

CPAT Report No. 1938




Hendre Mynydd, Treherbert: classroom

Heritage Impact Assessment



YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS
CLWYD-POWYS ARCHAEOLOGICAL TRUST

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Summary

In March and April 2023 the Clwyd Powys Archaeological Trust was instructed by Neath Port Talbot Council to undertake a heritage impact assessment of two scheduled monuments that Cadw were concerned might be affected by the proposed development of a new classroom facility and related structures near the summit of Rhigos Mountain Road, Treherbert. A cross-ridge dyke 1.2km long, 0.5m high and 1.5-2m wide, constructed of horizontally laid coarse stone blocks, and an upland settlement comprising a series of rubble stone enclosures c.4m – 18m in diameter, were assessed through field survey and professional judgement, applying recommended Cadw guidance. The assessment indicated that no significant effect would result on the heritage significance of the monuments through construction and operation of the proposed development within their setting.

Crynodeb

Fis Mawrth a mis Ebrill 2023, derbyniodd Ymddiriedolaeth Archeolegol Clwyd Powys gyfarwyddiadau oddi wrth Gyngor Castell-nedd Port Talbot i ymgymryd ag asesiad o effaith o ran dwy heneb gofrestredig yr oedd Cadw'n pryderu y gallai gwaith arfaethedig i ddatblygu cyfleuster ystafell ddsbarth newydd a strwythurau cysylltiedig ger copa Heol Mynydd Rhigos, Treherbert, effeithio arnynt. Aseswyd clawdd traws-cefnennau 1.2km o hyd, 0.5m o uchder ac 1.5-2m o led, a oedd wedi'i adeiladu o flocliau cerrig garw wedi'u gosod ar eu gwastad, ac anheddiad ucheldirol yn cynnwys cyfres o lociau cerrig rwbwl â diamedr o ryw .4m – 18m, trwy arolwg maes a chrebwyll proffesiynol, gan roi canllawiau cymeradwy Cadw ar waith. Roedd yr asesiad yn awgrymu na fyddai unrhyw effaith sylweddol ar arwyddocâd yr henebion o safbwynt treftadaeth yn sgil adeiladu a gweithredu'r datblygiad arfaethedig yn eu hamgylchedd.

1 Introduction

- 1.1. Neath Port Talbot Council's Countryside and Wildlife Team has commissioned Clwyd Powys Archaeological Trust to undertake a Heritage Impact Assessment for a small development in proximity to two scheduled monuments. The assessment was required by Cadw in order for them to provide informed advice to Rhondda Cynon Taf County Borough Council in determining whether planning permission would be justified.
- 1.2. Planning application 20/1056/10 was submitted on 1st October 2020 for:
Construction of a small off-grid highly sustainable community building on forestry land, including classroom, welfare, access route, on-site energy generation (wind turbine and PV panels) and drainage to support delivery of the Lost Peatlands of South Wales partnership project.
- 1.3. The Countryside & Wildlife Team (C&W Team) of Neath Port Talbot County Borough Council (the Council) are administrating a landscape-scale partnership project – *Lost Peatlands of South Wales*. The project intends to restore the upland landscape of the Upper Afan Valley in Neath Port Talbot and the Upper Rhondda Fawr in Rhondda Cynon Taf whilst engaging and encouraging local communities and school children to get outside in their landscape to get healthier and learn about their local heritage.
- 1.4. Limited facilities are available within the upland part of the project area to use for education, welfare and interpretation of the project. The Partnership aims to address this by building a classroom, designed to be environmentally sustainable.
- 1.5. The site is located at National Grid Reference SN 92340234, on forestry land to the north east of Hendre Mynydd car park (Figures 1 and 2). The site is situated at c.480m on a west facing valley (Nant Garreg Lwyd) at the head of the Rhondda Fawr Valley. The A4061 Rhigos Mountain road lies to the west and conifer plantations to the east, and long views to the south-south-west.
- 1.6. Although historically the site was on moorland, modern development includes industrial scale forestry over much of the surrounding countryside, and the site is within the Pen Y Cymoedd wind farm.
- 1.7. There are three possible constraints to development due to potential harm to designated historic assets. The site lies within the setting of two scheduled monuments which are located within 500m, to the west and the south, and within a Landscape of Special Historic Interest (Rhonda Fawr valley registered as No. 50) which represents one of the largest and best-known mining conurbations and coalfield communities in Britain. The latter, however, has not been raised as of concern by statutory consultees to the planning authority, and is therefore not subject to assessment in the following report.



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Fig. 1 Location of proposed classroom

