Archaeology Wales

Gogerddan Campus, University of Aberystwyth, Ceredigion

Visual Impact Assessment CD259



By Philip Poucher

Report No. 1528



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Non – Technical Summary

In November 2016, Archaeology Wales was commissioned by Aberystwyth Innovation and Enterprise Campus Ltd to carry out a Visual Impact Assessment of a proposed development on land at the Gogerdan Campus of the University of Aberystwyth, Ceredigion. The Assessment has been undertaken in advance of the submission of a planning application for the development of a three-storey Innovation and Enterprise Campus building, associated car parking, access, and landscaping. A previous archaeological desk-based assessment had been produced, but Cadw requested a further assessment of Scheduled Ancient Monument CD259, an area of prehistoric and early medieval funerary and ritual activity, which lies close to the site, following the production of more detailed development plans and further archaeological investigations into the proposed development area.

The methodology used in this Visual Impact Assessment follows the guidance and methodology offered in Annex 6 of the recently published 'Welsh Government Consultation on Secondary Legislation to Support The Historic Environment (Wales) Act 2016 and Various Best-Practice Guidance Documents' (Cadw 2016). This is laid out in a four stage approach.

Stage 1 identifies the historic assets, which in this case has already been agreed as the site and setting of CD259, an area of prehistoric and early medieval funerary and ritual activity.

Stage 2 defines and analyses the setting of the archaeological site. It is suggested that the main setting for the Scheduled Area extends across relatively low-lying agricultural land to the northwest, as this area has topographical and visual links to the site, with main views both of and to the monument in this direction. Recent archaeological investigations have shown that associated archaeological remains do not extend to the northeast into the proposed development area, and although a large number of sites located throughout the surrounding landscape may be associated with the Scheduled Area, the main focus of associated activity is believed to lie to the northwest and west. The current campus includes large modern buildings, and provides a distinct change in the visual setting of the Scheduled Area to the east.

Stage 3 evaluates the potential impact of the proposed development. The development comprises a large three-storey building located to the east of the Scheduled Area, partly replacing some existing modern buildings, and partly extending into a triangular field on the western edge of the campus. It is suggested that the proposed development area comprises an area of large-scale development that is distinct from the site and setting of the Scheduled Area, and that the proposed development is in keeping with current development in the campus. Therefore the impact on the setting of the Scheduled Area is limited. However, the development will form a prominent visual element to the backdrop to the Scheduled Area and will, therefore, have an adverse impact. This is considered to be a **Slight to Moderate** adverse impact.

Stage 4 suggests mitigation measures. However, it is considered that appropriate mitigation measures are already in place and therefore no new measures are suggested.

1 Introduction

- 1.1 In November 2016 Archaeology Wales (AW) was commissioned by Aberystwyth Innovation and Enterprise Campus Ltd to carry out a Visual Impact Assessment of a proposed development on land at the Gogerddan Campus of the University of Aberystwyth, Ceredigion (NGR SN 6270 8358, Figures 1 3, AW Project Number 2460).
- 1.2 This assessment has been prepared prior to the submission of a planning application. The local planning authority is Ceredigion County Council (CCC).
- 1.3 The purpose of the Assessment, which is detailed in the following report, is to provide CCC with the information they are likely to request in respect of the proposed development, the requirements for which are set out in Planning Policy WALES, Edition 8, January 2016, Chapter 6, and Welsh Office Circular 60/96. The work is also designed to inform Cadw about the potential impacts on nearby designated archaeological sites.
- 1.4 A previous archaeological desk-based assessment had been produced by Dyfed Archaeological Trust (Bell & Murphy 2016), which included an assessment of the impacts of the proposed development on surrounding designated archaeological sites. As pre-development planning progressed and further archaeological work was carried out, further opinion was sought from Cadw regarding the need to update the assessment of surrounding designated archaeological sites. In light of the new information, Cadw was of the opinion that it would be beneficial to carry out an updated assessment of one particular Scheduled Ancient Monument, CD259, although they accepted the assessment of other sites as laid out in the previous desk-based assessment.
- 1.5 The proposed development is for the construction of a three-storey Innovation and Enterprise Campus building, associated car parking, access and landscaping, along with the demolition of two existing agricultural buildings, an existing pyrolysis unit and the partial demolition of an existing granary store and associated loading ramp.

