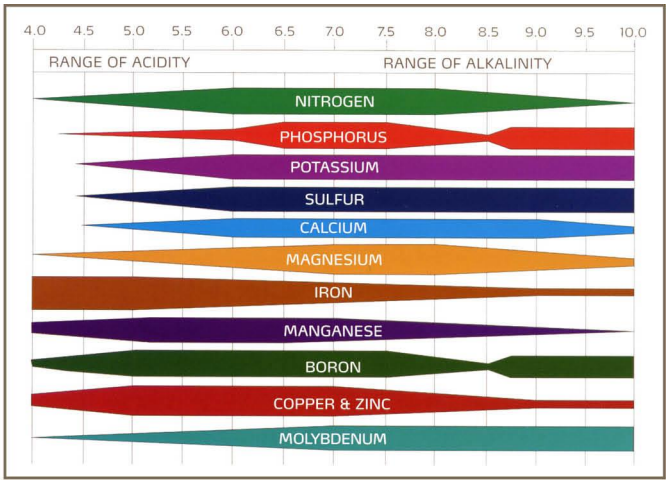
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 3 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362403/01		
Crop			





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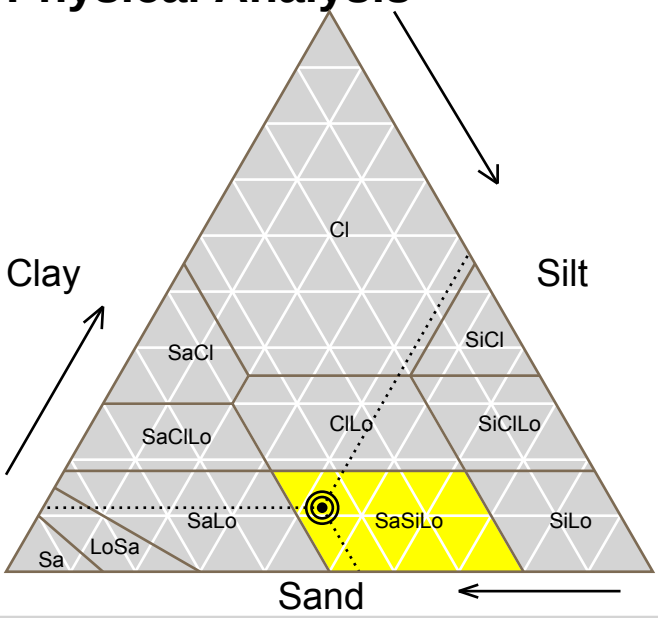
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 3 TOPSOIL
Sample No E362403/01
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	45.41
Silt	43.16
Clay	11.43
Soil Type	SaSiLo Sandy Silt Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	7.8	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 3 SUBSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362403/02

Crop

Analysis	Result
pH	4.7
Phosphorus (ppm)	5
Potassium (ppm)	37
Magnesium (ppm)	95
Calcium (ppm)	566
Sulphur (ppm)	1
Manganese (ppm)	53
Copper (ppm)	12.5
Boron (ppm)	0.68
Zinc (ppm)	13.0
Molybdenum (ppm)	0.15
Iron (ppm)	981
Sodium (ppm)	18
C.E.C. (meq/100g)	7.3
Org. Matter - DUMAS (%)	10.4

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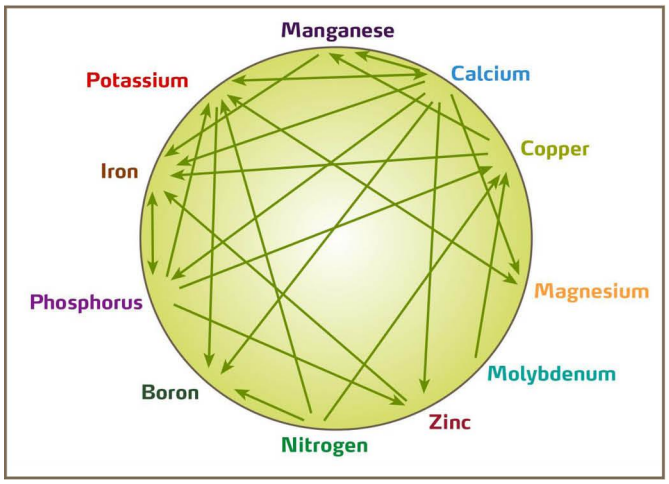
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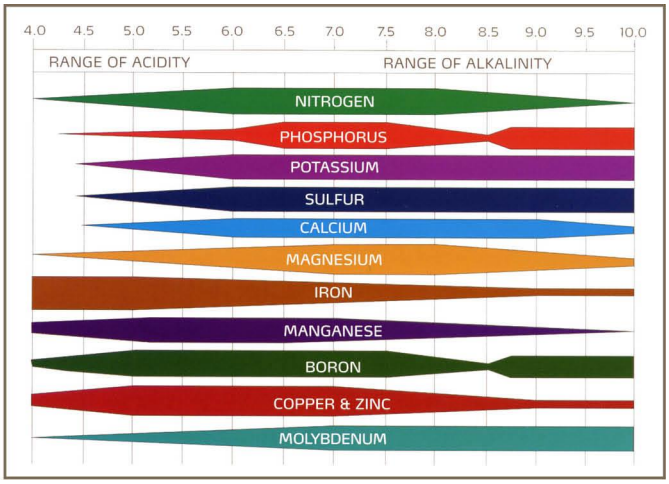
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 3 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362403/02		
Crop			





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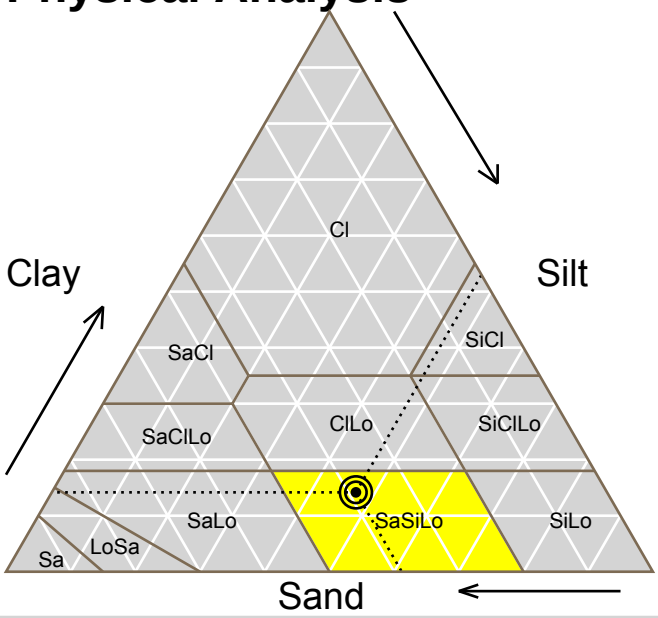
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 3 SUBSOIL
Sample No E362403/02
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	38.82
Silt	47.01
Clay	14.17
Soil Type	SaSiLo Sandy Silt Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	6.0	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



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Fungi thrive
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Nutrient cycling drops

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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref WOODLAND 3 TOPSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362403/03

Crop

Analysis	Result
pH	5.1
Phosphorus (ppm)	6
Potassium (ppm)	69
Magnesium (ppm)	87
Calcium (ppm)	649
Sulphur (ppm)	1
Manganese (ppm)	22
Copper (ppm)	4.5
Boron (ppm)	0.72
Zinc (ppm)	6.7
Molybdenum (ppm)	0.06
Iron (ppm)	1097
Sodium (ppm)	20
C.E.C. (meq/100g)	7.7
Org. Matter - DUMAS (%)	6.2

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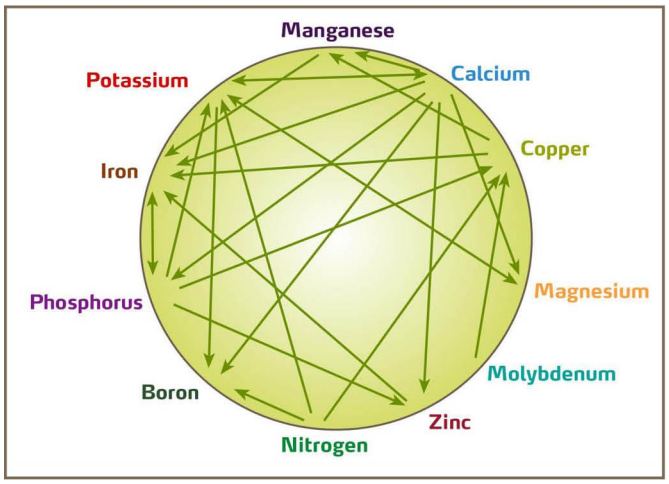
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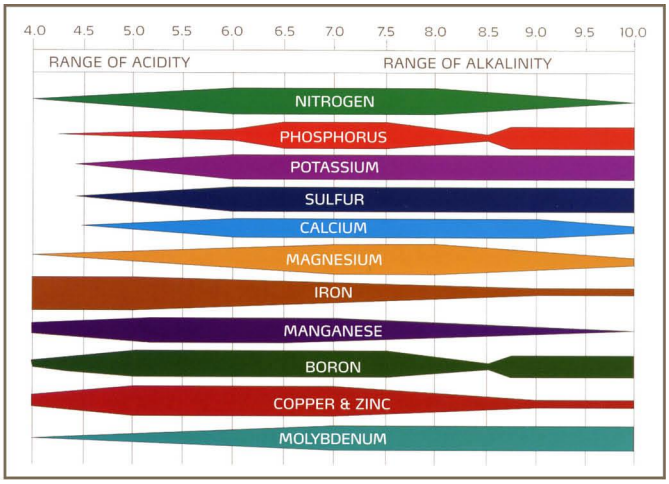
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 3 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362403/03		
Crop			





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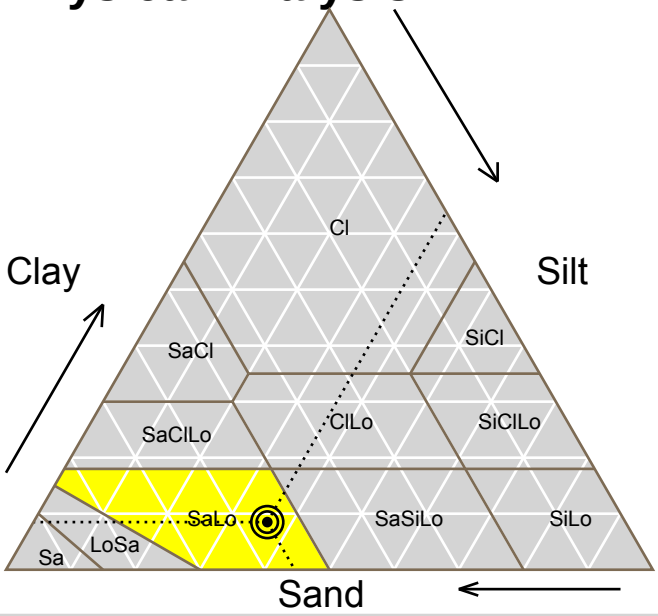
Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref WOODLAND 3 TOPSOIL
Sample No E362403/03
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	55.36
Silt	36.14
Clay	8.50
Soil Type	SaLo Sandy Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	3.6	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
Fungal activiy declines
Bacteria thrive
Nutrient cycling drops

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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref WOODLAND 3 SUBSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362403/04

Crop

Analysis	Result
pH	5.4
Phosphorus (ppm)	3
Potassium (ppm)	47
Magnesium (ppm)	72
Calcium (ppm)	568
Sulphur (ppm)	2
Manganese (ppm)	28
Copper (ppm)	2.7
Boron (ppm)	0.56
Zinc (ppm)	3.6
Molybdenum (ppm)	0.06
Iron (ppm)	639
Sodium (ppm)	19
C.E.C. (meq/100g)	6.0
Org. Matter - DUMAS (%)	1.8

Please Note

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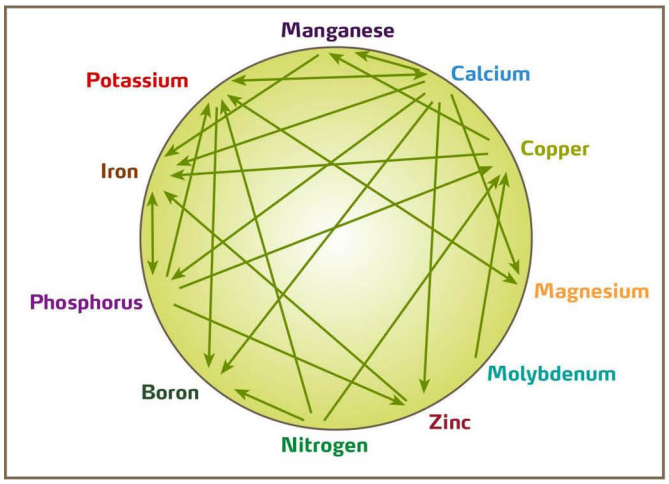
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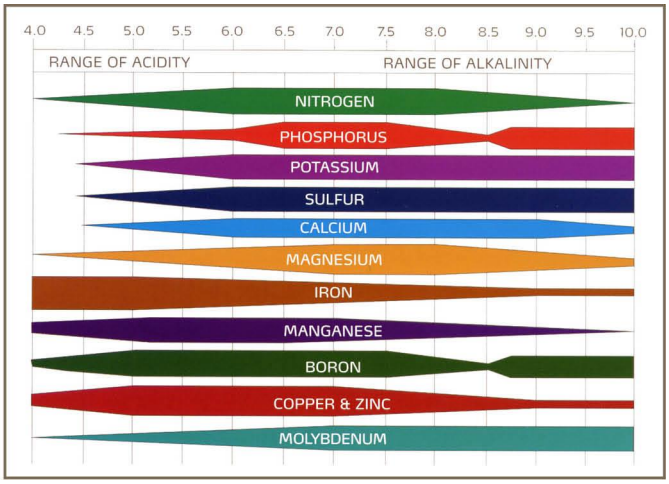
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	WOODLAND 3 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362403/04		
Crop			





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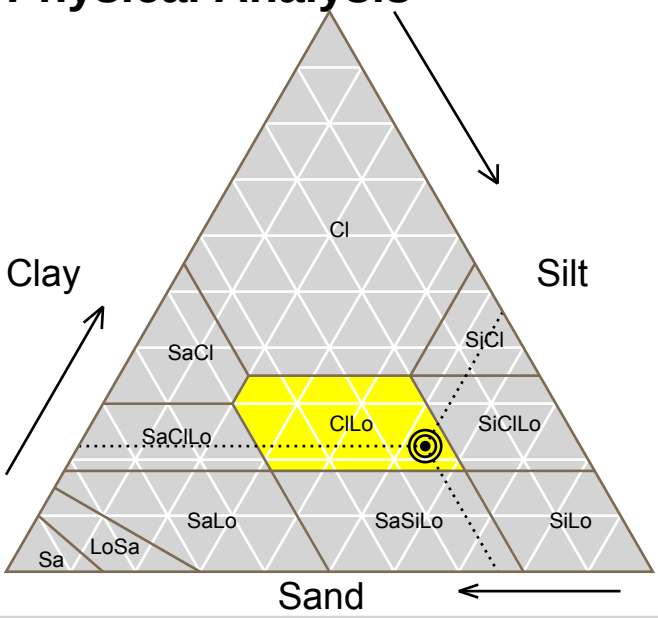
Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref WOODLAND 3 SUBSOIL
Sample No E362403/04
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	23.98
Silt	53.60
Clay	22.42
Soil Type	ClLo Clay Loam

Property	Assessment
Available Water	Medium to High
Drainage Rate	Medium to Slow
Inherent Fertility	Medium to High
Potential C.E.C.	Medium to High
Leaching Risk	Moderate to Low
Warming Rate	Medium

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	1.0	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
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Nutrient cycling drops

Neutral
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Bacteria thrive
Nutrient cycling drops

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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 4 SUBSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362404/01

Crop

Analysis	Result
pH	4.6
Phosphorus (ppm)	7
Potassium (ppm)	49
Magnesium (ppm)	60
Calcium (ppm)	441
Sulphur (ppm)	3
Manganese (ppm)	6
Copper (ppm)	4.5
Boron (ppm)	0.49
Zinc (ppm)	3.5
Molybdenum (ppm)	0.09
Iron (ppm)	1443
Sodium (ppm)	28
C.E.C. (meq/100g)	6.4
Org. Matter - DUMAS (%)	8.0