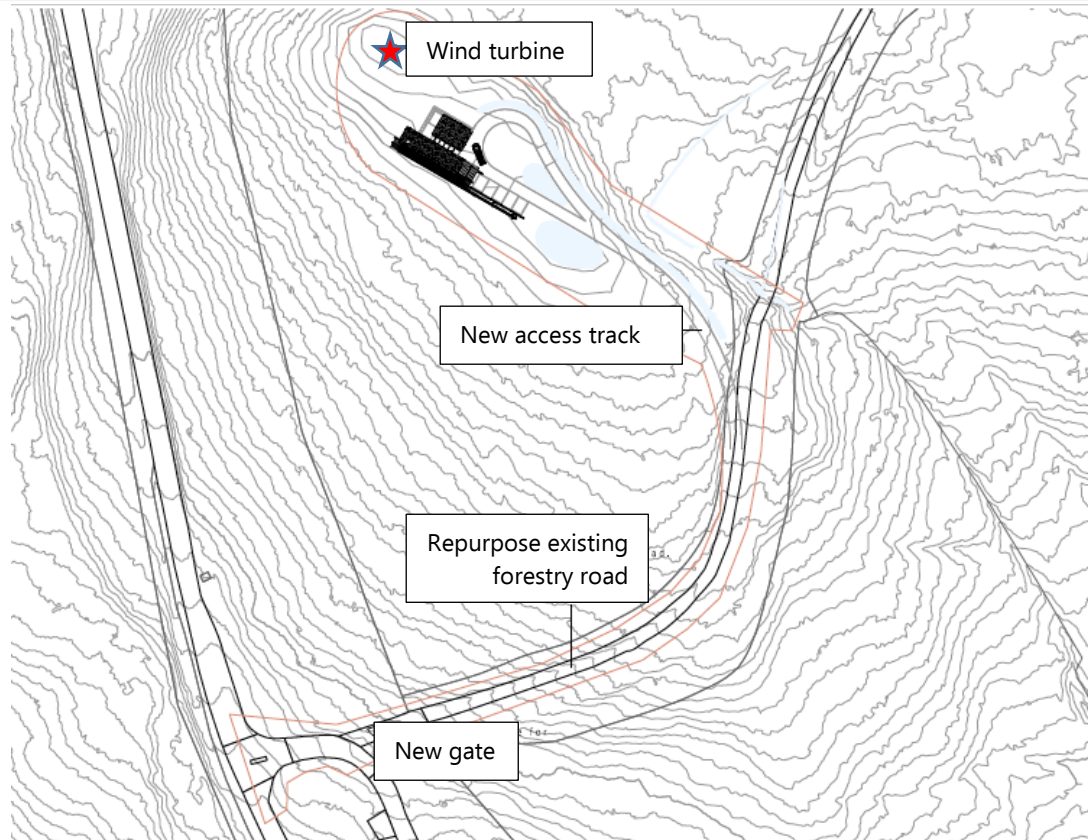


Fig. 2 Detailed location of proposed classroom

2 Planning policy and guidance

- 2.1. The Historic Environment (Wales) Act 2016 is the primary statutory tool for protecting historic assets and sustainable management of the historic environment. It is designed to enable greater transparency into decisions taken on the historic environment and to make it a statutory requirement for information on the historic environment to be safe-guarded for the public good.
- 2.2. The Well-being of Future Generations Act of 2015 defines sustainable development as 'the process of improving the economic, social, environmental and cultural well-being of Wales by taking action ... aimed at achieving the well-being goals'. It requires public bodies in Wales to consider the long-term impact of their decisions, and whether such decisions contribute to social, cultural, environmental, and economic well-being in Wales.
- 2.3. National policy within Wales is set out in in Planning Policy Wales Edition 11, December 2021 ("PPW"), in which Section 5.7 states the importance of Renewable Energy, and Section 6.1 The Historic Environment (within the chapter on Distinctive and Natural Places) explains the need for a reasonable and proportionate impact assessment to ensure Proposed Development is sustainable and to prevent unnecessary harm to historic assets.
- 2.4. PPW is supported by Technical Advice Note 24: The Historic Environment (May 2017) which is designed to assist local authorities with developing their local plans and for determination of planning applications or listed building consent in relation to historic assets.

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- 2.5. The three principal guidance documents that will be followed in this assessment are those produced by Cadw on behalf of the Welsh Government for managing historic assets:
- Conservation Principles for the sustainable management of the historic environment in Wales (March 2011) to establish objective assessment of the value and significance of historic assets within and surrounding the Proposed Development site;
 - Setting of Historic Assets in Wales (2017); and
 - Heritage Impact Assessment in Wales (May 2017)
- 2.6. Cadw's Conservation Principles (page 18) states in Managing Change to an Historic Asset: *"Changes to historic assets are inevitable To ensure the long-term future of historic assets, change needs to be managed to ensure that their significance is not diminished as a consequence"* and paragraph 47 *"When considering the severity of potential impacts upon an historic asset, there should always be proportionality and reasonableness"*. The heritage assessment reported upon in the current document has used these key aims of the guidance to ensure the results of the study are focused on a proportionate response to potential impacts on heritage significance from the degree of change that might result from the Proposed Development.
- 2.7. The Proposed Development would result in change to the existing baseline, and change has been considered an impact dependent on the degree of change that is caused to heritage significance. The assessment reported upon in the current document has identified impacts and effects as direct or indirect, adverse or beneficial, and short-term, long-term, reversible or permanent. Direct impacts are those which physically alter an asset and therefore its heritage significance; indirect impacts are those which affect the heritage significance of an asset by causing change within its setting. The significance of effect is derived from a matrix scoring the importance and sensitivity of the historic asset against the magnitude of impact.
- 2.8. Key aspects of the new classroom facility and wind turbine that might affect the historic environment include elements such as visual dominance, scale, intervisibility, vista and sight-lines, and unaltered setting, which can all form part of the criteria for assessment. The more detailed guidance that has been issued by Cadw (the Setting of Historic Assets in Wales (May 2017) and Heritage Impact Assessment in Wales (May 2017)) promote a staged approach to assessing assets, their historic significance and the potential impacts from development, and have been applied to undertake the assessment reported upon in the current document.
- 2.9. Rhondda Cynon Taf Borough Council has supplementary planning guidance (SPG) from March 2011 which supports the Local Development Plan Policy AW7 and details their approach to the historic environment. In it, they refer any potential impacts on scheduled monuments or development within their setting, to advice from Cadw.

3 Stage 1: Identify the Designated Historic Assets

- 3.1. Cadw's advice letter to the planning authority dated 17/11/20 states *"The application area is located some 335m north of scheduled monument GM101 Blaenrhondda settlement and some 245m east of scheduled monument GM118 Ffos Toncenglau cross ridge dyke and their presence is noted in the Design and Access Statement submitted with the application: However no assessment of the impact of the proposed development on the settings of these scheduled monuments has been provided. This will be a material consideration in the determination of this application (see Planning Policy Wales 2018 section 6.1.23): However, as no information*

*on this issue has been submitted with the application the LPA should request the applicants to provide an assessment of this impact. The assessment should be prepared by a competent and qualified historic environment expert in accordance with the methodology outlined in the Welsh Government's best-practice guidance *Setting of Historic Assets in Wales (2017)*. Once this information has been submitted to the LPA Cadw should be reconsulted on this application."*

- 3.2. The following sections therefore address the specific requirements of the Cadw advice by describing the assets that might be affected by the proposed development, assessing their historic significance, and how they might be impacted by development within their setting, in accordance with the *Settings of Historic Assets* and other guidance referenced in section 2.5 above. The sections are numbered according to the stages outlined in the *Settings of Historic Assets* guidance.