2 Methodology

- 2.1 The methodology for this assessment follows the guidance and methodology offered in Annex 6 of the recently published 'Welsh Government Consultation on Secondary Legislation to Support The Historic Environment (Wales) Act 2016 and Various Best-Practice Guidance Documents' (Cadw 2016). This guidance document is currently still in draft form (October 2016). This assessment also conforms to the Standard and Guidance for Archaeological Desk-Based Assessment, as produced by the Chartered Institute for Archaeologists (CIfA 2014).
- 2.2 This methodology sets out a four-stage approach:
 - **Stage 1**: Identify the historic assets that might be affected by a proposed change or development and their significance.
 - **Stage 2**: Define and analyse the settings to understand how they contribute to the ways in which the historic assets are understood, appreciated and experienced.
 - **Stage 3**: Evaluate the potential impact of a proposed change or development on those settings.

- **Stage 4**: Consider options to mitigate the potential impact of a proposed change or development on those settings.
- 2.3 Stage 1 has been established through the previous Desk-based assessment and through further consultation with Cadw, namely that this assessment examines one Scheduled Ancient Monument only, that of CD259.
- As a Scheduled Ancient Monument this site and its setting, is considered to be of High archaeological value. Following the evaluation of the potential impact, this impact will be assessed as either positive, neutral or negative. Positive or negative impacts will be described as severe, moderate, slight and very slight. Severe equates to a 'significant impact' in environmental impact assessment terminology.
- 2.5 This assessment has utilised in part the detailed research undertaken as part of the pervious desk-based assessment (Bell & Murphy 2016). As part of further subsequent research and assessment a site visit was undertaken on 21st November 2016.

3 Stage 1: Identifying the Historic Asset.

3.1 This assessment is concerned with Scheduled Ancient Monument CD259. This has been identified through the previous desk-based assessment (Bell & Murphy 2016), and through subsequent consultation with Cadw. This site is further described below.

3.2 Site Description

- 3.2.1 The proposed development site, which comprises an area of 1.39 hectares (3.43 acres)¹, is located to the west of the Institute of Biological, Environmental & Rural Sciences situated on the Gogerddan Campus of Aberystwyth University, 4.6km to the northeast of the centre of Aberystwyth. The campus is located on the western floor of a narrow, steep-sided and forested valley through which two watercourses converge to become the westward flowing Nant Clarach.
- 3.2.2 Gogerddan Campus is situated within the former grounds of Plas Gogerddan; a late Georgian mansion house. The site is bisected by a minor B-road (Highway C1010) which runs east towards Penryhn-coch, and joins the A4159 at a crossroads to the west. A minor road also forks off between the C1010 and the A4159 and forms the western boundary of the proposed development area. The A4159 road flanks the western side of the campus.
- 3.2.3 The existing university campus is comprised mainly of large late post-medieval and modern agricultural buildings, blocks of up to three-storey high modern buildings and several glass houses and polytunnels. These buildings are surrounded by hardstanding, some lawned areas, car parking, footpaths and trees. A triangular field of pasture lies immediately to the west of the main campus buildings, bounded along its west side by the minor road connecting the A4159 with the C1010 highway. This field is enclosed by post-and-wire fencing with a row of trees along its western boundary. The proposed development area spans both the western

¹ This excludes a reptile receptor area located adjacent to Cae Lodge to the north.