Please Note

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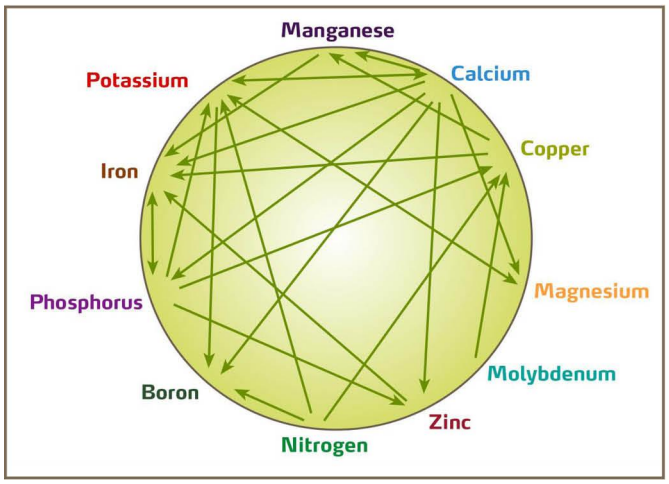
Released by .....Chris Lindley.....Laboratory Manager on behalf of Lancrop Laboratories

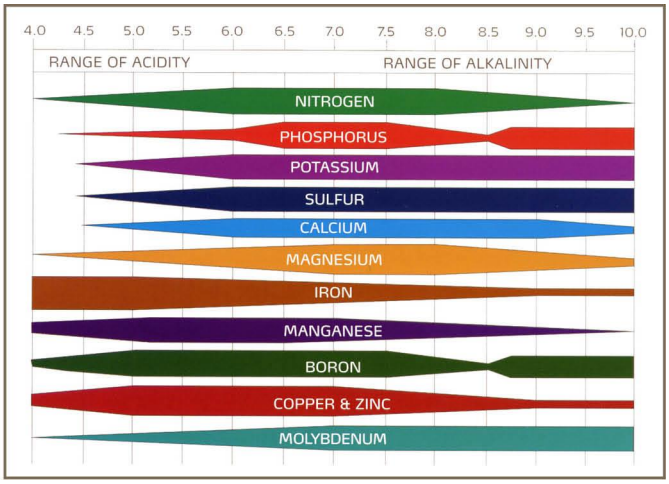
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 4 SUBSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362404/01		
Crop			





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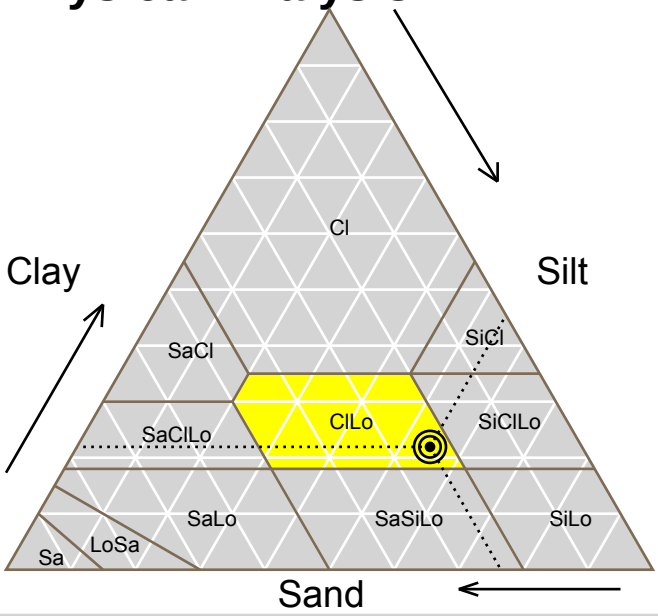
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 4 SUBSOIL
Sample No E362404/01
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	23.49
Silt	54.58
Clay	21.93
Soil Type	ClLo Clay Loam

Property	Assessment
Available Water	Medium to High
Drainage Rate	Medium to Slow
Inherent Fertility	Medium to High
Potential C.E.C.	Medium to High
Leaching Risk	Moderate to Low
Warming Rate	Medium

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	4.7	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref FIELD 4 TOPSOIL

Date Received 07/10/2019 (Date Issued: 11/10/2019)

Sample No E362404/02

Crop

Analysis	Result
pH	4.3
Phosphorus (ppm)	9
Potassium (ppm)	88
Magnesium (ppm)	100
Calcium (ppm)	508
Sulphur (ppm)	4
Manganese (ppm)	43
Copper (ppm)	3.8
Boron (ppm)	0.54
Zinc (ppm)	4.3
Molybdenum (ppm)	0.01
Iron (ppm)	1392
Sodium (ppm)	38
C.E.C. (meq/100g)	7.2
Org. Matter - DUMAS (%)	22.2

Please Note

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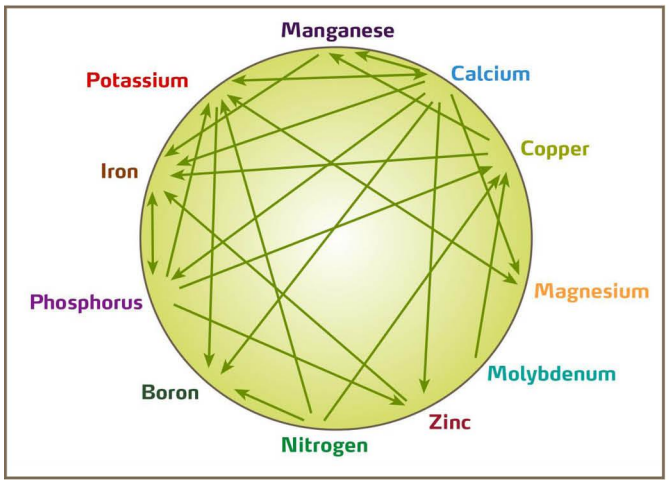
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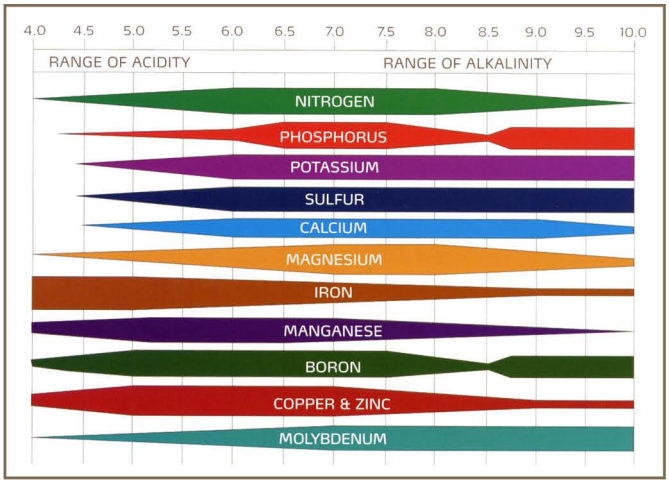
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Date Printed : 11/10/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	FIELD 4 TOPSOIL	**Date Received**	07/10/2019 (Date Issued: 11/10/2019)
Sample No	E362404/02		
Crop			





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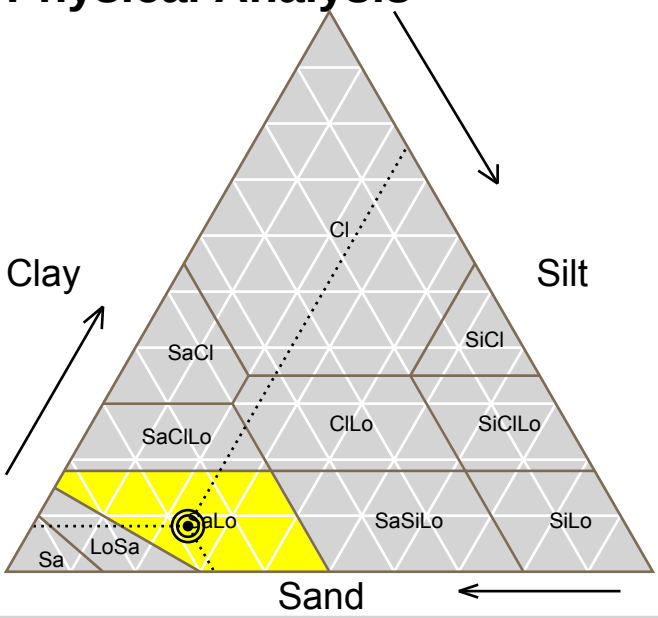
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref FIELD 4 TOPSOIL
Sample No E362404/02
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 07/10/2019 (Date Issued: 11/10/2019)

Physical Analysis



Analysis	Result (%)
Sand	67.80
Silt	24.06
Clay	8.14
Soil Type	SaLo Sandy Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	12.9	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



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Date Printed : 11/10/2019

ADVANCE GRASS SOLUTIONS

Hogwood Farm Industrial Estate
Sheerlands Road
Finchampstead
Berkshire RG40 4QY

Mr Chris James

Soil Moisture Readings

W1 Topsoil and Subsoil Eastings 261625 Northings 213920





W2 Topsoil and Subsoil Eastings 261700 Northings 213940





ADVANCE GRASS SOLUTIONS

Hogwood Farm Industrial Estate
Sheerlands Road
Finchampstead
Berkshire RG40 4QY

W3 Topsoil and Subsoil Eastings 261650 Northings 213862





F1 Topsoil and Subsoil Eastings 261570 Northings 213396





ADVANCE GRASS SOLUTIONS

Hogwood Farm Industrial Estate
Sheerlands Road
Finchampstead
Berkshire RG40 4QY

F2 Topsoil and Subsoil Eastings 261490 Northings 213433





F3 Topsoil and Subsoil Eastings 261296 Northings 213600





ADVANCE GRASS SOLUTIONS

Hogwood Farm Industrial Estate
Sheerlands Road
Finchampstead
Berkshire RG40 4QY

F4 Topsoil and Subsoil Eastings 261248 Northings 213663





Subject: RE: Pre Application Consultation Response for the Northern Extension to Glan Lash Mine Site.
From: Ruth Thomas <RuThomas@carmarthenshire.gov.uk>
Date: 09/07/2019, 11:19
To: Chris James <chris@brynbachcoal.co.uk>
CC: Thomas R Boothroyd <TRBoothroyd@carmarthenshire.gov.uk>

Good morning Chris,

Apologies for the delay in responding to your e-mail.

May I confirm that I am satisfied with all the information submitted and I'm in a position to provide comment as and when a planning application is submitted.

Regards

Ruth Thomas
Environmental Health Officer/Ymarferydd Iechyd yr Amgylchedd
Cartrefi a Chymunedau Mwy Diogel / Homes and Safer Communities
Ffôn / Tel: 01269 598208 Ext: 5608
Rydym yn croesawu gohebiaeth yn Gymraeg a Saesneg. / We welcome correspondence in English and Welsh.

learning

From: Chris James [mailto:chris@brynbachcoal.co.uk]
Sent: 06 June 2019 13:23
To: Ruth Southby <RSouthby@carmarthenshire.gov.uk>
Subject: Pre Application Consultation Response for the Northern Extension to Glan Lash Mine Site.

Good Afternoon Ruth,

Further to your response I instructed Kevan Walton to address the issues raised in you email. His response is attached.

Should you require any further information please do not hesitate to contact me.

Regards
Chris James

BRYN BACH COAL LTD

GLAN LASH EXTENSION SURFACE MINE SITE

RE: PRE-APP TO MINE BY SURFACE MINING OPERATIONS 110,000 TONNES OF PREMIUM ANTHRACITE FROM A NORTHERN EXTENSION TO THE EXISTING GLAN LASH MINE SITE COVERING 10.03 HECTARES OVER A 6.5 YEARS PERIOD LAND NORTH OF CURRENT GLAN LASH MINE SITE, CARMARTHENSHIRE.

This is a response to comments made by the Coal Authority in correspondence dated 23 April 2019.

QUERY RAISED BY THE COAL AUTHORITY

Concern is raised with respect to an adit which provided access to the abandoned Ty-Uchaf mine which itself is located outside of the site boundary, but the associated drivage of which is located within the site boundary and lies beneath a proposed soil tip.

DETAILS OF ABANDONED COAL MINE WORKINGS

Abandoned workings associated with the Ty-Uchaf colliery will be intersected by the proposed surface mining operations. The drift down to the workings and part of the workings will be overlain at surface by a subsoil mound (the proposed topsoil mound lies beyond the under-mined area). The sub-soil mound will be constructed to a maximum height of approximately 5 metres above surrounding ground level, and will therefore impose a loading on the ground.

The drift adit, which is located outside of the site boundary, is still visible at surface, has partially collapsed and is substantially overgrown with vegetation.

The mouth of the drift has been surveyed and photographed (see Photographs 1 and 2 which show it to be collapsed and overgrown) and is located at a level of 61.88 metres above ordnance datum.

Records show the drift to be inclined at a gradient of approximately 1 vertical to 4 horizontal then falling towards the north east. It is estimated that the base of the drift will be at a level of approximately 54 metres AOD at the point at which surface loading associated with the proposed subsoils mound will occur. Clearly, the roof of the adit (if still intact) would be around 2 to 2.5 metres above this level, i.e. approximately 56 to 57 metres AOD and 4 to 5 metres below existing ground level.

The main working areas associated with the Trichwart and Pumpquart Seams are approximately 60 metres inbye of the portal position at a level of 46 to 47 metres AOD, i.e. approximately 20 metres below current ground level.

The condition of the drift is unknown, and it must therefore be assumed that it has not been sealed in accordance with any acknowledged standard procedure. Whether the drift and workings are flooded is also unknown but is considered to be likely.

Drawing titled 'Compilation of Details for the Coal Authority' dated 15 May 2019, shows the following details:

- Site boundary.
- Excavation limit.
- Location of proposed above ground soils storage tips.
- Location of Ty-Uchaf mine adit and abandoned workings.
- Surface contours.

PROPOSED IMPLICATIONS AND RISK ASSESSMENT

The proposed operation will involve the following element which could impact upon the abandoned mineworkings associated with the colliery.

- Surface loading of the adit, due to the sub-soil mound, leading to its collapse.
- De-watering of abandoned mineworkings.
- Removal of voids and collapsed strata associated with the underground mineworkings.

1. POTENTIAL DANGER TO THE PUBLIC

With respect to the proposed operations and their potential impacts upon the safety of the general public, this will not be an issue.

The site will be fully fenced off to prevent public access and adequate warning notices will be posted around the boundaries.

With respect to the drift portal, this structure lies outside of the site boundary, has existed for many years, will itself not be affected by the proposed operations and therefore does not present any greater risk to the public than currently exists.

2. POTENTIAL DANGER TO PERSONNEL UNDERTAKING OPERATIONS ON THE SITE

Under Regulation 6(1) of the Quarries Regulations 1999 - General Duties of the Operator - it is the duty of the operator to take the necessary measures to ensure that persons can perform the work assigned to them without endangering their own health and safety or the health and safety of others.

Upon grant of planning permission to undertake the proposed scheme, a Geotechnical Site Report will be compiled which provides details of potential risks and operational methodologies to safely deal with them. Nevertheless, and in summary, the identified potential risks to personnel operating on the site are as follows:

i) Plant Falling into Collapsed Ground due to Additional Loading Imposed by the Proposed Subsoil Mound Construction

The formation of the subsoil mound will involve two operations, namely removing the topsoil layer then tipping and dozing subsoil generated from elsewhere on the site to construct the tip.

Topsoil will be stripped from the area of the proposed tip by dozing operations involving soil being pushed from west to east, then loaded onto an ADT and transported to the proposed topsoil tip area (which is not underlaid by any recorded abandoned mineworkings). No ADT vehicle movements across the proposed subsoil tip will be permitted until a 2 metres layer has been formed at the eastern end. From this raised level ADTs will tip subsoil which will then be dozed towards the west.

ii) Plant Falling into Abandoned Mineworkings Within the Proposed Excavation Area

The mining scheme will involve the excavation of three coal seams, the Stinking, Trichwart and Pumpquart, the latter two which have been partially worked by underground mining method. The workings have long since been abandoned, may have suffered varying degrees of collapse and could be flooded.

The proposed mining operation will involve the formation of north / south orientated excavation panels which will individually be developed from north to south.

The structural geology of the site is complicated, comprising multiple over-thrusting (on a broadly east / west orientation) and upright normal faulting (on a north north west / south south east orientation), with an overall strata dip towards the south.

The potential risks to the safety of personnel are as follows:

- Collapse of ground on operational levels and / or haul routes.
- Water / strata outbursts due to pressurised mine water.
- Mine gas.