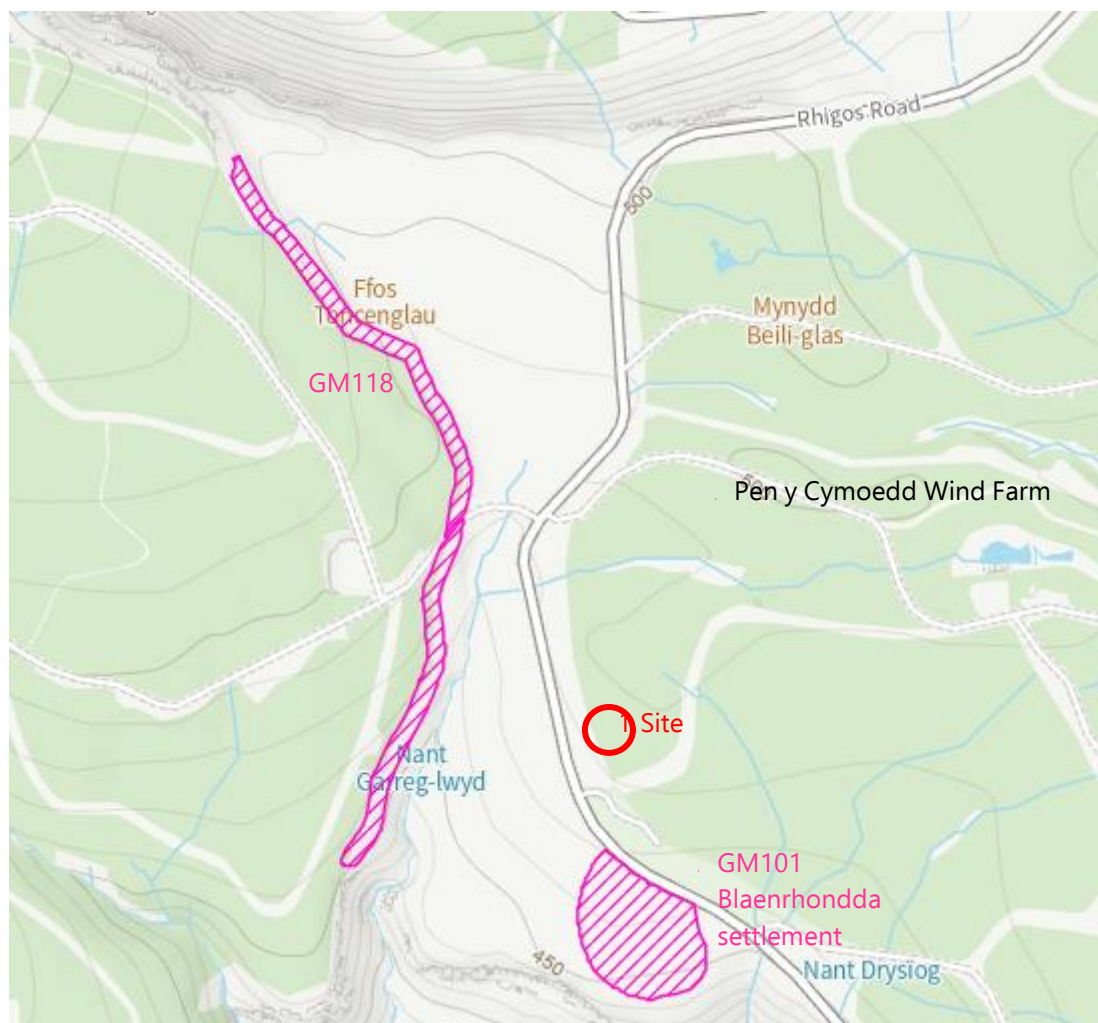


Fig. 3 Scheduled monuments shown as hatched areas (after Historic Wales portal)

4 Stage 2: Define and Analyse the Setting

GM118 Ffos Toncenglau cross ridge dyke

- 4.1. The dyke comprises an overgrown stone wall which gives the appearance of a bank, following a north – south alignment for c.1.2km. Although preservation is variable, in good sections the

horizontally laid coarse stone slab construction survives to a height of c. 0.5m and is 1.5 – 2m in width (Appendix 1 Figure 1).

- 4.2. North of the access road for Pen y Cymoedd wind farm the dyke follows the 500m contour of a hill as it curves north-westwards towards the north-facing escarpment above the Vale of Neath and Rhigos (A1 Figure 2). The dyke is situated three-quarters of the way up the hillside, with a 45° descent to moorland (A1 Figure 3) which gradually rises to a crest c.300m to the north-east at Mynydd Beili-glas (see the historic mapping in Figure 4).
- 4.3. South of the access road for Pen y Cymoedd wind farm the dyke lies on the west side of the Nant Garreg Lwyd (A1 Figure 4). As the valley descends to the south the dyke becomes correspondingly higher, following the 450m contour until it terminates near the end of a spur overlooking a dramatic drop into the Rhondda valley to the south. Although much of it is not easy to discern amongst the felled conifer plantation as many branches and brambles cover it, towards the south end it becomes more pronounced due to scarping into the hillside below it, and the creation of a berm on its eastern side. This makes it appear as c.1.5m high when viewed from the east side (A1 Figure 5).
- 4.4. The name of the dyke seems to derive from a neighbouring peat bog that lies at an altitude of 488m AOD which drains into the Rhondda river.
- 4.5. The scheduling description for this monument records that "*The monument comprises the remains of a cross ridge dyke - a linear bank running along the upper edge of the west-facing slopes of a small steep valley situated in moorland at the head of the Rhondda Valley. The tradition of cross ridge dyke building appears to roughly span a millennium, beginning in the middle Bronze Age and lasting throughout the Iron Age (although perhaps with reuse and limited construction in the medieval period). They have been interpreted as territorial boundaries, defining areas of political influence (including internal territorial boundaries and land allotment within communities) and perhaps having ritual associations.*"
- 4.6. The scheduling description continues with a brief explanation of its value: "*The monument is of national importance for its potential to enhance our knowledge of prehistoric land division and perhaps ritual practices. The monument is an important relic of a prehistoric landscape and retains significant archaeological potential, with a strong probability of the presence of environmental and structural evidence. The exceptional size of the cross ridge dyke increases its importance.*"

GM101 Blaenrhondda settlement

- 4.7. The scheduled monument comprises a series of rough stone walls arranged in interlocking and discrete circular patterns covering an area of c.500sqm. A footpath cuts through the southern part of the complex and the A4061 forms the northern edge (A1 Figure 6), but it is likely that historically the footpath was the original track up the hillside, providing access to and from the settlement (see the historic mapping in Figure 4).
- 4.8. The walls are not overgrown although they are fairly collapsed, at c.0.5m high. The spaces defined by these walls range from 3 – 4m in diameter to c.18m diameter, and sometimes show evidence for hollows within (A1 Figure 7). The larger ones are terraced into the hillside, and they face south into the Rhondda valley, with part of an encircling wall visible beyond the modern pillar cairn to the south.