- edge of the current built limits of the campus (to the north and south of the C1010 Highway), along with this triangular area of pasture.
- 3.2.4 Scheduled Ancient Monument CD259 largely lies within a triangular area of pasture a short distance to the west of the proposed development, with an outlying, but associated standing stone lying on the opposite side of the road to the west. The edge of the scheduled area comes to within approximately 30m of the edge of the proposed development. This triangular area occupies the low summit of a gentle west-facing gravel ridge that runs roughly northwest to southeast, with the Afon Clarach to the southwest, and the Nant Clarach to the northeast. The field is bounded by post-and-wire fencing and is surrounded by the A4159 to the west, the C1010 Highway to the south, and a connecting minor road to the east. A small fenced allotment area lies in the centre of this field, providing a boundary to the Scheduled Area. A further fenced meteorological enclosure lies in the southeast corner of the field. The Scheduled Area encompasses largely buried archaeology along with the low remains of a round barrow and two standing stones.
- 3.2.5 To the northeast, the site is overlooked by the wooded slopes and high ground of Allt Ddel, and to the southeast by the wooded slopes and high ground of Allt Dderw, both of which from the western end of the Stewi Valley (along which the C1010 Highway runs towards Penrhyncoch). To the southwest lies the wooded slopes and high ground of Coed Rhyd-tir, which along with Allt Dderw form the northern end of the Clarach valley. The banks of the Clarach itself are wooded a short distance to the west of the Scheduled Area. These two rivers join with the Nant Afallen and Bowstreet Brook that emerge from a valley to the north to form the Dyffryn Clarach, a relatively flat open area at the confluence of the watercourses that extends to the northwest of the Scheduled Area. This then forms a short east west valley to drain into the sea at Clarach Bay. This open area is largely used by the Institute of Biological, Environmental & Rural Sciences to grow various crops.
- 3.2.6 The solid bedrock geology of the area comprises sandstones and mudstones of the Aberystwyth Grits Group; sedimentary bedrock formed approximately 428 to 444 million years ago in the Silurian Period. This is overlain by alluvium, comprising clay, silt, sand and gravel formed up to 2 million years ago in the Quaternary Period in a local environment once dominated by rivers (BGS, 2016).

3.3 Previous archaeological studies

3.3.1 The Scheduled Area of CD259 has previously been archaeologically investigated, the following description of those investigations is reproduced from the recent Desk-based Assessment undertaken by Dyfed Archaeological Trust (Bell & Murphy 2016):

The site was partially excavated in 1986 in response to the construction of a gas pipeline between the two visible standing stones. The excavation was undertaken by Dyfed Archaeological Trust and a summary of which was published in *Archaeology in Wales* the same year and followed by a detailed article in *The Archaeological Journal* in 1992 (Murphy 1986 and 1992).

The excavations comprised a long, linear trench along the western boundary of the field (along the course of the gas pipe, now Area A of the SAM) within which the remains of three Bronze

Age ring ditches and associated inhumations cremations and Iron Age burials were revealed (Murphy 1986).

A large area was also excavated to the east of this linear trench; focusing investigation around the vicinity of, and including, the eastern standing stone (PRN 8237). These excavations revealed that the standing stone had been re-erected sometime during the 19th century and was not located in its original pit, thought to have been located some two metres to the north. It is also conceivable that the standing stone may not have prehistoric origins and was erected during the 19th century as a marker for the race course (*ibid*). However, around the standing stone were several features all considered to be of prehistoric date and associated with the stone. These included numerous post-holes, pits, a hearth, a small cist and a possible cremation. Radiocarbon dates obtained from a sample of these features indicate late Neolithic to late Bronze Age activity.

Clustered around the north, east and south of the standing stone were at least twenty-two graves, all orientated east —west. Three of these graves were enclosed by the remains of rectangular timber structures, and dark coffin stains were present in nine of the graves. Material from a coffin stain in one of the graves yielded a radiocarbon date range from the 3rd — 7th centuries AD, placing the cemetery in the early medieval period. The limits of the cemetery were not defined within the area of excavation and it was considered very likely to be more extensive (Murphy 1992).