The operation will involve following the coal seams from north to south in a series of excavation faces of between 4 and 5 metres in height. This will ensure that there is always at least 4 metres cover across any mineworking voids above which plant may be operating.

All internal haul roads will be located such that they do not run over previously worked (underground mining) areas. The risk of plant falling into mineworkings cavities is therefore minimal.

iii) Collapse of The Western Excavation Sidewall at the Limit of Extraction

The presence of abandoned underground mineworkings within final excavation sidewalls on opencast coal sites has been a very common phenomenon for which the geotechnically approved site designs take full account of.

The actual inclination of excavation sidewalls through mineworkings voids and any overlying collapsed ground along the western sidewall (which is the only boundary within which mine workings voids will be present) will take full account of ground conditions as they become apparent and designs will, if necessary, be amended.

iv) Potential for Water / Strata Outbursts Due to Pressurised Mine Water

The operations will entail excavation commencing at the northern end of the site, in virgin ground which has not been previously under-mined, and then develop towards the south.

The areas of previously worked coal will be intersected and may contain water, which, due to the northern end of the worked area being the shallowest, will have effectively little or no significant hydraulic head.

The only column of water which is likely to lie above the level of the northernmost part of the workings is that between the drift portal level and this northern limit of the workings, and possibly a head equivalent to the parting between the Trichwart and Pumpquart Seams (if the Trichwart workings are flooded).

Water, when intersected, will have little hydraulic head and its level will be progressively drawn down as excavation progresses towards the south.

The risk of a hazards associated with stratal or minewater outbursts occurring is not considered to be significant.

v) Potential Risk from Mine Gas

Working in confined spaces will not occur and therefore if any mine gas is present it will be easily vented.

Smoking is not permitted in the working area and therefore the risk associated with methane is negligible.

SUMMARY

Whilst it is appreciated that the presence of abandoned mineworkings structures are a consideration in this scheme, the risks to the general public is non-existent and any potential threat to the safety of operating personnel will be designed-out.

A formal comprehensive Geotechnical Site Report will be compiled prior to any operations being undertaken on the site. The report will highlight potentially hazardous areas and present operational methodologies which will mitigate against any risks to the health and safety of personnel.

.....

D A B HIGGINS MSc, BSc, FGS, DIC, C.Geol
6 June 2019

Attachments:

Plan titled 'Compilation of Details for the Coal Authority' dated 15 May 2019
Photographs 1 and 2 Ty-Uchaf Adit





PHOTOGRAPHS 1 AND 2 – TY-UCHAF MINE ADIT

Subject: Re: PRE-APP BRYN BACH COAL LTD, LAND NORTH OF CURRENT, GLAN LASH MINE SITE, CARMARTHENSHIRE
From: Chris James <chris@brynbachcoal.co.uk>
Date: 07/06/2019, 10:37
To: planningconsultation@coal.gov.uk

Good Morning,

Further to the concerns raised in the consultation process, I have instructed Dennis Higgins of James Associates to respond on behalf of Bryn Bach Coal Ltd.
The report and plans have been attached.
I would like to confirm that the photographs show the adit and that the vertical pit prop and the horizontal cross member have been painted white.

Regards
Chris James

On Tue, 23 Apr 2019 at 16:12, <planningconsultation@coal.gov.uk> wrote:

> Dear Mr Chris James
>
> Following the planning consultation on 28 March 2019, please find attached our comments on the above application.
>
> If you would like to discuss any of the issues raised, please contact us.
>
> Regards
>
> Planning and Local Authority Liaison team
>
> T: 01623 637119
> E: planningconsultation@coal.gov.uk
> W: https://www.gov.uk/coalauthority

Resolving the impacts of mining. Like us on <a href="
https://www.facebook.com/thecoalauthority" title="Like us on Facebook">Facebook or follow us on Twitter and LinkedIn.
<P>

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Attachments:

02-Response to Coal Authority correspondence dated 23 April 2019.pdf	497 kB
For Dennis for CA v2000 rev1-Model.pdf	332 kB

The Coal Authority

INVESTOR IN PEOPLE

RTPI Learning Partner

200 Lichfield Lane
Berry Hill
Mansfield
Nottinghamshire
NG18 4RG

Tel: 01623 637 119 (Planning Enquiries)

Email: planningconsultation@coal.gov.uk

Web: www.gov.uk/coalauthority

For the Attention of: Mr C James – Case Officer
Carmarthenshire County Council

[By Email: chris@brynbachcoal.co.uk]

23 April 2019

Dear Mr James

Pre-app - To mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash Mine Site covering 10.03 hectares over a 6.5 year period - Land north of current Glan Lash Mine Site, Carmarthenshire

Thank you for your notification of 28 March 2019 seeking the views of The Coal Authority on the above.

The Coal Authority is a non-departmental public body sponsored by the Department of Business, Energy & Industrial Strategy. As a statutory consultee, The Coal Authority has a duty to respond to planning applications and development plans in order to protect the public and the environment in mining areas.

The Coal Authority records indicate that there is a mine entry and its resultant zone of influence on the site. The site is also in an area of recorded and likely unrecorded coal workings at shallow depth.

In our letter to the LPA dated 29 December 2017 in respect of the scoping opinion carried out for this site we noted that we would expect the ES to take account of the coal mining legacy present on the site and to demonstrate that consideration has been given to what risks, if any, these may pose to the extension works and to provide an outline of any remedial works and/or mitigation measures considered necessary. We noted that we hold no treatment details for the recorded mine entry and that it therefore poses a significant risk to land stability and public safety.

It is noted that the Environmental Impact Assessment, dated June 2018, does not consider ground conditions or the risks posed by the recorded mine entry the extension works. Having reviewed the layout plan it would appear that the recorded mine entry is located in an area proposed for soil mounding.

As we hold no treatment details for this feature we consider that some consideration should be given to the mine entry and how the additional weight from the mounding proposed may impact on its stability. Although we appreciate that this may not warrant a full chapter in any ES we do request that consideration is given to the inclusion of some form of ground conditions assessment as part of any formal planning application submitted.

I hope this is helpful but please do not hesitate to contact me if you would like to discuss this matter further.

Yours sincerely

Melanie Lindsley

Melanie Lindsley *BA (Hons), DipEH, DipURP, MA, PGCertUD, PGCertSP, MRTPI*
Development Team Leader

Disclaimer

The above consultation response is provided by The Coal Authority as a Statutory Consultee and is based upon the latest available data on the date of the response, and electronic consultation records held by The Coal Authority since 1 April 2013. The comments made are also based upon only the information provided to The Coal Authority by the Local Planning Authority and/or has been published on the Council's website for consultation purposes in relation to this specific planning application. The views and conclusions contained in this response may be subject to review and amendment by The Coal Authority if additional or new data/information (such as a revised Coal Mining Risk Assessment) is provided by the Local Planning Authority or the Applicant for consultation purposes.

In formulating this response The Coal Authority has taken full account of the professional conclusions reached by the competent person who has prepared the Coal Mining Risk Assessment or other similar report. In the event that any future claim for liability arises in relation to this development The Coal Authority will take full account of the views, conclusions and mitigation previously expressed by the professional advisers for this development in relation to ground conditions and the acceptability of development.

The Coal Authority

INVESTOR IN PEOPLE

RTPI Learning Partner

200 Lichfield Lane
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NG18 4RG

Tel: 01623 637 119 (Planning Enquiries)

Email: planningconsultation@coal.gov.uk

Web: www.gov.uk/coalauthority

For the Attention of: Mr C James – Case Officer
Carmarthenshire County Council

[By Email: chris@brynbachcoal.co.uk]

27 June 2019

Dear Mr James

Pre-application – Bryn Back Coal Ltd - To mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash Mine Site covering 10.03 hectares over a 6.5 year period - Land North Of Current, Glan Lash Mine Site, Carmarthenshire – Re-consultation

Thank you for your notification of 7 June 2019 seeking the further views of The Coal Authority on the above.

We previously commented on this pre-application enquiry in a letter to the LPA dated 23 April 2019.

We note that additional information has now been provided in the form of; a response to the Coal Authority, dated 9 June 2019 and prepared by James Associates and a plan showing the relationship of the recorded mine entry to the works proposed on site.

Having reviewed this information, and the comments and conclusions of the letters author, we are satisfied that the applicants are aware of the potential risks posed by past coal mining activity to the site and proposed operations. We also note that the author of the letter states that a formal comprehensive Geotechnical Site Report will be complied prior to any operations being undertaken on site which will identify any potentially hazardous areas and present operational methodologies to mitigate any risks posed to on-site personnel.

It is recommended that the information now provided, and any additional information, such as the Geotechnical Site Report referred to, if completed, should be submitted to the LPA to support any formal planning application made.

Please do not hesitate to contact me if you would like to discuss this matter further.

Yours sincerely

Melanie Lindsley

Melanie Lindsley *BA (Hons), DipEH, DipURP, MA, PGCertUD, PGCertSP, MRTPI*
Development Team Leader

Disclaimer

The above consultation response is provided by The Coal Authority as a Statutory Consultee and is based upon the latest available data on the date of the response, and electronic consultation records held by The Coal Authority since 1 April 2013. The comments made are also based upon only the information provided to The Coal Authority by the Local Planning Authority and/or has been published on the Council's website for consultation purposes in relation to this specific planning application. The views and conclusions contained in this response may be subject to review and amendment by The Coal Authority if additional or new data/information (such as a revised Coal Mining Risk Assessment) is provided by the Local Planning Authority or the Applicant for consultation purposes.

In formulating this response The Coal Authority has taken full account of the professional conclusions reached by the competent person who has prepared the Coal Mining Risk Assessment or other similar report. In the event that any future claim for liability arises in relation to this development The Coal Authority will take full account of the views, conclusions and mitigation previously expressed by the professional advisers for this development in relation to ground conditions and the acceptability of development.

Subject: Pre-Application Consultation Response: Glan Lash extension
From: Mike Ings <M.Ings@DYFEDARCHAEOLOGY.ORG.UK>
Date: 05/04/2019, 13:58
To: "chris@brynbachcoal.co.uk" <chris@brynbachcoal.co.uk>

Dear Mr. James

Thank you for your email (28th March 19) regarding a pre-application response following preparation of the EIA (June 2018) of the proposed Glan Lash extension. We note that, in line with our response (27th December 2017) for a Scoping Opinion, the EIA refers to, and summarises, the findings of Heritage Impact Assessment prepared by Heritage Recording Services Wales (HRSW report no.180, October 2017)

This report recommends several mitigation measures, including:

Archaeological evaluation of the probable continuation of the Bryncoed Iron Age enclosure (PRN 850) to inform further decisions, including possible redesign of part of the scheme in order to avoid potentially significant buried archaeology or further mitigation to preserve the archaeology by record. We understand, from correspondence with Richard Scott Jones of HRSW (12th June 2018), that this work will be delayed until year 4 of the project and, as such, it has been agreed that such evaluation could be conditioned rather than pre-determined.
Archaeological watching brief during removal of all field banks and during all turf/topsoil stripping.
Protection of the WWII Pillbox, with adequate fencing erected at a distance of at least 20m

We concur with the report's findings and, should this development proposal enter the planning process, we will recommend that an **archaeological condition** should be attached to consent, if forthcoming. This will require preparation and submission of a Written Scheme of Investigation (WSI) by a qualified and competent archaeologist for approval by the LPA.

We hope that this is of assistance but please do not hesitate to contact us again should you require further information

Mike Ings MCIfA
Archaeological Planning Manager
Dyfed Archaeological Trust – Development Management

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DYFED ARCHAEOLOGICAL TRUST LTD
Corner House, 6 Carmarthen Street, Llandeilo, Carmarthenshire, SA19 6AE
Tel: 01558 825987 Email m.ings@dyfedarchaeology.org.uk Website www.dyfedarchaeology.org.uk
The Trust is both a Limited Company (No. 1198990) and a Registered Charity No. 504616) Any of the statements or comments made above should be regarded as personal and not necessarily those of Dyfed Archaeological Trust. This e-mail and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this e-mail in error, please notify the administrator on the following address: info@dyfedarchaeology.org.uk

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Corner House, 6 Stryd Caerfyrddin, Llandeilo, Sir Gaerfyrddin SA19 6AE Ymholiadau Cyffredinol 01558 825987
Ebost m.ings@dyfedarchaeology.org.uk Gwefan www.archaeolegdyfed.org.uk Cwmni cyfyngedig (No.1198990) ynghyd ag elusen gofrestredig (No.504616) yw'r Ymddiriedolaeth. Dylai'r datganiadau neu'r sylwadau uchod gael eu trin fel rhai personol ac nid o reidrwydd fel datganiadau neu sylwadau gan Ymddiriedolaeth Archaeolegol Dyfed.
Mae'r e-bost hwn ac unrhyw ffeiliau a drosglwyddir gydag ef yn gyfrinachol ac at ddefnydd yr unigolyn neu'r corff y cyfeiriwyd hwy atynt yn unig. Os ydych wedi derbyn yr e-bost hwn drwy gamgymeriad, dylech hysbysu'r

gweinyddydd yn y cyfeiriad canlynol: info@dyfedarchaeology.org.uk

Be green and only print this email if really necessary. Thank you.

National Grid House
Warwick Technology Park
Gallows Hill, Warwick
CV34 6DA

Chris James
Bryn Bach Coal Ltd
Bryn Bach Coal Ltd, Glan Lash Mine Complex, Shand's Road, Blaenau, Llandybie, SA18 3YR

Sukhbir Biring
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Planning Work?
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Mon-Fri 8am-4pm
(*Calls may be recorded and monitored)
E-mail: Plantprotection@nationalgrid.com

Electricity Emergency Number:
0800 40 40 90*
National Gas Emergency Number:
0800 111 999*

*Available 24 hours, 7 days/week.
Calls may be recorded and monitored.
www.nationalgrid.com

Date : 4/30/2019
Our Reference: XX_TW_Z3_3NWP_016930
Your Reference: Glan Lash Mine (BS)

Dear Chris James

Ref: Glan Lash Mine Site, Shand's Road, Bleanau, Llandybie, SA18 3NA

National Grid has No Objection to the above proposal which is in close proximity to a High-Pressure Gas Pipeline – Feeder.

I have enclosed a location map to show the location of National Grid high-pressure gas pipeline(s) within the vicinity of your proposal and associated information below.

Yours sincerely
Sukhbir Biring

Asset Protection Assistant

EAGLES (**E**lectricity **A**nd **G**as **L**ocation **E**nquiry **S**ystem)
Is now available to use simply click on the link to register **www.beforeyoudig.nationalgrid.com**, submit details of your proposed works and receive instant guidance and if appropriate maps showing the location of National Grid gas and electric apparatus.

National Grid is a trading name for:
National Grid Electricity Transmission plc
Registered Office: 1-3 Strand, London WC2N 5EH
Registered in England and Wales, No 2366977

PLEASE READ CAREFULLY

- No buildings should encroach within the Easement strip of the pipeline indicated above
- No demolition shall be allowed within 150 metres of a pipeline without an assessment of the vibration levels at the pipeline. Expert advice may need to be sought which can be arranged through National Grid.
- National Grid has a Deed of Easement for each pipeline which prevents change to existing ground levels, storage of materials. It also prevents the erection of permanent / temporary buildings, or structures. If necessary National grid will take action to legally enforce the terms of the easement.
- We would draw your attention to the Planning (Hazardous Substances) Regulations 1992, the Land Use Planning rules and PADHI (Planning Advise for Developments near Hazardous Installations) guidance published by the HSE, which may affect this development.

- To view the PADHI Document, please use the link below:
  http://www.hse.gov.uk/landuseplanning/padhi.pdf

- You should be aware of the Health and Safety Executives guidance document HS(G) 47 "Avoiding Danger from Underground Services", and National Grid's specification for Safe Working in the Vicinity of National Grid High Pressure gas pipelines and associated installations - requirements for third parties T/SP/SSW22. You should already have received a link to download a copy of T/SP/SSW/22, from our Plant protection Team, which is also available to download from our website.

- To view the SSW22 Document, please use the link below:
  http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=33968

- A National Grid representative will be monitoring the works to comply with SSW22.

- To download a copy of the HSE Guidance HS(G)47, please use the following link:
  http://www.hse.gov.uk/pubns/books/hsg47.htm

- National Grid will also need to ensure that our pipelines access is maintained during and after construction.

- Our pipelines are normally buried to a depth cover of 1.1 metres however; actual depth and position must be confirmed on site by trial hole investigation under the supervision of a National Grid representative. Ground cover above our pipelines should not be reduced or increased.