-
- 4.9. The scheduling description for this monument is stated as "*The monument comprises the remains of a hut circle settlement dating to the prehistoric period. This well-preserved settlement is situated on a gently sloping south-facing terrace at the head of the Rhondda Valley. It comprises a number of small sub-rectangular and sub-circular huts and platforms with associated larger irregular stock enclosures.*"
- 4.10. The scheduling description continues with a brief explanation of its value: "*The monument is of national importance for its potential to enhance our knowledge of later prehistoric land use, settlement and economy. It is a well preserved, relatively rare and little understood example of upland settlement and retains great archaeological potential to enhance our knowledge of post medieval stock rearing practices in the upland zone, whether as permanent settlement, regular transhumance, or intermittent opportunistic expansion.*"
- 4.11. Glamorgan-Gwent Archaeological Trust refer to this as a seasonal settlement site, of medieval date. "*Hafodau, or seasonal upland agricultural dwellings are also known at Cwm-y-fforch, Mynydd Ynysfeio, at Garreg Lwyd, Blaenrhondda, at Blaenycwm, and also at Hafod Fach*" https://www.ggat.org.uk/cadw/historic_landscape/Rhondda/English/Rhondda_Features.htm
- 4.12. Glamorgan-Gwent Archaeological Trust's assessment of the Rhondda uplands (http://www.ggat.org.uk/cadw/historic_landscape/Rhondda/English/Rhondda_030.htm) describes the area surrounding the proposed development including the two scheduled monuments in the following terms.
- 4.13. "*Features of the medieval period include an extensive system of well-preserved early medieval cross dykes (8th-9th century), which guard the upland ridge way routes into the Rhondda. It is perhaps no coincidence that these cross dykes lie across the ancient ridge way routes (which themselves date back into the prehistoric past) and also demarcate early medieval administrative boundaries between cymydau (commotes) and cantrefi (hundreds)*
- 4.14. *Ffos Toncenglau (SAM Gm 118) at SN 916031 - 919020, demarcates the northern border with Cantref Mawr, straddling the ancient ridge way route of Y Gefn-Ffordd (Heol Adam) and that (SAM Gm 285) near Bedd Eiddil at Bryn-du, also straddles Y Gefn-Ffordd, at Twyn Croesffordd, where its route crosses the eastern border of Glynrhondda with the cwmwd (commote) of Meisgyn (Miskin).*
- 4.15. *A well-preserved example of medieval upland settlement is to be found at Carn-y-wiwer, comprising two groups of typically paired house platforms (SAM Gm 323). To the north and east of the platform houses is a group of c. 19 small cairns associated with evidence of ploughing; the relationship between the different elements of this landscape is, however, as yet unestablished; the cairns may be Bronze Age burial cairns, the ploughing may be later than the house platforms, or they could all be contemporary, with the cairns representing clearance material from the adjacent fields. Other medieval settlement sites in the area include a group of four house platforms on Craig Tir Llaethdy, a long hut and a platform hut at Cwm Saerbren, while further platform houses are located at Graig Rhondda-fach and on Mynydd Ty'n-tyle. Enclosures or pounds of the period remain at Ffald Lluest and Tarren Saerbren."*

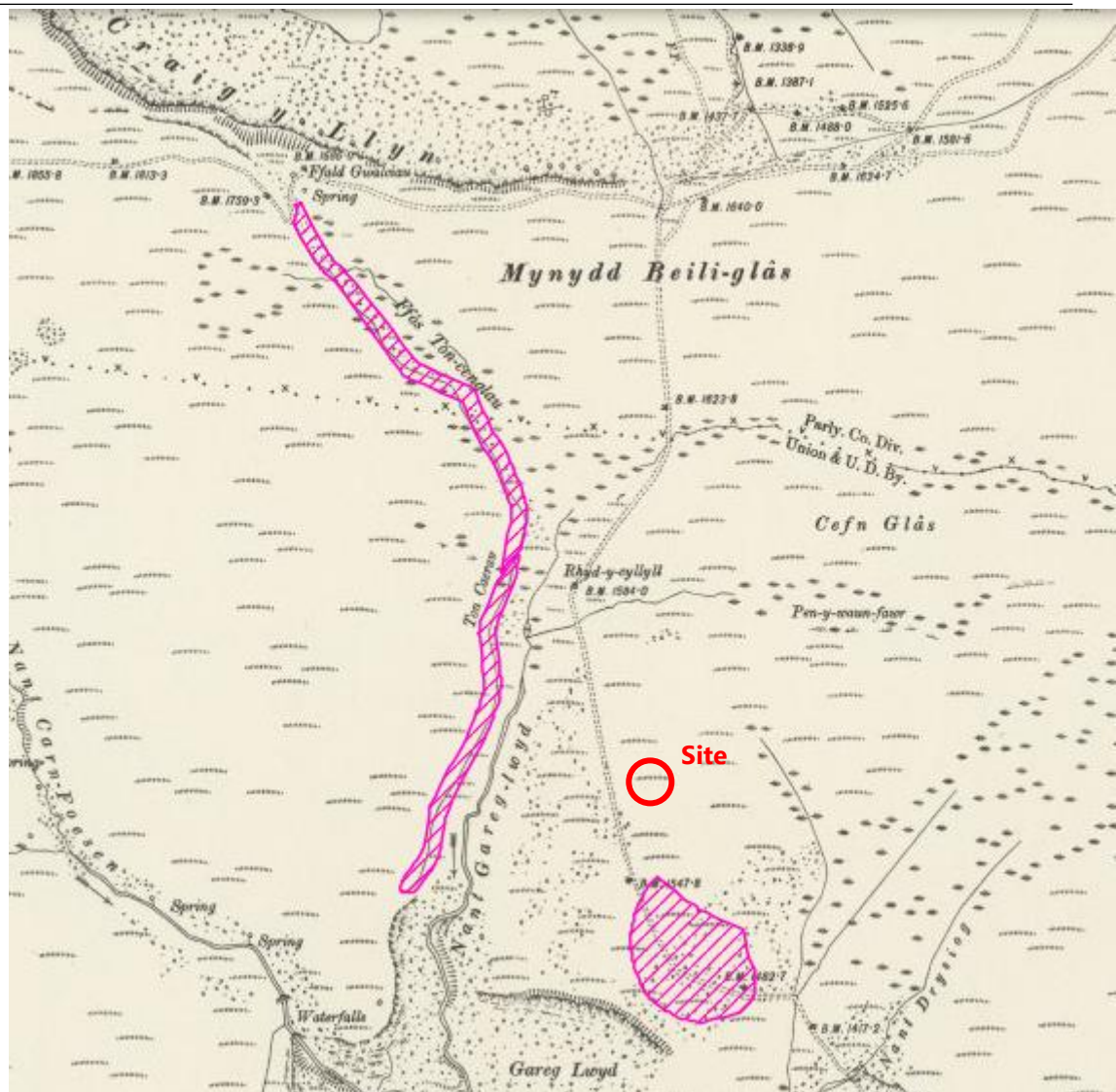


Fig. 4 Scheduled monuments plotted against historic map background (1st edition c.1888)

5 Stage 3: Proposed development

Design concept and client brief

- 5.1. This is a partnership project, between Neath Port Talbot Council working alongside Natural Resources Wales, Rhondda Cynon Taf County Borough Council, Coed Lleol and Swansea University, to deliver an environmentally sustainable classroom for education, welfare and interpretation of the upland peat restoration project in the Upper Rhondda Fawr. The development will provide an exemplar following the principles of the Future Generations Act, and will be off-grid, energy efficient, using natural, locally sourced materials (Figure 5).