- If any excavations are planned within 3 metres of National Grid High Pressure Pipeline or, within 10 metres of an AGI (Above Ground Installation), or if any embankment or dredging works are proposed then the actual position and depth of the pipeline must be established on site in the presence of a National Grid representative. A safe working method must be agreed prior to any work taking place in order to minimise the risk of damage and ensure the final depth of cover does not affect the integrity of the pipeline.

- Excavation works may take place unsupervised no closer than 3 metres from the pipeline once the actual depth and position has been has been confirmed on site under the supervision of a National Grid representative. Similarly, excavation with hand held power tools is not permitted within 1.5 metres from our apparatus and the work is undertaken with NG supervision and guidance.

Pipeline Crossings

- Where existing roads cannot be used, construction traffic should ONLY cross the pipeline at locations agreed with a National Grid engineer.

- All crossing points will be fenced on both sides with a post and wire fence and with the fence returned along the easement for a distance of 6 metres.

- The pipeline shall be protected, at the crossing points, by temporary rafts constructed at ground level. No protective measures including the installation of concrete slab protection shall be installed over or near to the National Grid pipeline without the prior permission of National Grid. National Grid will need to agree the material, the dimensions and method of installation of the proposed protective measure. The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to National Grid.

- Please be aware that written permission from National Grid is required before any works commence within the National Grid easement strip.

- A National Grid representative shall monitor any works within close proximity to the pipeline to comply with National Grid specification T/SP/SSW22.
- A Deed of Indemnity is required for any crossing of the easement including cables

Cables Crossing

- Cables may cross the pipeline at perpendicular angle to the pipeline i.e. 90 degrees.

- A National Grid representative shall supervise any cable crossing of a pipeline.

- An impact protection slab should be laid between the cable and pipeline if the cable crossing is above the pipeline.

- Where a new service is to cross over the pipeline a clearance distance of 0.6 metres between the crown of the pipeline and underside of the service should be maintained. If this cannot be achieved the service must cross below the pipeline with a clearance distance of 0.6 metres.

All work should be carried out in accordance with British Standards policy

- BS EN 13509:2003 - Cathodic protection measurement techniques
- BS EN 12954:2001 - Cathodic protection of buried or immersed metallic structures – General principles and application for pipelines
- BS 7361 Part 1 - Cathodic Protection Code of Practice for land and marine applications
- National Grid Management Procedures

Pryce Consultant Ecologists

Trevethin, School Road, Pwll, LLANELLI, Carmarthenshire, SA15 4AL, UK.
Voicemail: 01554 775847 Mobile: 07900 241371 Email: PryceEco@aol.com
Partners: Richard Pryce BSc(Hons), CEnv. CBiol, MCIEEM, MRSB, FLS. Kathleen Pryce BSc(Hons)

Chris James Esq
Bryn Bach Coal Ltd
Glan Lash Mine Site
Shands Road
Nr Blaenau
Ammanford
SA18 3NA

23rd August 2019

Application for extension to Glanlash Surface Mine
Re: Letter from NRW dated 30th April 2019
Response to NRW's concerns regarding the ecology of the site

Dear Chris

I will respond to NRW's concerns (copied in blue below) regarding the ecology of the proposed Glanlash Extension site detailed in their letter dated 30th April 2019, point by point.

> Protected sites
> A Phase II vegetation survey was carried out in 2017 and 2018 in support of this application and it appears that the habitats surveyed in 1994 by ourselves are still present. Part of the site to be mined is in a candidate Site of Special Scientific Interest (cSSSI Ty Isaf) as there is an area (0.8ha) of M24 mire habitat.
> Due to the importance of this habitat the Local authority may require more detailed information on how the mitigation in the form of translocation will be carried out and information on the likely success rate of this translocation, how the habitat will be maintained in the future, the amounts of habitats (metre sq or ha) that will be mitigated/compensated.

At the times of our surveys in 2016 and 2017 we were aware that the area to which NRW refers was surveyed by the CCW Phase II team in August 1994 which had recorded M24 vegetation, so we made a special effort to search for Meadow Thistle (*Cirsium dissectum*), the species diagnostic of this vegetation type. We did not find it, nor have we found it on any subsequent site visits. The CCW survey of 1994 recorded Meadow Thistle in two out of the four quadrats recorded (although the grid reference of one of the two Meadow Thistle quadrats shows it to located in woodland). I understand, the species was also recorded by them in c.2002 although I have not seen this data. In the years since the last CCW survey the site appears to have become much more dominated by Purple Moor-grass (*Molinia caerulea*) and rushes (*Juncus effusus* and *J. acutiflorus*), the dense, rank growth of which probably having been responsible for the current apparent absence of Meadow Thistle. We acknowledge that M24 can occur without the diagnostic species being present (Rodwell *et al*, 1991 p.257) but the dominance of *Molinia* and rushes indicates a general transition towards the M23 *Juncus effusus/acutiflorus – Galium palustre* rush-pasture and M25 *Molinia caerulea – Potentilla erecta* mire communities.

We were not aware, until the NRW letter, that the land had been identified as a candidate SSSI "as there is an area (0.8ha) of M24 mire habitat". This information is not in the public domain.

NRW resurveyed the land on 10th June 2019 and, again, Meadow Thistle was not found although the surveyor was of the opinion that some of the vegetation could still be described as M24. I have not

seen the results of this survey but would expect that the 0.8ha of M24 identified in 1994 has considerably diminished.

Due to the importance of this habitat the Local authority may require more detailed information on how the mitigation in the form of translocation will be carried out and information on the likely success rate of this translocation, how the habitat will be maintained in the future, the amounts of habitats (metre sq or ha) that will be mitigated/compensated.

This concern is dealt with under Marsh Fritillary, below.

Marsh Fritillary butterfly

Marsh Fritillary butterflies are present on site and they have been proposed to be translocated, this will require a NRW licence and we would need a detailed Management Plan with all the details described above with the translocation of Molina meadow.

I understand that licences have been issued by CCW/NRW in the past and the mitigation proposed at Glanlash Extension, including the intention to translocate the vegetation on which the butterfly depends and its subsequent management will meet NRW's criteria for granting such a licence. This habitat of course, largely corresponds with the *Molinia* – rush grassland vegetation which is the subject of NRW's concern over M24 vegetation above.

A detailed analysis of the areas of vegetation suitable to support the Marsh Fritillary butterfly, chiefly based upon the vegetation structure and its suitability to support the butterfly, has been undertaken using the survey information gathered by Richard Smith in 2018. The details of this analysis are at Appendix 1 and Figure 1 and show that the area of habitat suitable to support the butterfly will be 76% greater after the translocation process than the habitat currently available.

Soil analyses of the donor and recipient sites have been undertaken which show the soil and subsoil chemistry at both sites to be very similar. The analysis results are at Appendix 2 and the locations of the sample sites are shown on Figure 1. Particular attention will be paid to ensuring that the soil hydrological conditions of the recipient site on which the translocated turves and soil material will be placed matches the hydrological conditions of the donor site. This will be achieved, where necessary, by creating a suitable landform and diverting natural surface drainage to irrigate the recipient site. The site geologist has also analyzed the surface water regime over the whole site and concludes that

"….with careful landform engineering during site restoration following the cessation of mining operations, it should be possible to replicate similar conditions which promote inhibited surface water drainage and ultimately lead to the re-establishment of rush dominated mire grassland across areas within the site."

His full report is at Appendix 3.

The proposed recipient site is located in the enclosure adjacent to the donor fields and currently supports semi-improved rush and grassland pasture which is the product of agricultural improvement over the years. The soil and subsoil analyses indicate the physical and biological characteristics at both sites to be similar except that the donor site has greater moisture content than the recipient site (34.5%VWC (Volumetric Water Content) and 19.8%VWC respectively), the latter as a result of more intensive agricultural practices. It is proposed to remove the top soil from the recipient land to expose the subsoil (which has similar moisture content and nutrient values to the donor site), on which the habitat turves and translocated soil material will be placed.

Habitat translocation will be carried out by specialist contractors using the tried and proven methodology of removing turves using bespoke equipment, each c.2m^2 to c.4m^2 in area and c.150mm to 300mm deep (as dictated by the depth of soil). Turves will be immediately transported to the prepared recipient site, with a minimum of handling, and immediately placed into their final position, as far as possible in the same juxtaposition as they were removed. They will be lightly tamped by the bucket of an excavator and voids between turves will be filled with soil from the part of the donor area from which the individual turf was derived.

Future management will include not only the translocated habitat but also the retained habitat, much of which is currently in less than favourable condition to support Marsh Fritillaries. The management

will also ensure that any remaining M24 vegetation, together with the M23 and M25, is also maintained in a condition to conserve these vegetation communities in favourable condition. Management will be achieved principally using low intensity cattle grazing but will be varied from year to year as required, and may also include occasional or local hay cutting, pony grazing, etc, whilst always ensuring that an effective, controlled hydrological regime is maintained.

Future management of retained and created habitats will be detailed in an Ecological Management Plan to be available before the commencement of site operations within the extension site.

Red Kite

Red Kites (Schedule 1 species under the Wildlife and Countryside Act 1981), the ecological report stated that Red Kites had begun nesting on part of the site. We recommend you contact the Local Authorities Ecologist to determine whether further surveys/assessments are required to ascertain any provisions needed to avoid disturbance during the nesting season.

The Local Authority's Ecologist will be consulted as recommended and a course of action agreed.

Afon Lash

Given the close proximity of the site to the Afon Lash which is a tributary of the Afon Llwchor which flows into Carmarthen Bay & Estuaries Special Area of conservation (SAC), Burry Inlet SPA, Burry Inlet Ramsar site and Burry Inlet & Loughor Estuary SSSI to ensure that the integrity of controlled waters is assured.

Discharges from the site will continue the high standards maintained over the duration of current mining activity which have always been in compliance with the discharge consents imposed.

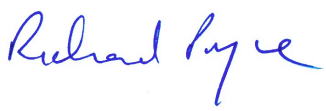
Construction Environment Management Plan

The applicant should produce a Construction Environment Management Plan (CEMP) specific to this proposal demonstrating how relevant guidelines for pollution prevention and best practice will be implemented, including details of emergency procedures and an incident response plan.

This document will be prepared prior to the commencement of site operations within the extension site and the site ecologist will contribute any ecological inputs if required.

If you require any additional information please do not hesitate to contact me.

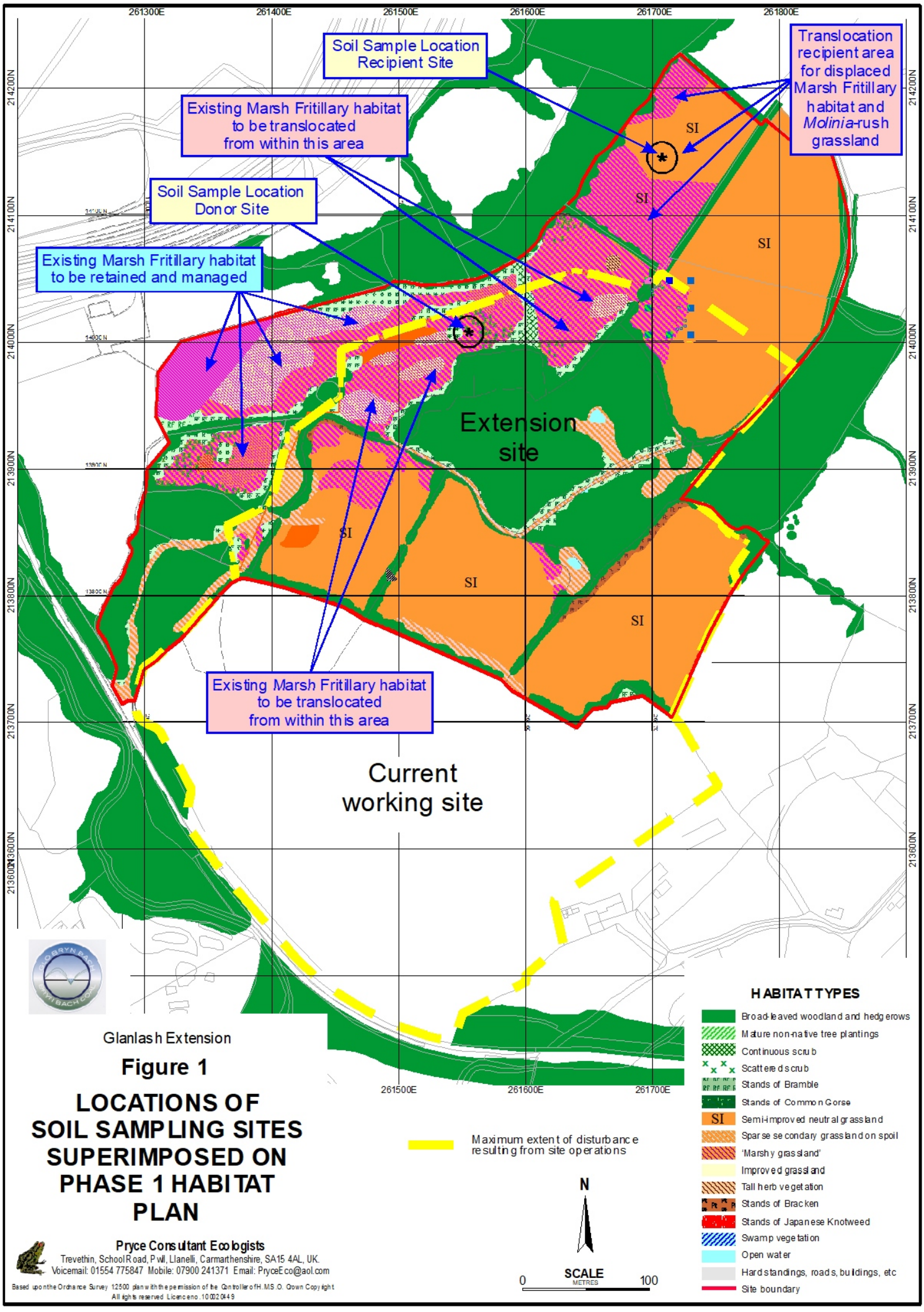
Yours sincerely



Richard Pryce

REFERENCE

Rodwell, J.S. (ed.). (1991). *British Plant Communities vol. 1 Mires and Heaths*. Cambridge Univ. Press.



Glanlash Extension

Figure 1

LOCATIONS OF SOIL SAMPLING SITES SUPERIMPOSED ON PHASE 1 HABITAT PLAN

Pryce Consultant Ecologists
Trevethin, School Road, Pwll, Llanelli, Carmarthenshire, SA15 4AL, UK.
Voicemail: 01554 775847 Mobile: 07900 241371 Email: PryceEco@aol.com

Based upon the Ordnance Survey 12500 plan with the permission of the Controller of H.M.S.O. Crown Copyright
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APPENDIX 1

Glanlash Marsh Fritillary Habitat Areas calculation

Figure number	Figure Title	Good Condition		Suitable undergrazed		Suitable sparse		Suitable rank		Potential habitat		Totals
		Number of areas	Area m2	Number of areas	Area m2	Number of areas	Area m2	Number of areas	Area m2	Number of areas	Area m2	m2
1	Vegetation To Be Removed	13 (1-10)	2184	4 (11-14)	2,792	4 (15-18)	394	0	0	2 (19-20)	7,573	12,943
2	Habitat To Be Retained & Restored	3 (21-24)	909	6 (25-30)	3,176	3 (31-33)	452	2 (34-35)	302	3 (36-39)	15,648	20,487

		Good Condition, Suitable undergrazed & Suitable sparse translocated									
		Number of Areas		Area m2							
3	Translocated Vegetation and Habitat To Be Created	14 (40-53)		5,370						4 (54-57)	33,070	38,440

SUMMARY

TOTAL EXISTING MARSH FRITILLARY HABITAT INCLUDING POTENTIAL HABITAT	m2
To be removed or translocated	12943
To be retained	20487
Total	33430

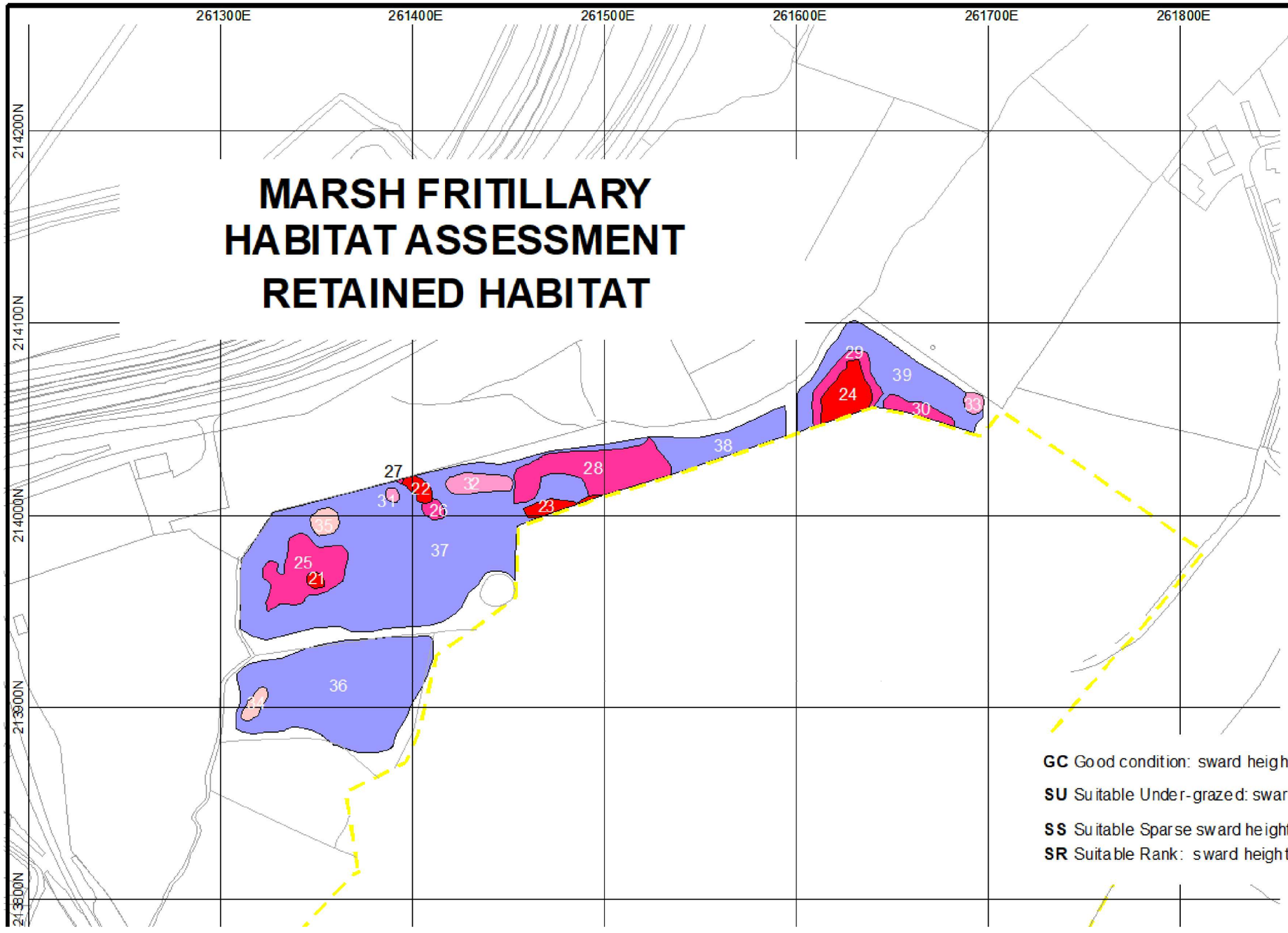
TO BE TRANSLOCATED	m2
Good condition (GC) habitat to be translocated as turves	2184
Total SU & SS habitat to be translocated as turves	3186
Potential habitat to be translocated as soil/vegetation	7573
Total good, suitable and potential to be removed	12943

TO BE RETAINED & RESTORED	m2
Good condition (GC) habitat to be retained	909
Total SU, SS & SR habitat to be retained & managed to good condition	3930
Potential to be retained & managed to good condition	15648
Total good, suitable and potential to be managed to good condition	20487

TRANSLOCATED VEGETATION AND MARSH FRITILLARY HABITAT TO BE CREATED	m2
Translocated habitat	5370
Habitat to be removed as soil or newly created	33070
Total translocated and newly created habitat	38440

CONCLUSION	m2	%
1. Existing area (ie before start of mining) of Marsh Fritillary habitat ranging from good condition to potential habitat [pages 1 + 2 on the plans]	33430	
2. 38.72% of this habitat will be removed (either translocated or removed as soil) due to the mining operation [page 1 on the plans]	12,943	38.72
of which, the area of GC, SU & SS habitat to be translocated as turves (16.06%) is	5370	16.06
3. Habitat translocated as turves + potential habitat translocated as soil + newly created potential habitat [page 3 on the plans]	38440	
4. Habitat translocated as turves + potential habitat translocated as soil + newly created potential habitat + retained MF habitat [pages 2 + 3 on the plans]	58927	
5. Potential gain in area of all Marsh Fritillary habitats [GC,SU, SS, SR, potential & new] (5 - 1), a potential gain of 76.27%	25497	76.27

MARSH FRITILLARY HABITAT ASSESSMENT RETAINED HABITAT



PAGE 1
VEGETATION TO BE REMOVED

- GC Good Condition 10-25cm SupA TO BE REMOVED
- SU Suitable undergrazed >25cm Sup TO BE REMOVED
- SS Suitable sparse sward 10-25c TO BE REMOVED
- Potential habitat TO BE REMOVED

PAGE 2
HABITAT TO BE RETAINED & RESTORED

- 21-24 GC Good Condition 10-25cm SupA TO BE RETAINED
- 25-30 SU Suitable undergrazed >25cm Sup TO BE RETAINED
- 31-33 SS Suitable sparse sward 10-25cm TO BE RETAINED
- 34-35 SR Suitable rank >25cm SupR TO BE RETAINED
- 36-39 Potential habitat TO BE RETAINED AND RESTORED

PAGE 3
TRANSLOCATED VEGETATION AND HABITAT TO BE CREATED

- GC, SU & SS habitat translocated from mine site
- Potential habitat TO BE CREATED (where possible, using translocated material)

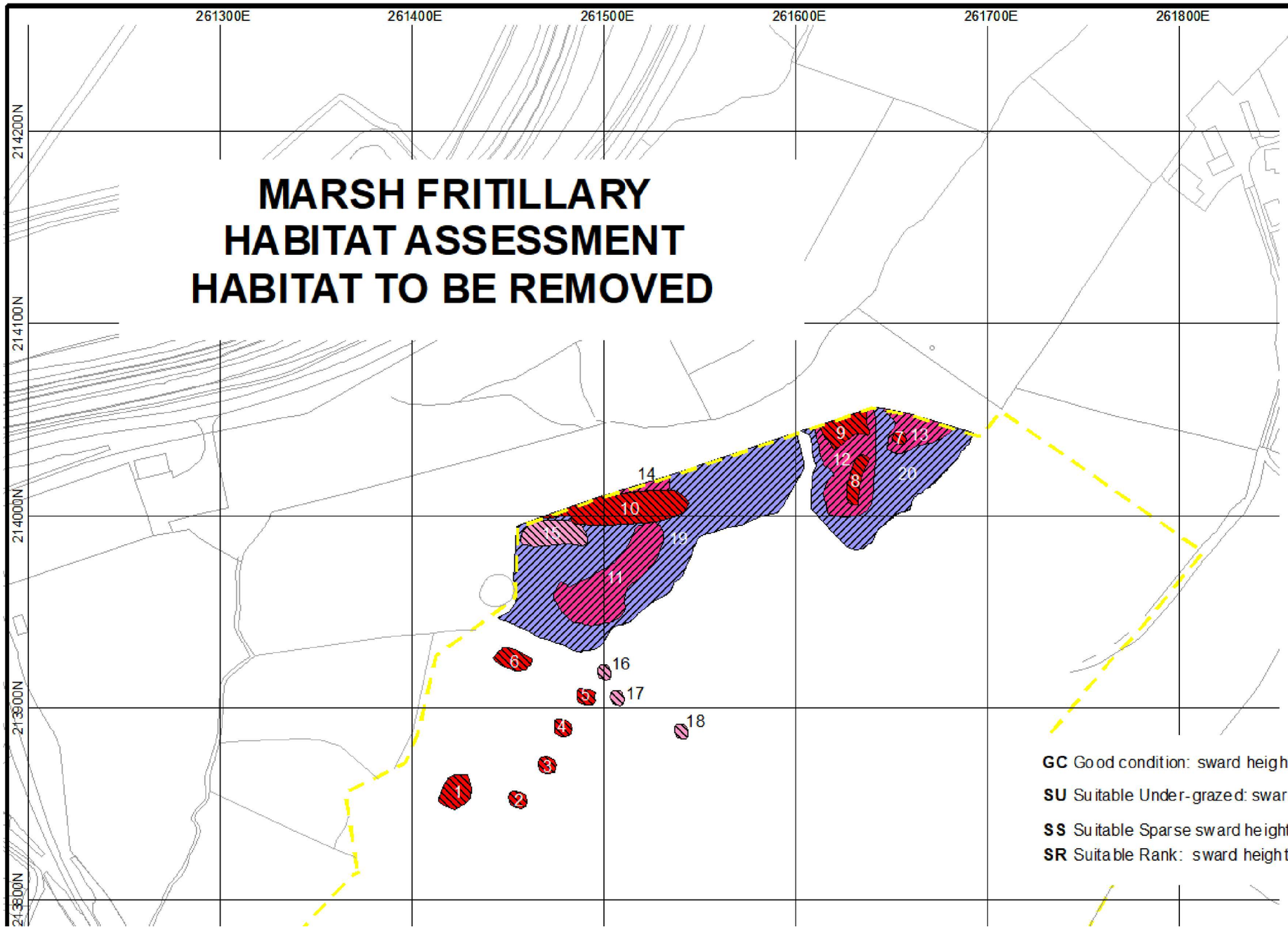
GC Good condition: sward height 10 to 25cm, abundant to frequent Devil's-bit Scabious

SU Suitable Under-grazed: sward height >25cm, frequent or occasional Devil's-bit Scabious

SS Suitable Sparse sward height 10 to 25cm occasional Devil's-bit Scabious

SR Suitable Rank: sward height >25cm, rare Devil's-bit Scabious within a 25m² area

MARSH FRITILLARY HABITAT ASSESSMENT HABITAT TO BE REMOVED



PAGE 1
VEGETATION TO BE REMOVED

- 1-10 GC Good Condition 10-25cm SupA TO BE REMOVED
- 11-14 SU Suitable undergrazed >25cm Sup TO BE REMOVED
- 15-18 SS Suitable sparse sward 10-25c TO BE REMOVED
- 19-20 Potential habitat TO BE REMOVED

PAGE 2
HABITAT TO BE RETAINED & RESTORED

- GC Good Condition 10-25cm SupA TO BE RETAINED
- SU Suitable undergrazed >25cm Sup TO BE RETAINED
- SS Suitable sparse sward 10-25cm TO BE RETAINED
- SR Suitable rank >25cm SupR TO BE RETAINED
- Potential habitat TO BE RETAINED AND RESTORED

PAGE 3
TRANSLOCATED VEGETATION AND HABITAT TO BE CREATED

- GC, SU & SS habitat translocated from mine site
- Potential habitat TO BE CREATED (where possible, using translocated material)

GC Good condition: sward height 10 to 25cm, abundant to frequent Devil's-bit Scabious

SU Suitable Under-grazed: sward height >25cm, frequent or occasional Devil's-bit Scabious

SS Suitable Sparse sward height 10 to 25cm occasional Devil's-bit Scabious

SR Suitable Rank: sward height >25cm, rare Devil's-bit Scabious within a 25m² area

MARSH FRITILLARY HABITAT ASSESSMENT
RESTORED & CREATED HABITAT

261300E 261400E 261500E 261600E 261700E 261800E

214200N 214100N 214000N 213900N 213800N

40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57

PAGE 1
VEGETATION TO BE REMOVED

- GC Good Condition 10-25cm SupA TO BE REMOVED
- SU Suitable undergrazed >25cm Sup TO BE REMOVED
- SS Suitable sparse sward 10-25c TO BE REMOVED
- Potential habitat TO BE REMOVED

PAGE 2
HABITAT TO BE RETAINED & RESTORED

- GC Good Condition 10-25cm SupA TO BE RETAINED
- SU Suitable undergrazed >25cm Sup TO BE RETAINED
- SS Suitable sparse sward 10-25cm TO BE RETAINED
- SR Suitable rank >25cm SupR TO BE RETAINED
- Potential habitat TO BE RETAINED AND RESTORED

PAGE 3
TRANSLOCATED VEGETATION AND HABITAT TO BE CREATED

- 40-53 GC, SU & SS habitat translocated from mine site
- 54-57 Potential habitat TO BE CREATED (where possible, using translocated material)

GC Good condition: sward height 10 to 25cm, abundant to frequent Devil's-bit Scabious

SU Suitable Under-grazed: sward height >25cm, frequent or occasional Devil's-bit Scabious

SS Suitable Sparse sward height 10 to 25cm occasional Devil's-bit Scabious

SR Suitable Rank: sward height >25cm, rare Devil's-bit Scabious within a 25m² area

APPENDIX 2

SOILS ANALYSES

NOTES

Two sites were sampled in July 2019

One site was in the translocation turf donor site and the other in the turf recipient site

The location of the donor sample site was E261558 N214008

The location of the recipient sample site was E261708 N214137

Two samples were taken at each site, one from the top soil and the other from the subsoil

In the succeeding pages, samples are identified as follows.

TOP 1	Topsoil sample Donor Site
BOTTOM 1	Subsoil sample Donor Site
TOP 2	Topsoil sample Recipient Site
BOTTOM 2	Subsoil sample Recipient Site

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref TOP 1

Date Received 29/07/2019 (Date Issued: 01/08/2019)

Sample No E362424/01

Crop

Analysis	Result
pH	4.9
Phosphorus (ppm)	22
Potassium (ppm)	74
Magnesium (ppm)	94
Calcium (ppm)	790
Sulphur (ppm)	5
Manganese (ppm)	10
Copper (ppm)	6.6
Boron (ppm)	0.62
Zinc (ppm)	13.3
Molybdenum (ppm)	0.02
Iron (ppm)	693
Sodium (ppm)	34
C.E.C. (meq/100g)	9.7
Org. Matter - DUMAS (%)	14.7

Please Note

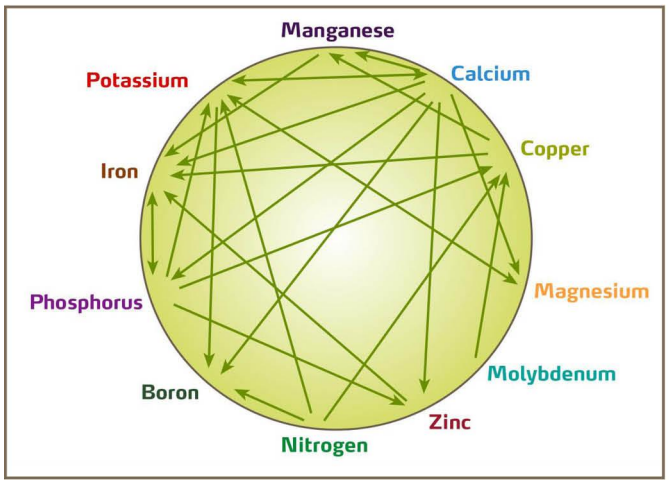
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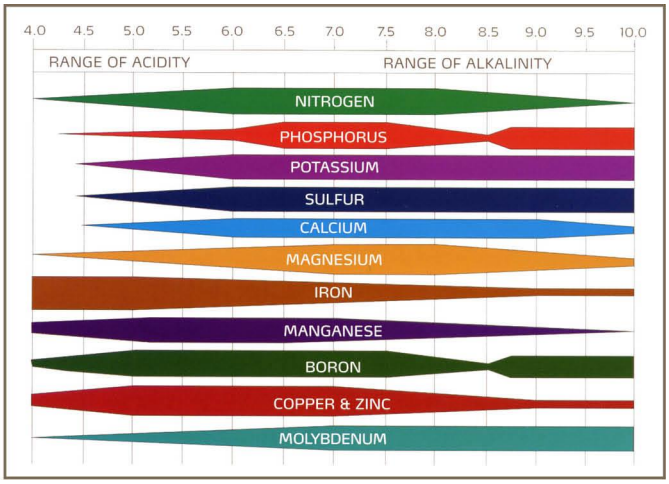
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Date Printed : 01/08/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	TOP 1	**Date Received**	29/07/2019 (Date Issued: 01/08/2019)
Sample No	E362424/01		
Crop			