Piled foundations and prefabrication

- 5.2. Due to the exposed nature of the site the architects have proposed piling foundations (which will be shallow due to the bedrock being only 1m down) then installing the superstructure quickly and efficiently as prefabricated panels, a technique which has been achieved

successfully on projects such as the Margam Discovery Park. Another benefit of this construction method is that it allows the land to flow underneath and the building touches the landscape very gently. A prefabricated construction method is preferred because of the exposed and remote nature of the site, and it means the building can be erected quickly and be made weather-tight so workers are not having to spend extended periods working outside in poor weather conditions.

- 5.3. This initial proposal investigated a single storey building 29m long with intersecting monopitch skillion roofs, with an overall height of 8m on the southern aspect (c.6.5m on the north side). This design allows for large south-facing glazing to take advantage of the views whilst the overhanging roofs provide lots of shading to reduce overheating. Where the roofs intersect there is high level clerestory glazing. The south facing roof has lots of PV panels to power the building and the north facing slope is a green roof (Figures 6-9). There will be a 3KW small wind turbine at the top of the hill to complement the solar energy on stormier days (Figure 10).
- 5.4. In plan this building is split into two wings separated by a glass link c.3m wide. One wing is the classroom c.8m wide and the other houses the ancillary services and WCs c.7m wide.
- 5.5. In the second iteration the building was extended to include an external covered teaching space taking advantage of the views. This meant that the ancillary wing moved behind the building and the glazed link also moved behind the building. The lobby now framed views in two directions.
- 5.6. Materials were chosen that would be sustainable and locally available, such as wool insulation and timber cladding, with a green roof over a standing seam steel roof manufactured in Port Talbot. Steel columns supporting the structure would be encased in locally sourced timber.

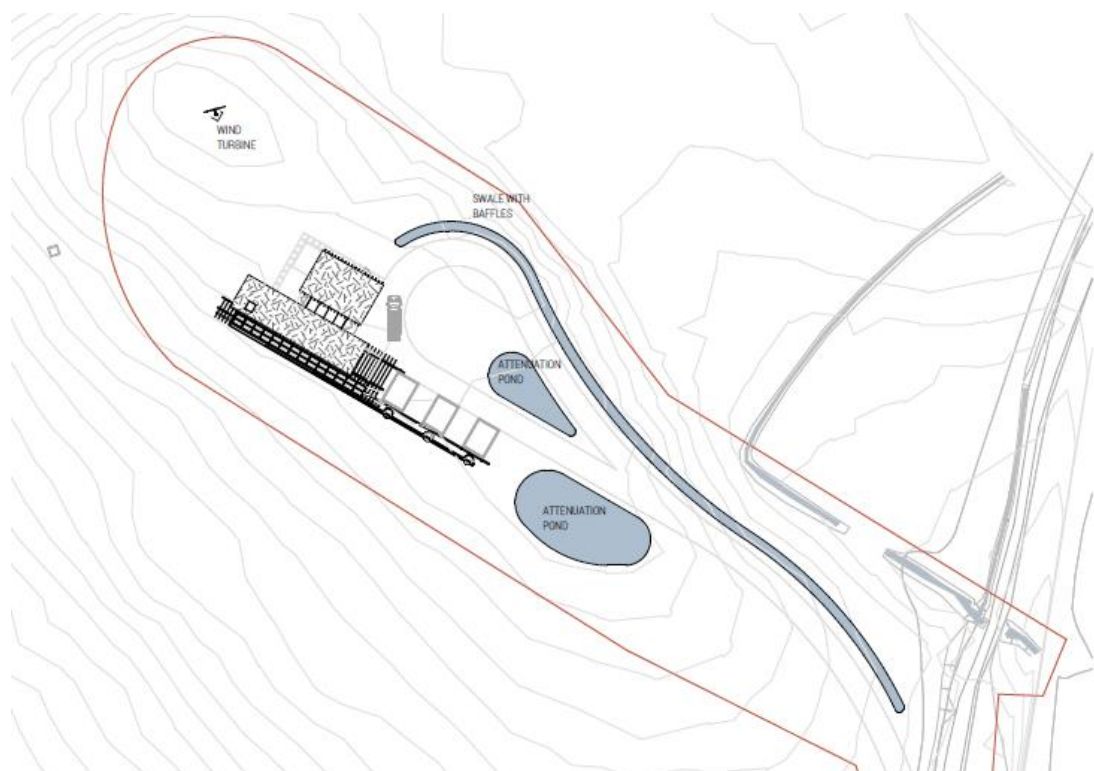


Fig. 5 Proposed development with turbine, SWALE, building, driveway and attenuation ponds