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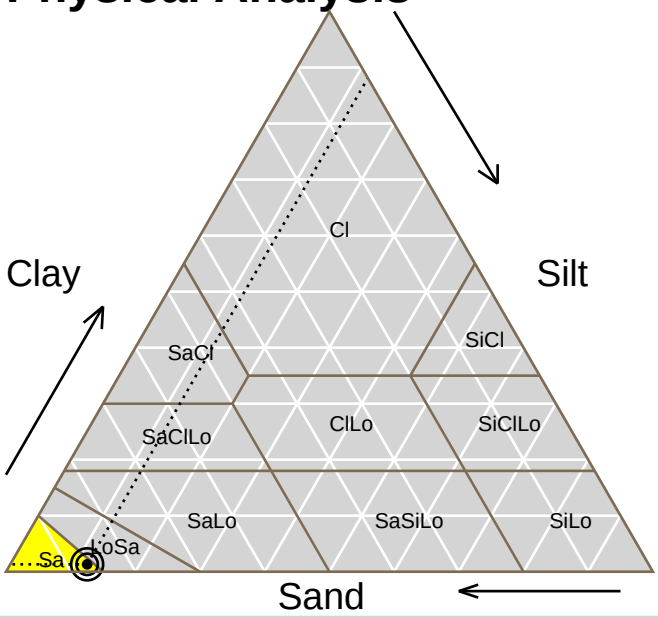
Date Printed : 01/08/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref TOP 1
Sample No E362424/01
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 29/07/2019 (Date Issued: 01/08/2019)

Physical Analysis



Analysis	Result (%)
Sand	86.80
Silt	11.88
Clay	1.32
Soil Type	Sa Sand

Property	Assessment
Available Water	Very Low to Low
Drainage Rate	Very Rapid
Inherent Fertility	Low
Potential C.E.C.	Low
Leaching Risk	High
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	8.5	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
Fungal activiy declines
Bacteria thrive
Nutrient cycling drops

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Date Printed : 01/08/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref BOTTOM 1

Date Received 29/07/2019 (Date Issued: 01/08/2019)

Sample No E362424/02

Crop

Analysis	Result
pH	5.1
Phosphorus (ppm)	18
Potassium (ppm)	20
Magnesium (ppm)	34
Calcium (ppm)	509
Sulphur (ppm)	5
Manganese (ppm)	1
Copper (ppm)	2.4
Boron (ppm)	0.35
Zinc (ppm)	2.0
Molybdenum (ppm)	< 0.01
Iron (ppm)	98
Sodium (ppm)	23
C.E.C. (meq/100g)	6.5
Org. Matter - DUMAS (%)	3.5

Please Note

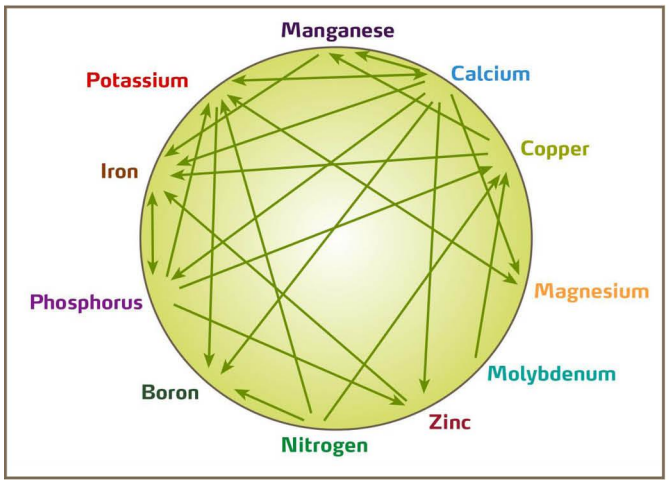
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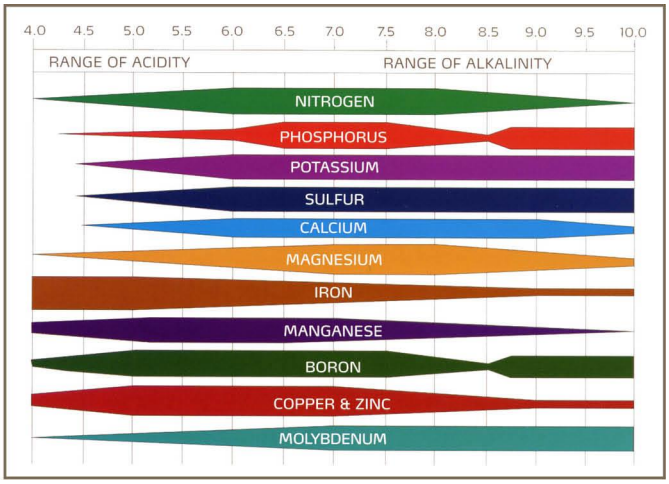
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Date Printed : 01/08/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	BOTTOM 1	**Date Received**	29/07/2019 (Date Issued: 01/08/2019)
Sample No	E362424/02		
Crop			





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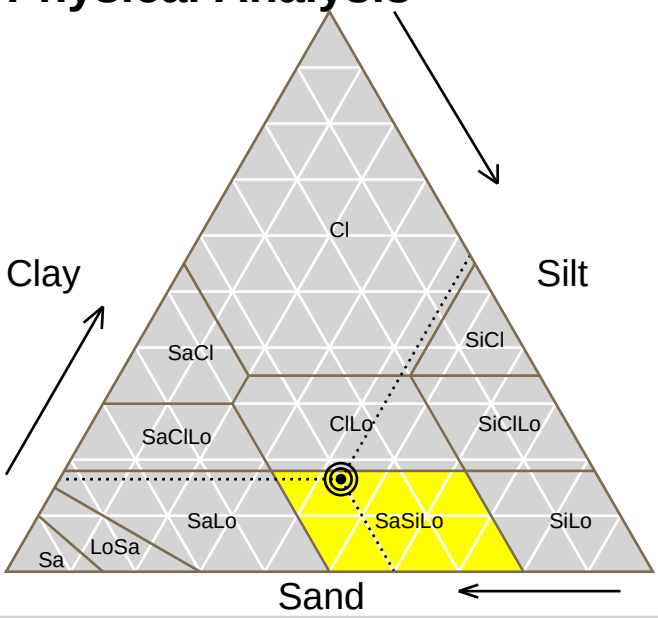
Date Printed : 01/08/2019

Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref BOTTOM 1
Sample No E362424/02
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 29/07/2019 (Date Issued: 01/08/2019)

Physical Analysis



Analysis	Result (%)
Sand	39.96
Silt	43.52
Clay	16.52
Soil Type	SaSiLo Sandy Silt Loam

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	2.0	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
Fungal activiy declines
Bacteria thrive
Nutrient cycling drops

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Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref TOP 2

Date Received 29/07/2019 (Date Issued: 01/08/2019)

Sample No E362424/03

Crop

Analysis	Result
pH	4.8
Phosphorus (ppm)	26
Potassium (ppm)	85
Magnesium (ppm)	82
Calcium (ppm)	493
Sulphur (ppm)	5
Manganese (ppm)	24
Copper (ppm)	5.8
Boron (ppm)	0.47
Zinc (ppm)	12.6
Molybdenum (ppm)	0.04
Iron (ppm)	722
Sodium (ppm)	27
C.E.C. (meq/100g)	7.0
Org. Matter - DUMAS (%)	13.1

Please Note

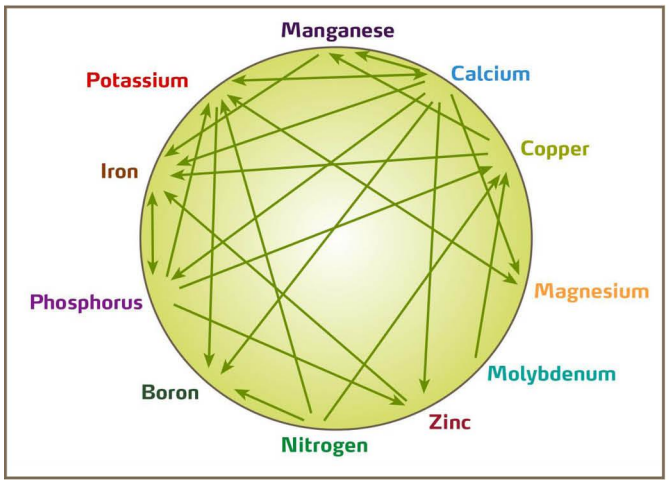
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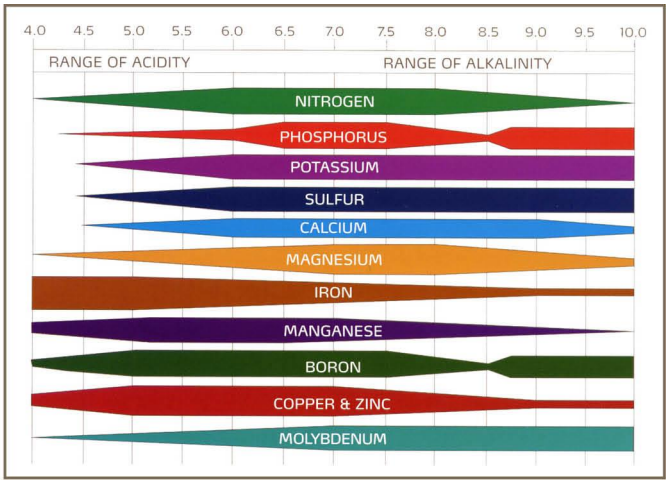
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Date Printed : 01/08/2019

Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	TOP 2	**Date Received**	29/07/2019 (Date Issued: 01/08/2019)
Sample No	E362424/03		
Crop			





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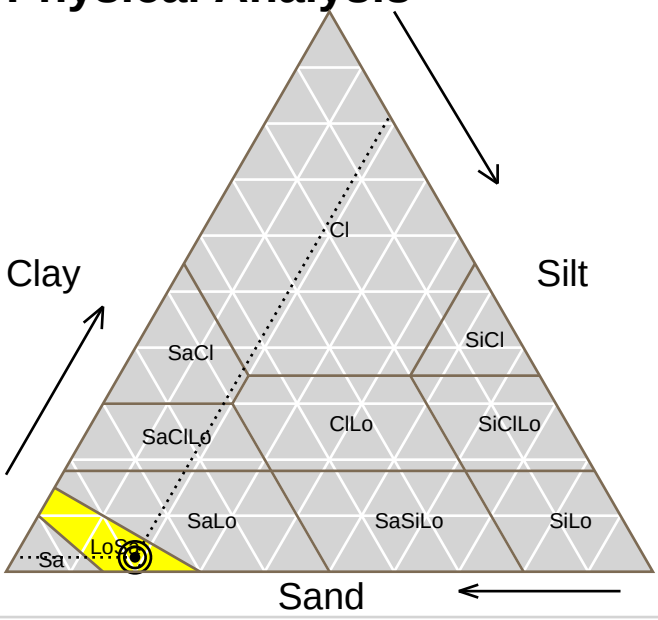
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref TOP 2
Sample No E362424/03
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 29/07/2019 (Date Issued: 01/08/2019)

Physical Analysis



Analysis	Result (%)
Sand	78.78
Silt	18.65
Clay	2.57
Soil Type	LoSa Loamy Sand

Property	Assessment
Available Water	Low to Medium
Drainage Rate	Rapid
Inherent Fertility	Low to Medium
Potential C.E.C.	Low to Medium
Leaching Risk	High to Moderate
Warming Rate	Rapid

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	7.6	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
Good earthworm activity
Nutrient cycling thrives

Increasing Alkalinity
Fungal activiy declines
Bacteria thrive
Nutrient cycling drops

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Analysis Results (SOIL)

Customer BRYN BACH COAL

Distributor ADVANCE GRASS SOLUTIONS
UNIT 5
HOGWOOD FARM INDUSTRIAL ESTATE
FINCHAMPSTEAD
BERKSHIRE
RG40 4QY

Sample Ref BOTTOM 2

Date Received 29/07/2019 (Date Issued: 01/08/2019)

Sample No E362424/04

Crop

Analysis	Result
pH	4.8
Phosphorus (ppm)	14
Potassium (ppm)	21
Magnesium (ppm)	37
Calcium (ppm)	278
Sulphur (ppm)	5
Manganese (ppm)	11
Copper (ppm)	2.6
Boron (ppm)	0.35
Zinc (ppm)	2.0
Molybdenum (ppm)	0.06
Iron (ppm)	560
Sodium (ppm)	24
C.E.C. (meq/100g)	4.2
Org. Matter - DUMAS (%)	1.5

Please Note

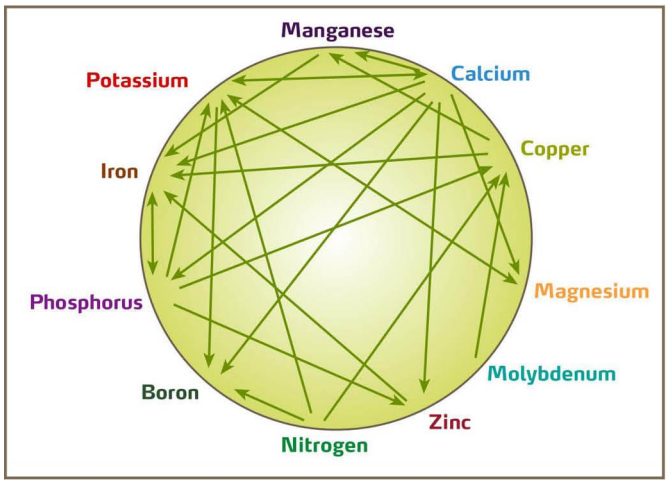
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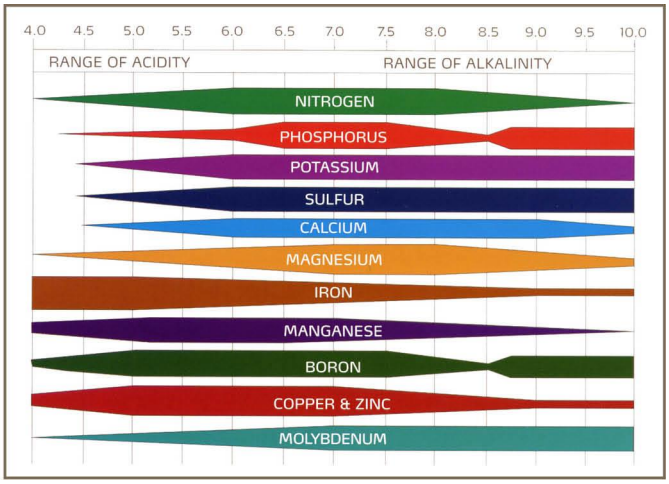
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Analysis Results (SOIL)

Customer	BRYN BACH COAL	**Distributor**	ADVANCE GRASS SOLUTIONS
Sample Ref	BOTTOM 2	**Date Received**	29/07/2019 (Date Issued: 01/08/2019)
Sample No	E362424/04		
Crop			





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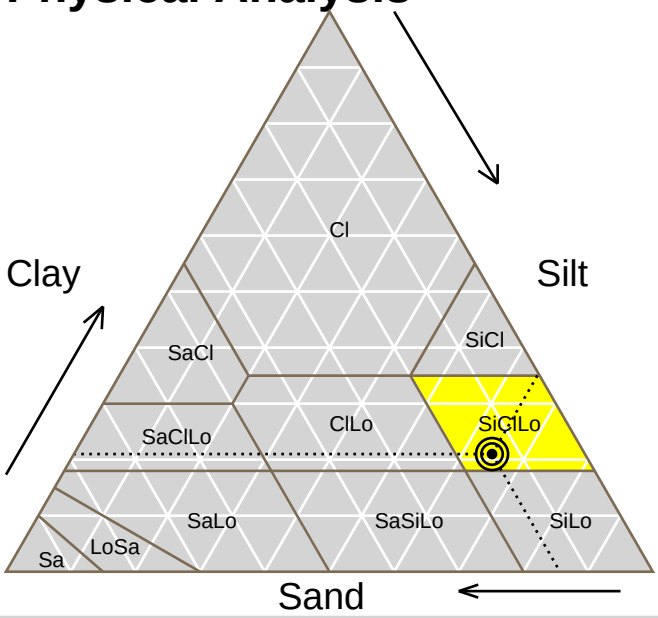
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Analysis Results (SOIL)

Customer BRYN BACH COAL
Sample Ref BOTTOM 2
Sample No E362424/04
Crop

Distributor ADVANCE GRASS SOLUTIONS
Date Received 29/07/2019 (Date Issued: 01/08/2019)

Physical Analysis



Analysis	Result (%)
Sand	14.36
Silt	64.64
Clay	21.00
Soil Type	SiClLo Silty Clay Loam

Property	Assessment
Available Water	High to Medium
Drainage Rate	Medium
Inherent Fertility	Medium
Potential C.E.C.	Medium
Leaching Risk	Moderate
Warming Rate	Rapid to Medium

Biological Analysis

SOLVITA®

Analysis	Result	Ideal
Solvita Burst CO2-C (ppm)	N/A	>70
Organic Carbon (%)	0.9	
Total Nitrogen (%)	N/A	
C:N Ratio	N/A	10-12

Calculated Parameters	Result
Microbial Biomass (mg/kg)	N/A
Solvita Potentially Mineralizable Nitrogen (kg N/ha)	N/A
Soil Assessment Score	N/A/100

pH impact on soil biology



Increasing Acidity
Fungi thrive
Bacterial activity declines
Nutrient cycling drops

Neutral
Desirable fungal and bacterial activity
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Date Printed : 01/08/2019

ADVANCE GRASS SOLUTIONS

Hogwood Farm Industrial Estate
Sheerlands Road
Finchampstead
Berkshire RG40 4QY

Mr Chris James



The above moisture reading was taken from Bottom of Translocation Site E261558 N214008



The above moisture reading was taken from the Top of Translocation Site E261558 N214008

ADVANCE GRASS SOLUTIONS

Hogwood Farm Industrial Estate
Sheerlands Road
Finchampstead
Berkshire RG40 4QY



The above moisture reading was taken from the bottom of the Receptor Site E261708 N214137



The above moisture reading was taken from the top of the Receptor Site E261708 N214137

APPENDIX 3

BRYN BACH COAL LTD

GLAN LASH EXTENSION SURFACE MINE SITE

FURTHER COMMENTS RELATING TO SURFACE AND GROUNDWATER

August 2019

As part of the documentation submitted in support of an application for planning permission to extend the Glan Lash Surface Mine Site a Water Features Survey was compiled (Water Features Survey, October 2018 – Ref JA.BBC.GLSMS.07.18). The survey involved undertaking a field inspection, reviewing available borehole information and published archival data.

In general terms, the proposed mining site comprises Coal Measures strata which are overlain immediately below surface by a variable thickness (5 to over 20 metres) of Glacial Drift deposits.

The Coal Measures strata do not crop out at surface in any locations within the site area.

The Coal Measures strata are of low permeability and in the area of the site of no significance with respect to groundwater resource, due to them containing isolated minor perched aquifers which have low storativity and transmissivity. The overlying Glacial Drift deposits, similarly, are of low permeability and from experience on the adjacent mine site have been demonstrated to contain occasional very minor discontinuous sandy water-bearing horizons (with very little storage) which tend to be perched within an otherwise impermeable unit.

The Coal Measures and overlying Glacial Drift deposits are hydraulically isolated from one another, and therefore the solid measures, even if they contained minor perched aquifers (which on this site there is no evidence of), would not give rise to any flows at surface.

The Water Features Survey makes note of several emergences of ground water outside of the proposed excavation area. It also highlights the presence of several areas where varying levels of rush growth is evident, some of which, it is suggested, may be attributable to groundwater emergence from within the Glacial Drift deposits. Whilst this may occur in very limited areas, it is considered to be more likely that the observed Rush growth is due to the highly impermeable nature of the Glacial Drift unit which occurs at surface, combined with generally slack topographic gradients both resulting in poor surface drainage.

The existing surface water drainage pattern has historically been much altered by man's activity involving the establishment of boundary ditches and forestry activity, in some areas leading to land improvements in associated with agricultural requirements.

Drawing No.JA-012-001-026 'Surface Contour Plan with Watershed Indicated' [contained within the Water Features Survey], shows significant surface flow into the area of wet woodland and proposed translocation site.

Those areas where there is an absence or reduction in the intensity of Molina or Rush growth are where land improvement has been undertaken. In other areas where Molina and Rush growth is evident and, for example the wet woodland, as noted above, is present, no significant land drainage works being evident.

Without the various improvement works it is highly likely that a greater proportion of the area included within the proposed mining scheme would, due to the poor surface water infiltration and relatively slack topographic gradients, have been Molina and / or Rush dominated mire grassland.

As an integral part of the mining scheme there is a proposal to translocate areas of Molina dominated grassland from part of the site to a nominated receptor location where appropriate land drainage characteristics will be engineered. Samples of topsoil and subsoil from both the translocator and receptor sites have been taken and a range of laboratory analyses undertaken on them. Included in the analyses were assessments of water content, the results of which showed the subsoil in both areas to have essentially the same moisture contents of approximately 20%. The subsoil is derived from the weathering of the underlying glacial drift deposits, which if there was major water infiltration into the subsoil from the glacial drift, would almost certainly show elevated moisture content levels and greater variability, which the analyses do not indicate to be the case.

In summary, areas contained within the land which will be excavated as a part of the proposed mining operation, in particular the unimproved Molina and Rush dominated mire grassland and wet woodland, have developed their poor drainage characteristics as a direct result of site geology, generally slack topographic gradients, disturbance and poor drainage infrastructure associated with woodland management activity and elsewhere due to a lack of formal land drainage.

As such, and with careful landform engineering during site restoration following the cessation of mining operations, it should be possible to replicate similar conditions which promote inhibited surface water drainage and ultimately lead to the re-establishment of rush dominated mire grassland across areas within the site.

.....

D A B HIGGINS MSc, BSc, FGS, DIC, CGeol
August 2019

BRYN BACH COAL LTD

GLAN LASH EXTENSION SURFACE MINE SITE

PROPOSAL: PLANNING PERMISSION TO (C) MINE BY SURFACE MINING OPERATIONS 110,000 TONNES OF PREMIUM ANTHRACITE FROM A NORTHERN EXTENSION TO THE EXISTING GLAN LASH MINE SITE COVERING 10.03 HECTARES OVER A 6.5 YEARS PERIOD

Reference

NRW reference CAS-83446-TO G4 – Geo-science Query

A Water Features Survey and Hydrological / Hydrogeological Impact Assessment have been submitted as a part of the EIA for the site which highlights the presence of limited groundwater and the likelihood that the site will be worked dry. These conclusions are derived from extensive experience gained on the current site within the Glacial Deposits and Coal Measures strata which have been worked through.

Within the proposed extension site abandoned underground mineworkings associated with the Ty-Uchaf Colliery in the Trichwart and Pumpquart Seams will be encountered and worked through as a part of the operations.

No information exists with respect to whether the workings will be dry or flooded. On the basis that they are flooded, the maximum potential volume of minewater contained within the (measured) working area is estimated to be approximately 6,500m^3.

The Coal Measures strata within which the mine workings occur are over-lain by a thick covering of glacial drift deposits which essentially seal-off the strata.

The permeability within the glacial drift deposits can be assumed to be extremely low both laterally and vertically, other than within the thin, dis-continuous, poorly consolidated sand horizons which contain limited quantities of groundwater.

Permeability within the Coal Measures strata, which principally comprises mudrocks, is similarly extremely low, especially vertically.

The only potentially significant modifying factors which can impact upon this are the fragmentation and dilation of ground, due to collapse above mine workings voids, and in some instances along fault planes which can act as conduits for water flow.

The main body of water which may be intersected (if present) will be in the abandoned mine workings. The workings are isolated from other abandoned mine workings in the geographical area and therefore there is no possibility of any re-charge into the mine workings which will be intersected on this site.

The only possible route for any additional inflows of water is via the mine access drift, the portal of which is located at a short distance beyond the far south western end of the site boundary.

Indications are that this drift, in the immediate surface area, has collapsed and therefore any water which is likely to flow down the roadway will be rainfall percolating through the broken ground, the volume of which will be negligible, and consequently any re-charge into the mining void will be of no significance.

Once the mineworkings have been intersected any water which may be initially encountered will be pumped from the void and treated accordingly before discharge from site. This water, if encountered, will be a 'one-off' event and will not re-occur during the remaining phases of the operation.

In conclusion, as this will be a 'one-off' event a formal abstraction licence for de-watering any water which may be encountered is not necessary.

.....

D A B HIGGINS MSc, BSc, FGS, DIC, CGeol
31 May 2019

Photographic viewpoint 1

Location: TAIR CARN ISAF

Grid coordinates and elevation:

E 268359m

N 216753m

459.3m AOD

Date: 22nd May, 2019

Weather – Fine and dry

Image taken using 18MP digital camera

Focal length 40mm

Distance to centre of application = 7373m

Existing situation:

The existing overburden mound is distinguishable in the far distance, however it does not stand out from the surrounding landscape. The existing impact of the Glan Lash Mine Site is negligible.

Potential impact of extension:

The overburden mound will remain in situ for the duration of the operational stage, with the majority of operational activities taking place below ground level. We therefore assess that the visual impact from this view point will remain negligible until completion of the restoration stage, when the visual impact will be reduced to none.



Photographic viewpoint 2

Location: CARREG DWFN

Grid coordinates and elevation:

E 265432m

N 217301m

279.3m AOD

Date: 22nd May, 2019

Weather – Fine and dry

Image taken using 18MP digital camera

Focal length 40mm

Distance to centre of application = 5154m

Existing situation:

The existing overburden mound is distinguishable in the distance, however it does not stand out from the surrounding landscape. The existing impact of the Glan Lash Mine Site is negligible.

Potential impact of extension:

The overburden mound will remain in situ for the duration of the operational stage, with the majority of operational activities taking place below ground level. We therefore assess that the visual impact from this view point will remain negligible until completion of the restoration stage, when the visual impact will be reduced to none.



Photographic viewpoint 3

Location: MYNYDD ISAF

Grid coordinates and elevation:

E 265754m

N 215391m

292.3m AOD

Date: 22nd May, 2019

Weather – Fine and dry

Image taken using 18MP digital camera

Focal length 40mm

Distance to centre of application = 4451m

Existing situation:

The existing overburden mound is distinguishable in the far distance, however it does not stand out from the surrounding landscape. The mound is only visible from the extreme western end of the Mynydd Isaf ridge and is lost below the horizon as you retreat some 30m to the east. The existing impact of the Glan Lash Mine Site is negligible.

Potential impact of extension:

The overburden mound will remain in situ for the duration of the operational stage, with the majority of operational activities taking place below ground level. We therefore assess that the visual impact from this view point will remain negligible until completion of the restoration stage, when the visual impact will be reduced to none.



Subject: Re: Proposed Northern Extension to the Existing Glan Lash Mine Site
From: Chris James <chris@brynbachcoal.co.uk>
Date: 02/09/2019, 08:53
To: Rhian.Isaac@cyfoethnaturiolcymru.gov.uk

Good Morning Rhian,

I have attached the Pryce Ecologists Report in reply to your response regards our proposed Northern Extension.

This report completes our reply to your Pre-Application Consultation Response.

If you need any further clarification please do not hesitate to contact me.

Regards
Chris James

On Thu, 8 Aug 2019 at 10:58, Chris James <chris@brynbachcoal.co.uk> wrote:

> Good Morning Rhian,
>
> Richard is asking if he could view the findings of you recent site survey, would this be possible?
>
> Regards
> Chris
>
> On Thu, 11 Jul 2019 at 11:16, Chris James <chris@brynbachcoal.co.uk> wrote:
>
> > Good Morning Rhian,
> >
> > Our site Ecologist Richard Pryce is in the process of compiling a report to respond to you ecological queries. Richard has asked me to contact you to see if he could view the findings of the recent site survey of the grassland to the north of our proposed extension to the Glan Lash Site. This would help Richard to answer fully your concerns.
> > Regards
> > Chris
> >
> > On Wed, 19 Jun 2019 at 11:04, Chris James <chris@brynbachcoal.co.uk> wrote:
> >
> > > Dear Miss Isaac,
> > >
> > > Further to your recent response to the pre-application consultation. I have attached 2 reports in order to address your requirement for further information with regards:-1. Geoscience - Report by Dennis Higgins James Associates
> > > 2. Landscape- Report illustrating the view point and assessment of the visual impact of the proposed development from the National Park.
> > >
> > > We would also confirm Bryn Bach Coal Ltd will agree to submit a Construction Environmental Management Plan for approval by Carmarthenshire County Council under a Condition of any future planning permission.

The ecological issues will be addressed by our site ecologist Richard Pryce in a report that will follow shortly.

Should you require any further clarification please do not hesitate to contact me.

Yours sincerely

Chris James

Attachments:

NRW Ecology Reply.pdf 9.1 MB

Ein cyf/Our ref: CAS-83446-T0G4
Eich cyf/Your ref: Glan Lash Mine
Maes Newydd
Llandarcy
Neath Port Talbot
SA10 6JQ

Ebost/Email:
Rhian.Isaac@cyfoethnaturiolcymru.gov.uk
Ffôn/Phone: 0300 065 3259

Dyddiad/Date: 30 April 2019

Chris James
Bryn Bach Coal Ltd
Glan Lash Mine Site
Shands Road
Blaunau
Llandybie
SA18 3NA

Annwyl / Dear Mr James,

PROPOSAL: planning permission to (c): mine by surface mining operations 110,000 tonnes of premium anthracite from a northern extension to the existing Glan Lash mine site covering 10.3 hectares over a 6.5 year period
SITE ADDRESS: Bryn Bach Coal,Glan Lash Mine Site, Shands Road, Blaunau, Llandybie, SA18 3NA.

Thank you for consulting Cyfoeth Naturiol Cymru / Natural Resources Wales on the above pre- application, which we received on 29 March 2019.

Based on the information submitted to us, we have significant concerns with the proposed development. On this basis, we would recommend to the local authority that they should only grant planning permission if the scheme can meet the following requirements and the conditions listed below are attached to the planning permission. Otherwise, we would object to this planning application.

Requirement:

Geoscience: Further information required for dewatering as detailed below.
Landscape: Submission of a photographic viewpoint within the National Park to illustrate visibility and potential impact from the area.

Condition:
Submission of a Construction Environment Management plan given the close proximity of the mine to the Afon Lash.

Geoscience
The submission includes an Environmental Impact Assessment – Glan Lash Extension. Bryn Bach Coal, June 2018.

A water feature survey and a Hydrogeological Impact Assessment (HIA) have been included as part of the Environmental Impact Assessment. The HIA concluded that the drift deposits are isolated from the underlying bedrock, which has a low permeability. Any water within the drift deposits is perched in more permeable lenses. All the drift is to be removed as part of the operation to reach the coal seams in the bedrock.

The existing mining operation suggests that groundwater is limited and therefore essentially worked dry i.e. no dewatering. For the extension area old underground mine working are likely to be encountered, which may contain mine waters. Once the mine water has been reached this will drain in to the working area and require dewatering. The likely volume is estimated to be 6,500 m3, but it is not clear if this will be in one event or many events over the 6.5 year time period. If this is for a prolonged period of time an abstraction licence will be required.

We require further details on the dewatering, including how the water will be collected and treated prior to discharge and will this be a one off occurrence or several events over the operational time period.

Landscape

The proposed extension lies approximately 3km from the Bracon Beacons National Park boundary and within the setting of the Park.

The Environmental Assessment includes an assessment of visual impact on the immediate locality, however there is no assessment of visual impact on the National Park.

The proposed extension is potentially visible from the National Park around Mynydd Isaf (approximately 4km away), Carreg Dwfn (approximately 5km away) and Tair Carn Isaf, (approximately 7km away). There are a number of public footpaths and minor roads in these areas and all lie within open access land.

We require a photographic viewpoint from one or more of these areas within the National Park to illustrate visibility and potential impact from the area. Photographs should be taken in accordance with the Landscape Institute's Advice Note 01/11 Photography and photomontage in landscape and visual impact assessment. We recommend a single frame photograph reproduced at A3, with an approx. 40 degree horizontal angle of view, to illustrate the level of detail seen in the field, in addition to any panorama for context.

Protected sites

A Phase II vegetation survey was carried out in 2017 and 2018 in support of this application and it appears that the habitats surveyed in 1994 by ourselves are still present. Part of the site to be mined is in a candidate Site of Special Scientific Interest (cSSSI Ty Isaf) as there is an area (0.8ha) of M24 mire habitat.