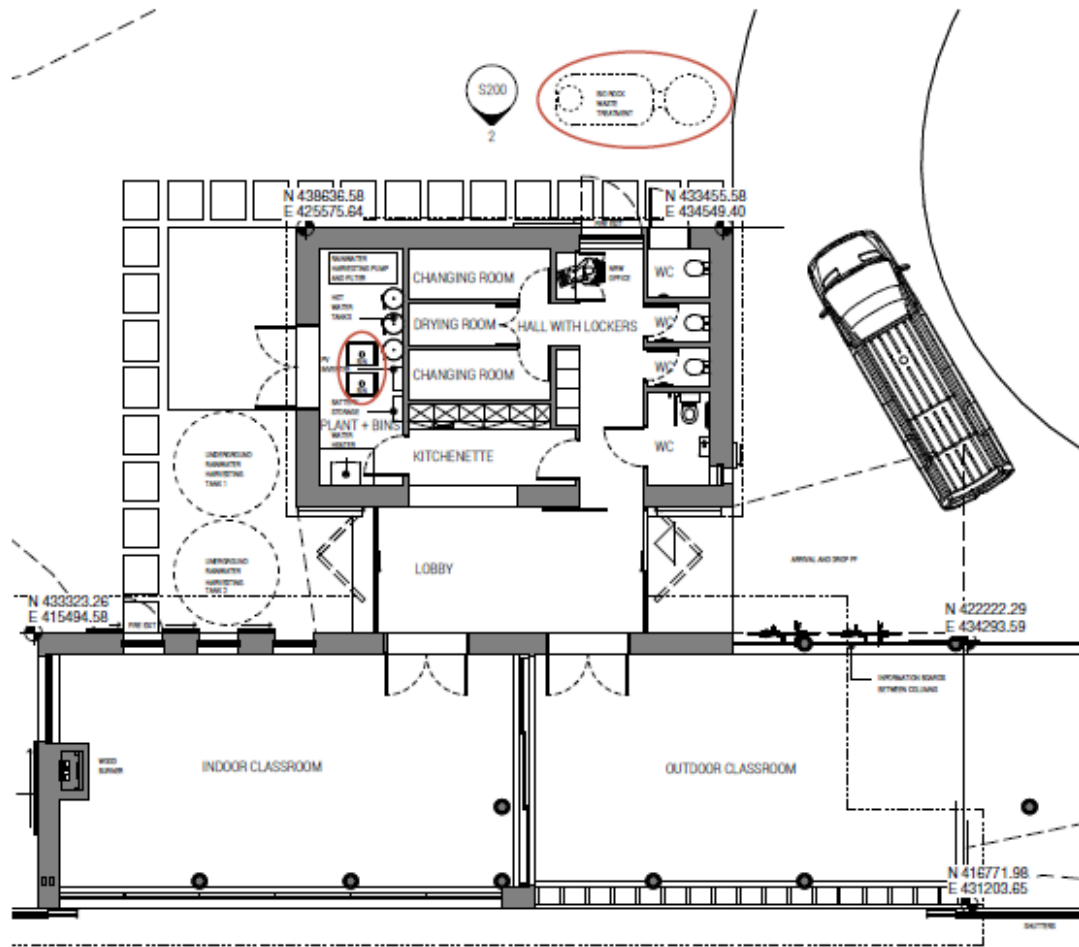


Fig. 6 Proposed development block plan, and ground floor plan of new classroom facility

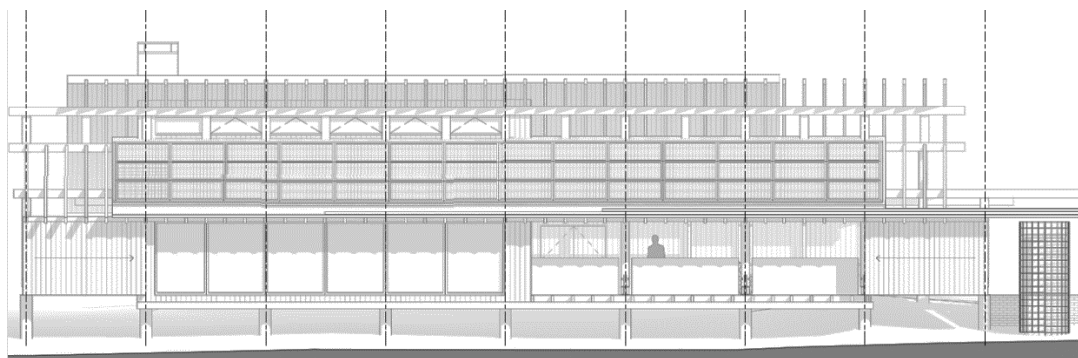


Fig. 7 Proposed development south elevation (classroom)