Due to the importance of this habitat the Local authority may require more detailed information on how the mitigation in the form of translocation will be carried out and information on the likely success rate of this translocation, how the habitat will be maintained in the future, the amounts of habitats (metre sq or ha) that will be mitigated/compensated.

Marsh Fritillary butterflies are present on site and they have been proposed to be translocated, this will require a NRW licence and we would need a detailed Management Plan with all the details described above with the translocation of Molina meadow.

Red Kites (Schedule 1 species under the Wildlife and Countryside Act 1981), the ecological report stated that Red Kites had begun nesting on part of the site. We recommend you contact the Local Authorities Ecologist to determine whether further surveys/assessments

are required to ascertain any provisions needed to avoid disturbance during the nesting season.

Given the close proximity of the site to the Afon Lash which is a tributary of the Afon Llwchor which flows into Carmarthen Bay & Estuaries Special Area of conservation (SAC), Burry Inlet SPA, Burry Inlet Ramsar site and Burry Inlet & Loughor Estuary SSSI to ensure that the integrity of controlled waters is assured.

The applicant should produce a Construction Environment Management Plan (CEMP) specific to this proposal demonstrating how relevant guidelines for pollution prevention and best practice will be implemented, including details of emergency procedures and an incident response plan.

Condition: No development shall commence until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure the risks to controlled waters and ecological systems are minimised.

Our comments above are based on the information submitted and only relate specifically to matters that are included on our checklist Natural Resources Wales and Planning Consultations (September 2018) which is published on our website at https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/our-role-in-planning-and-development/our-role-in-planning-and-development/?lang=en.

We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests, including environmental interests of local importance. The applicant should be advised that, in addition to planning permission, it is their responsibility to ensure that they secure all other permits/consents relevant to their development.

I hope these comments are of assistance. If you have any queries, or if you require any further information, please do not hesitate to contact us at the above address.

Yn ddiffuant / Yours sincerely

Miss Rhian Isaac
Ymgynghorydd Cynllunio Datblygu / Development Planning Advisor

Subject: RE: Pre-application consultation
From: <James.Cooke@gov.wales>
Date: 17/04/2019, 15:54
To: <extension@brynbachcoal.co.uk>

Hello Chris

Many thanks for the clarification; much appreciated.

All the best

James

From: Bryn Bach Coal Extension <extension@brynbachcoal.co.uk>
Sent: 17 April 2019 12:07
To: Cooke, James (ESNR - ERA - Land, Nature & Forestry) <James.Cooke@gov.wales>
Subject: Re: Pre-application consultation

Good Morning James,

Thank you for your prompt response and comments.
I would like to clarify that we have allowed in the topsoil quantities to strip the topsoil from the areas intended for subsoil storage. I would also like to confirm that the subsoil will be stored to a maximum height of 5m, whilst the topsoil will be stored at 3m.

Regards
Chris James

On Tue, 16 Apr 2019 at 12:04, <James.Cooke@gov.wales> wrote:

> Dear Chris
>
> Thank you for the Pre-application consultation email sent on 1st April 2019. I am responding for and on behalf of the Department for Environment and Rural Affairs concerning the proposed agricultural after use. Any comments made here do not bind other Government Departments or Teams who may wish to comment in their own right.
>
> Figure GLE-06 gives a number of habitat types. The Department wishes to only comment on those where agriculture is intended as the after use.
>
> For the purposes of this consultation it is assumed that only the areas identified as “agricultural grazing” are intended for an agricultural after use and all other habitat types are to be managed for an amenity after use.
>
> Should this be any different, the proposal must reassure that additional areas destined for an agricultural after use are going to be returned to a beneficial and productive standard.
>
> It is good to see an assessment of soil resources has taken place. The Department would favour the best recovered soils being assigned for the agricultural areas.
>
> Land form, placement and handling appear to have been addressed for the agricultural areas.

> I have had difficulty identifying proposals for the storage of soils. The subsoil storage areas should have the topsoil removed to avoid mixing of soils. GLE-02 appears to show soil bunds no more than 4m high.
>
> Yours sincerely
>
> James
>
> RJ Cooke
> Agricultural Land Use Planning
> Department for Environment & Rural Affairs
> Llandrindod Wells
>
> ---
> Good Afternoon All,
>
> Just to confirm that the planning application form can be viewed on line alongside the supporting documentation at www.brynbachcoal.co.uk
>
> Regards
> Chris James
>
> On Thu, 28 Mar 2019 at 15:51, Chris James <chris@brynbachcoal.co.uk> wrote:
> Dear All,
>
> Further to the Scoping Opinion provided by yourselves under the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017,
>
> Please find attached a formal notice defined by article 2D of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012. This notice comprises a formal request for a pre-application response.
>
> A copy of the Environmental Impact Assessment Non Technical Summary, the Environmental Impact Assessment and the Health Impact Assessment can be viewed on line at www.brynbachcoal.co.uk.
>
> Should you require any further information please do not hesitate to contact me.
>
> Regards
> Chris James
>
> Sganiwyd y neges hon am bob feirws hysbys wrth iddi adael Llywodraeth Cymru. Mae Llywodraeth Cymru yn cymryd o ddifrif yr angen i ddiogelu eich data. Os cysylltwch â Llywodraeth Cymru, mae ein hysbysiad preifatrwydd yn esbonio sut rydym yn defnyddio eich gwybodaeth a sut rydym yn diogelu eich preifatrwydd. Rydym yn croesawu gohebiaeth yn Gymraeg. Byddwn yn anfon ateb yn Gymraeg i ohebiaeth a dderbynnir yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi. On leaving the Welsh Government this email was scanned for all known viruses. The Welsh Government takes the protection of your data seriously. If you contact the Welsh Government then our Privacy Notice explains how we use your information and the ways in which we protect your privacy. We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

Sganiwyd y neges hon am bob feirws hysbys wrth iddi adael Llywodraeth Cymru. Mae Llywodraeth Cymru yn cymryd o ddifrif yr angen i ddiogelu eich data. Os cysylltwch â Llywodraeth Cymru, mae ein hysbysiad preifatrwydd yn esbonio sut rydym yn defnyddio eich gwybodaeth a sut rydym yn diogelu eich preifatrwydd. Rydym yn croesawu gohebiaeth yn Gymraeg. Byddwn yn anfon ateb yn Gymraeg i ohebiaeth a dderbynnir yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi. On leaving the Welsh Government this email was scanned for all known viruses. The Welsh

Government takes the protection of your data seriously. If you contact the Welsh Government then our Privacy Notice explains how we use your information and the ways in which we protect your privacy. We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

Dŵr Cymru
Welsh Water

PPA0003953

N
W E
S

LEGEND

Clean network:

- Sluice valve
- Pressure reducing valve
- Meter
- Bulk meter
- Hydrant (FH)
- Cap end
- Air valve
- Stop tap
- Water Treatment Works
- Water Pumping Station
- Existing main
- Non-operational main
- Raw Water

NB: Water main symbol colour indicates the type.

LIGHT BLUE - Trunk
DARK BLUE - Distribution
YELLOW - Raw Water

Notes:

Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF) . It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

Dŵr Cymru Cyfyngedig ('the Company') gives this information as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus. The onus of locating apparatus before carrying out any excavations rests entirely on you. The information which is supplied by the Company, is done so in accordance with statutory requirements of sections 198 and 199 of the Water Industry Act 1991 which is based upon the best Information available and, in particular, but without prejudice to the generality of the foregoing, it should be noted that the records that are available to the Company may not disclose the existence of a water main, service pipe, sewer, lateral drain or disposal main and any associated apparatus laid before 1 September 1989, or, if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of this information is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the Company's right to be compensated for any damage to its apparatus.

Service pipes are not generally shown but their presence should be anticipated.

EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.

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Map Ref:	261468,213997
Map scale:	1:2500
Printed by:	Crowe Danielle
Printed on:	24 Apr 2019

BRYN BACH COAL LTD

LAND TO THE NORTH OF GLAN LASH MINE SITE, BLANEAU

DEVELOPMENT SCHEDULE 1C, ARTICLE 2D, MINE BY SURFACE MINING OPERATIONS
110,000 TONNES OF PREMIUM QUALITY ANTHRACITE
FROM THE PROPOSED GLAN LASH EXTENSION

Reference: PPA0003953

WATER

The propose extension to the Glan Lash Mine is in the vicinity of a 250mm trunk water main. We would request that prior to any work commencing on site, details of a construction design method statement and risk assessment for the protection of the structural condition of the strategic water main in the vicinity of the site has been submitted to the local planning Authority as a part of the planning application and approved.

The proposed limit of excavation at surface lies, at its closest, approximately 100 metres from the indicated (Welsh Water Plan dated 24 April 2019 – accompanying their correspondence ref: PPA0003953)

The northern limit of excavation at surface is orientated broadly ENE / WSW and the excavation slope inclined towards the SSE.

The top section of the excavation slope will be formed through Glacial drift deposits which will principally comprise stiff sandy boulder clay with occasional thin, impersistent, un-consolidated sand layers.

Along this boundary the thickness of the Glacial Drift is indicated to lie between 5 and 7 metres.

The underlying excavation slope to be formed through solid Coal Measures strata will vary in height between 10 (in the east) and 22 metres (in the west).

Between the two slopes an intermediate safety bench of approximately 5 metres in width will be established.

The excavation slope through the solid measures will be inclined at a gradient of approximately 1 vertical to 0.5 horizontal and that through the Glacial drift at approximately 1 in 1.5.

The solid measures are indicated to be inclined towards the south at a gradient of approximately 1 vertical to 8 horizontal.

Exploratory borehole information indicates the presence of low angle thrust faults which are broadly orientated ENE / WSW and inclined towards the south at varying gradients. The sequence of strata is also disturbed by upright normal faulting on a NNE / SSE trend.

POTENTIAL RISK

Concerns have been raised by Welsh Water with respect to the potential for the proposed mining operation having a negative impact upon the structural integrity of the 250mm trunk water main which is located in / around the B4556 public highway corridor, to the north of the site.

As noted above, the highway / water main is located at least 100 metres from the proposed limited of excavation at surface.

POSSIBLE MODES OF SLOPE FAILURE WHICH COULD AFFECT THE GROUND BEHIND THE NORTHERN LIMIT OF EXCAVATION AT SURFACE AND POTENTIAL IMPACTS

1. Glacial Deposits

Excavation slopes (of far greater height than will be formed along the northern site limit) on the existing site have been affected by two types of instability as follows:

i) Localised slope failure arising due to minor water flows from un-consolidated sand horizons causing erosion and removal of support from the overlying clay. These failures have had localised effects not extending to more than 2-3 metres beyond the surface excavation limit.

ii) Large scale slope failures due to movements along thrust planes located within the Coal Measures strata. Slight movements within the solid measures have resulted in the removal of support from the overlying Glacial Drift. This removal of support has enabled water to infiltrate the Glacial Drift leading to its weathering and in places slurrification. The effects have been experienced to a distance of up to 10 to 15 metres (maximum) behind the original excavation limit at surface.

2. Solid Measures

As noted above, the solid measures are likely to be affected by both east / west orientated thrust faulting and NNW / SE trending normal faults.

Thrust planes represent horizons along which the strata have been pushed laterally thereby creating weak (low shear strength) planes within the sequence of measures.

The information interpreted from exploratory boreholes and experienced gained on the existing site indicates that the thrust planes are inclined towards the south, though the actual angle of the inclination can be variable, particularly at a local level.

The potential presence of these low shear strength planar features, which are likely to be inclined to the south (and dipping out of the proposed excavation sidewall low wall) could result in the movement of strata. Such disturbances tend to be slow moving and their extent limited by the location and inclination of the slip plane (i.e. thrust plane). In general terms, the steeper the thrust plane the more likely that sliding movements will occur.

Alternatively, as the angle of inclination of the thrust plane decreases so does the possibility of sliding movements occurring.

It should be noted that, as occurred on the existing site, the principal area of thrusting within the sequence occurred between the Trichwart and Stinking Seams in a zone which will not be present along the northern sidewall.

The potential for thrust related instability extending as far as the trunk water main is extremely low. Failure should it occur, is likely to be limited to a maximum distance of approximately 10 to 15 metres from the excavation limit.

Under the requirements of the Quarries Regulations 1999 there is a statutory responsibility to undertake such mining operations in compliance with approved geotechnical designs which ensure the safety of personnel and structural integrity of third-party interests and features beyond the site boundary.

CONCLUSIONS

Whilst the potential for localised small-scale instabilities affecting sections of the north wall of the proposed excavation, it is highly un-likely that their impacts will extend beyond 10 to 15 metres beyond the limit of excavation at surface.

The possibility of the Welsh Waters watermain being affected by the proposed operations is remote.

.....

D A B HIGGINS MSc, BSc, FGS, DIC, CGeol
31 May 2019

Dŵr Cymru
Welsh Water

Developer Services
PO Box 3146
Cardiff
CF30 0EH

Tel: +44 (0)800 917 2652
Fax: +44 (0)2920 740472
E.mail: developer.services@dwrcymru.com

Gwasanaethau Datblygu
Blwch Post 3146
Caerdydd
CF30 0EH

Ffôn: +44 (0)800 917 2652
Ffacs: +44 (0)2920 740472
E.bost: developer.services@dwrcymru.com

Mr Chris James
Bryn Bach Coal Limited
Glan Lash Mine Site
Shand's Road Bleanau
Llandybie
Carmarthenshire
SA18 3NA

Date: 18/04/2019
Our Ref: PPA0003953

Dear Mr James

Grid Ref: 261601 213878
Site Address: Land to North of Glan Lash Mine Site Bleanau
Development: Schedule 1C, Article 2D - mine by surface mining operations 110,000 tonnes of premium quality anthracite from the proposed Glan Lash Extension.

We refer to the letter received and your formal request for a pre-application consultation response from Dwr Cymru Welsh Water, as a 'Specialist Consultee' as defined by Paragraph (y) of Schedule 4 of the Town & Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2016, before applying for planning permission. It is acknowledged that the consultation request relates to a major development site and thus seeks a substantive response within 28 days from the date of the notice, as per the requirements of Article 2E. This request includes our views on the capacity of our network of assets and infrastructure to accommodate your proposed development.

Having reviewed the information submitted as part of the application we would advise there is **no objection** to the proposal and offer the following standing advice which should be taken into account within any future planning application for the development:

Sewerage and Sewerage Treatment

We have no comment to make in relation to the capacity of the public sewerage system and the Waste water Treatment Works.

glas
Glas Cymru Cyfyngedig

Welsh Water is owned by Glas Cymru – a 'not-for-profit' company.
Mae Dŵr Cymru yn eiddo i Glas Cymru – cwmni 'nid-er-elw'.

We welcome correspondence in Welsh and English

Dŵr Cymru Cyf, a limited company registered in Wales no 2366777. Registered office: Pentwyn Road, Nelson, Treharris, Mid Glamorgan CF46 6LY

Rydym yn croesawu gohebiaeth yn y Gymraeg neu yn Saesneg

Dŵr Cymru Cyf, cwmni cyfyngedig wedi'i gofrestru yng Nghymru rhif 2366777. Swyddfa gofrestredig: Heol Pentwyn Nelson, Treharris, Morgannwg Ganol CF46 6LY.

Water

The proposed extension to the Glan Lash Mine is in the vicinity of a 250mm trunk water main. We would request that prior to any work commencing on site, details of a construction design method statement and risk assessment for the protection of the structural condition of the strategic water main in the vicinity of the site has been submitted to the local planning authority as part of the planning application and approved.

No works should be undertaken at the mine extension until the approved protection measures have been implemented and completed. Thereafter, the protection measures shall be retained at all times.

I trust the above information is helpful and will assist you in forming water and drainage strategies that should accompany any future planning application. I also attach copies of our water and sewer extract plans for the area, and a copy of our Planning Guidance Note which provides further information on our approach to the planning process, making connections to our systems and ensuring any existing public assets or infrastructure located within new development sites are protected.

Please note that our response is based on the information provided in your enquiry and should the information change we reserve the right to make a new representation. Should you have any queries or wish to discuss any aspect of our response please do not hesitate to contact our dedicated team of planning officers, either on 0800 917 2652 or via email at **developer.services@dwrcymru.com**

Please quote our reference number in all communications and correspondence.

Yours faithfully,



Owain George
Planning Liaison Manager
Developer Services

***Please Note** that demands upon the water and sewerage systems change continually; consequently the information given above should be regarded as reliable for a maximum period of 12 months from the date of this letter.*