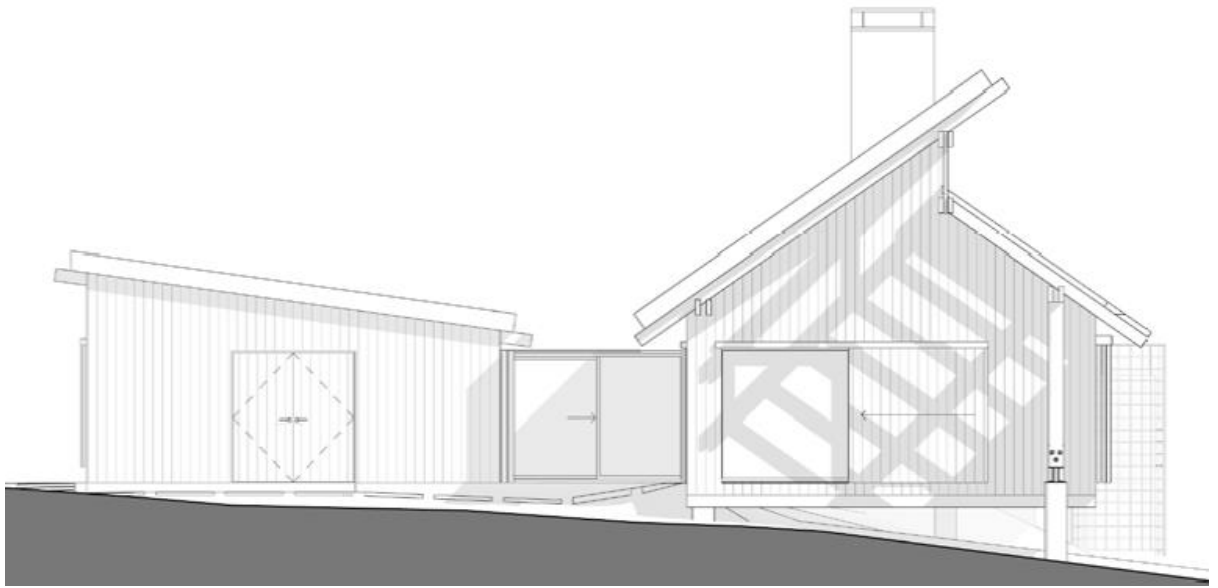


Fig. 8 Proposed development west elevation



Fig. 9 Proposed development cut away axonometric view

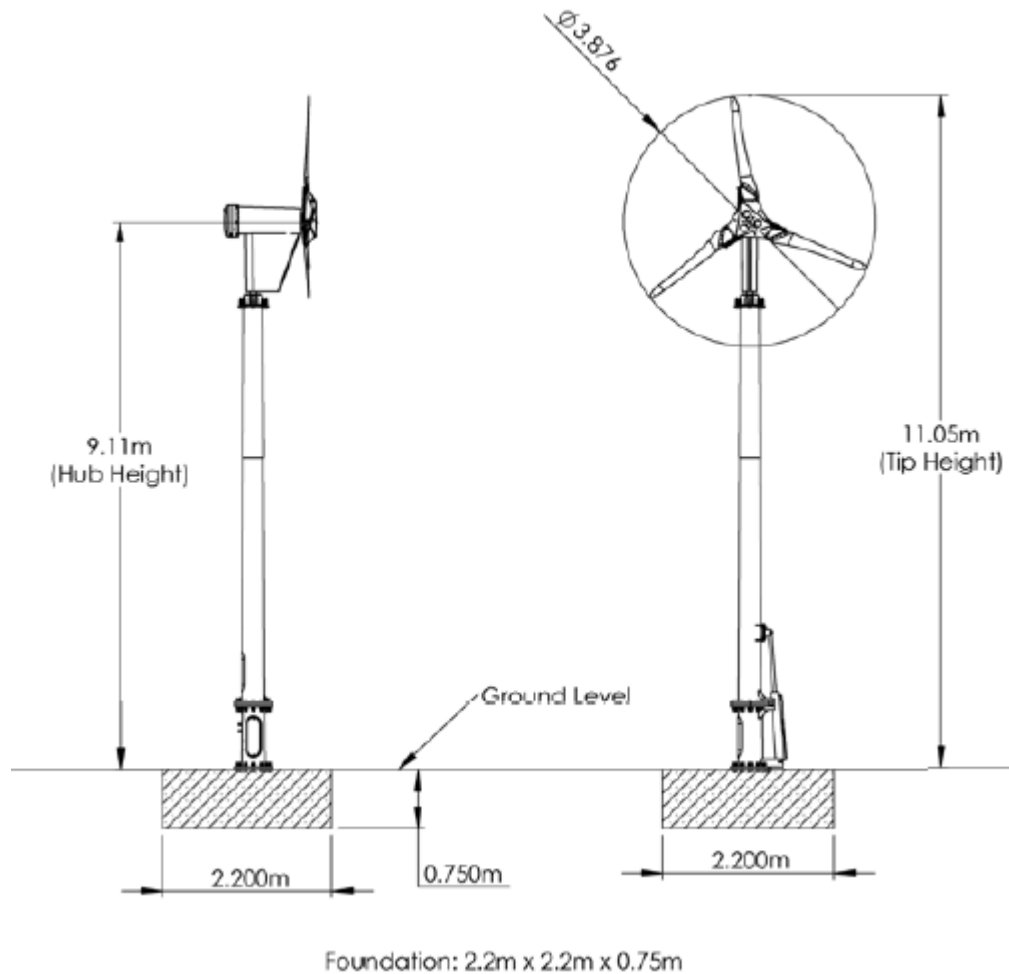


Fig. 10 Proposed development small (3kw) wind turbine located on top of the hill

6 Stage 3: Evaluate Potential Impact of Development

Changes to existing baseline

- 6.1. The location where the proposed classroom and associated development would be situated on a slight rise in the ground north of the Hendre Mynydd car park, lies east of the A4061 main road. To the east and north conifer plantations exist, with the top of at least one wind turbine visible over the trees to the north-east. Although the land is not included in commercial forestry, small fir trees have established themselves over it, and the intervening space between them is dense tussocky grass and bramble (Figure 11).
- 6.2. This reflects the changes that have occurred to some parts of the landscape setting of the scheduled monuments since historic times. Firstly open cast mining was a major industry along the north-facing slopes of Rhigos Mountain. Secondly, the construction of the A4061 Rhigos Mountain Road in 1929 opened up the uplands to 20th century exploitation, for forestry and tourism as well as providing a route to Hirwaun and onward connections. Thirdly, the change in landuse from rough grazing to conifer plantation was followed by energy production when the Pen y Cymoedd wind farm was granted permission (opened in 2017), and overhead lines were installed as well as large wind turbines.



Fig. 11 Proposed development site as seen from the north-west (top) and south (base)

Heritage significance and contribution of setting to this

- 6.3. Ffos Toncenglau is classed as a cross-ridge dyke, essentially a man-made feature designed to be visible as a boundary across the watershed between two valleys. Although undated, these kinds of feature are usually assigned to the Bronze Age or medieval periods. The dyke runs along the western side of the Nant Carreg Lwyn valley, terminating on a steep promontory overlooking the Rhondda Valley to the south, and on its northern side on the crest of the Mynydd Beili-glas, at Craig Llyn. Its purpose is unlikely to have been defensive, and so an administrative function is a more likely interpretation, as a commote or cantref boundary perhaps. It's positioning on the eastern flank of the hillside, not on the very top but part-way down, shows that it was meant to be seen by people crossing the pass from Hirwaun and travelling into the Rhondda Valley.
- 6.4. Currently its overgrown condition, and low construction, means it is all but invisible to the general public, although its alignment and location against the far hillside can be discerned by a knowledgeable observer. To appreciate it in its setting it can be viewed from the east and seen against the backdrop of the Nant Carreg Lwyd valley and hillside. Conifer plantations and wind turbines form the skyline in this direction. Viewed from the dyke looking east towards the proposed development site, the setting of the dyke can be understood and appreciated as a feature within the landscape despite the traffic moving along the A4061, and the wind turbine and conifer plantation beyond.
- 6.5. Blaenrhondda settlement was located on a south-facing, relatively level hillside east of the Nant Carreg Lwyd, with extensive views south over the Rhondda Valley. The old route to the Rhighos pass cut through the settlement (Figure 4), or perhaps more accurately, the settlement was situated on the old routeway, not at the top but near the summit of the route. The size of the stone enclosures suggest livestock management, and so the surrounding landscape would probably have been utilised for rough summer grazing. The nearest water source might have been the Nant Carreg Lwyd to the west, however, the steepness and depth of the valley side from the settlement suggests that the closer streams to the east (Figure 4) would have been more likely. If contemporary with Ffos Toncenglau then any grazing rights associated with the Blaenrhondda settlement would likely to have been restricted to the east side of the Nant Carreg Lwyn. The walls are probably defining corrals for stock, and shielings (temporary shelters) for shepherds. The fact that they are not overgrown (unlike Ffos Toncenglau dyke) suggests they are of more recent construction and may well be post-medieval as structures associated with summer grazing for transhumance pastoralism. If this is correct, Blaerhondda is unlikely to have been a permanent settlement and would have formed part of the vertical economy and transhumance patterns typical of medieval and post-medieval Welsh uplands.

Direct impacts

- 6.6. Appendix 2 defines the criteria used in this assessment to determine the magnitude of impact and significance of effect.
- 6.7. The proposed scheme will include light foundations, a swale for drainage, a driveway and some attenuation ponds, construction for which would require direct impacts from groundworks. There are no known archaeological remains within the site, therefore this activity has a very low probability of disturbing in situ archaeology and is considered no change (a neutral effect).

Indirect impacts

- 6.8. The classroom would introduce a modern structure into a landscape which previously had no domestic buildings in the surrounding landscape, albeit much taller structures can be seen on both sides of the Nant Carreg Lwyd as part of the Pen y Cymoedd turbine array. Viewed from Ffos Toncenglau the classroom (at 8m roof height) would not break the skyline and it would be set against the background of the existing conifer plantation. The choice of materials, green roof and its relatively lightweight pre-fabricated design, means it would not create a stark contrast to the existing managed commercial landscape.
- 6.9. The glazing and solar panels could cause some localised glint and glare, but views from the dyke across the valley would be peripheral to the largely south-facing aspect of the building, and it is unlikely that any significant impact on the heritage significance of this monument would occur, and so a negligible impact resulting in a slight effect is assessed.
- 6.10. The single 11m high wind turbine would be visible on the hilltop, but as an isolated columnal structure with a minimal 4m diameter blade rotation, it would result in a very small change to a very small part of the general setting for the Ffos Toncenglau, and not within a location that was of heritage significance for the dyke. It is therefore assessed as causing no change to the heritage significance of the dyke, and therefore a neutral effect.
- 6.11. Blaenrhondda settlement has no intervisibility with the proposed development site. Although the site lies within the general setting of the settlement as part of its presumed rough grazing land, there is nothing of specific heritage significance about this location. Modern impacts such as the A4061, car parks, turbines and conifer plantations mean that the potential change to the scheduled monument due to the development of a well-designed, lightweight structure within its surrounding landscape is assessed as no change, and a neutral effect.

7 Stage 4: Mitigation Options

- 7.1. Mitigation options have been designed as part of the project brief and iterative design approach. Instead of placing a contemporary looking concrete, brick and glazed building with a slate roof into this location accompanied by trenching for associated utilities, the client and architects have managed to effectively minimise potential visual change, as well as the physical impact from groundworks.

8 Conclusions

- 8.1. This heritage impact assessment has followed due process in understanding the historic assets that would be affected, in understanding the relevant details of the proposed development, and in assessing the heritage significance of the affected assets and how their setting contributes to that significance. A site visit was essential to experience the monuments in their setting, and to appreciate them, so that a professional assessment could be made on the magnitude of potential impact and significance of effect that the proposed development would have with respect to the designated historic assets.
- 8.2. This approach is in accordance with Cadw's recommended guidance, and has resulted in the potential for a slight effect on Ffos Toncenglau dyke from the introduction of a new distracting modern structure with glazing and solar panels which might have glint and glare at certain locations if viewing the dyke in context from its southern end. No change would be evident for

Blaenrhondda settlement, and it can be safely concluded that the proposed application would not result in significant effects on the scheduled monuments.

- 8.3. The completion of this heritage impact assessment ensures the application has complied with both national and local policies, and the local planning authority should have no difficulty in ruling out any objection of potential harm to the historic environment.

9 Sources

Cadw March 2011. *Conservation Principles for the Sustainable Management of the Historic Environment in Wales* Welsh Government

Cadw May 2017. *Managing: Heritage Impact Assessment in Wales* Welsh Government

Cadw May 2017. *Managing: The Setting of Historic Assets in Wales* Welsh Government

Cadw Welsh Government GM118 Ffos Toncenglau cross ridge dyke scheduled monument full report

Cadw Welsh Government GM101 Blaenrhondda settlement scheduled monument full report

Loyn & Co Architects September 2020. *Lost Peatlands: Design and Access Statement*

Cartographic sources

1888 Ordnance Survey map First Edition 1:2500 scale

Appendix 1: Site Visit Photographs



Figure 1 Ffos Toncenglau Dyke construction: horizontally laid coarse stone slabs (CPAT photo 5047-010)



Figure 2 Dyke to left (arrowed); view north over moorland to Craig Llyn (CPAT photo 5047-006)



Figure 3 Dyke located ¾ way up hill (arrowed); looking south with development site (white arrow) in background (CPAT photo 5047-007)



Figure 4 Ffos Toncenglau (arrowed) along western side of Nant Carreg Lwyd (CPAT photo 5047-025)



Figure 5 Dyke as upstanding monument (arrowed) looking south near termination over Rhondda Valley (CPAT photo 5047-021)



Figure 6 Blaenrhondda looking north towards A4061 and the development site (adjacent to edge of conifers); footpath in foreground (CPAT photo 5047-032)



Figure 7 Blaenrhondda settlement corrals looking west (CPAT photo 5047-029)

APPENDIX 2 Criteria for assessment

The relative value (importance) of a heritage asset, as given in greater detail in DMRB (2007) is laid out in Table 1.

Table 1 Factors for Assessing the Value of Heritage Assets

Factors for Assessing the Value of Heritage Assets	
Very High	World Heritage Sites (including those nominated). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives.
High	Scheduled Monuments (including those proposed). Undesignated monuments of which could potentially be worthy of scheduling. Listed Buildings. Assets that can contribute significantly to acknowledged national research objectives.
Medium	Conservation Areas. Designated or undesignated assets that contribute to regional research objectives.
Low	Designated and undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with the potential to contribute to local research objectives.
Negligible	Assets with very little or no surviving heritage interest.
Unknown	The importance of the resource has not been ascertained.

Factors that need to be considered in assessing the magnitude of the impact are given in Table 2, based on the DMRB (2007), but in modified form, for each historic environment sub-topic (archaeological remains, historic buildings, historic landscapes etc) has its own set of factors, which are set out in great detail in the Design Manual.

Table 2 Factors in the Assessment of the Magnitude of Impacts

Factors in the Assessment of Magnitude of Direct Impacts	
Major	Change to most or all key heritage elements, such that the resource is totally altered.

Moderate	Changes to many key heritage elements, such that the resource is clearly modified.
Minor	Changes to key heritage elements, such that the asset is slightly altered or different.
Negligible	Very minor changes to heritage elements.
No Change	No change.

The significance of the impact of a development on a particular heritage asset is then established from the matrix (Table 3) also taken from the DMRB (2007).

Table 3 Matrix for Assessing the Significance of Direct Impacts of the Proposed Development upon Heritage Assets

Magnitude of Impact	Value/Sensitivity of Heritage Asset				
	Very High	High	Medium	Low	Negligible
Major	Very Large	Large/ Very large	Moderate/ Large	Slight/ Moderate	Slight
Moderate	Large/Very Large	Moderate/ Large	Moderate	Slight	Neutral/ Slight
Minor	Moderate/ Large	Moderate/ Slight	Slight	Neutral/ Slight	Neutral/ Slight
Negligible	Slight	Slight	Neutral/ Slight	Neutral/ Slight	Neutral
No change	Neutral	Neutral	Neutral	Neutral	Neutral