The early medieval burials at Plas Gogerddan were reviewed during the pan Wales, Cadw funded Early Medieval Ecclesiastical Sites project in 2004. The review noted that whilst early medieval re-use of prehistoric funerary/ritual sites as burial foci are well documented elsewhere in Wales, there is only one other know site in Ceredigion; that at Dyffryn Bern (PRN 50158) in Penbryn parish, near Aberporth (Ludlow, 2004).

Conclusions at the time of the excavation considered the cemetery at Plas Gogerddan to be "undeveloped"; the cemetery was not associated with a chapel. However, the review in 2004 identified a late 16th century map which marked a chapel at "Gogirthan", suggesting that there may have been a later chapel on the site. This inference has significant implications for the site for it suggests that the site was eventually developed (*ibid*) and the chapel site has since been lost. Further to early medieval reuse of prehistoric funerary sites is the possibility that early chapels may have been built upon or close to barrows. Such a theory has been postulated for a number of sites in Ceredigion with two in particular; the churchyard in Mwnt (PRN 31488) which appears to overlie at least one round barrow and is in close proximity to a second. Another site is Llanilar Church (PRN 5171) which is sited in close association with a Neolithic and early Bronze Age settlement and burial complex (*ibid*). It is possible that such an association may be present with round barrow (PRN 11822) and the early medieval cemetery (PRN 13005) at Plas Gogerddan.

3.3.2 As mentioned, the above description comes from a detailed desk-based assessment by Dyfed Archaeological Trust (Bell & Murphy 2016), produced to examine the potential impacts of the proposed development. This report included an assessment of the impact on SAM CD259 (amongst others in the area), and concluded that the proposed development could have an

- adverse major/moderate visual impact upon CD259. This assessment was made prior to development details being available, and further archaeological work being undertaken in the immediate vicinity. The impact on other surrounding designated historic assets were assessed as either low or negligible.
- 3.3.3 Following the production of the desk-based assessment a geophysical survey was also carried out by Dyfed Archaeological Trust (Day 2016). This survey concentrated on the triangular pasture field lying to the east of the Scheduled Area, within the proposed development area, as well an area to the north adjacent to Cae Lodge, the site of a proposed silage clamp. This geophysical survey identified a number of features of potential archaeological interest throughout the investigated areas, requiring further archaeological evaluation.
- 3.3.4 As a result, Archaeology Wales was commissioned to undertake a trenched evaluation of the proposed development area (Poucher 2016), investigating the features identified on the geophysical survey. Several trenches were opened in the triangular pasture field a short distance to the northeast of the SAM. The geophysical survey had identified a large potential curvilinear enclosure bank and ditch across the northern end of this area. This was shown to correspond to a natural terrace, presumably a former terrace associated with the Nant Clarach watercourse. No evidence of a boundary bank or ditch, or any internal archaeological activity was noted. Some ephemeral ditches were recorded across the upper edge of the slope, interpreted as a likely post-medieval field boundary of limited archaeological interest. One feature was visible to the south, consisting of a linear ditch, with an area of compacted small stone along its eastern edge that may represent an associated trackway. The ditch was 1.4m wide, 0.7m deep, and running east - west. This ditch was visible on the geophysical survey as a straight linear feature, running across the field area. The feature remained undated. With the potential exception of this single undated feature, no evidence of potential prehistoric or early medieval archaeological finds, features or deposits were revealed within this area. A distinct change in ground level between the area of the SAM and this triangular field (which was lower) may indicate this area has undergone terracing or similar landscaping work, potentially in association with post-medieval parkland associated around Plas Gogerddan. It was concluded that the archaeological potential of this area was low, and that there was no evidence of the prehistoric or early medieval activity associated with the Scheduled Area having extended into this area. Investigations to the north, in the Cae Lodge area, similarly revealed a limited archaeological potential. Several features identified on the geophysical survey appeared to be related to a mixture of post-medieval and modern agricultural drainage and other services, along with surface detritus. No features of archaeological interest were revealed.
- 3.3.5 An archaeological watching brief was undertaken in 2008 during the development for new glasshouses at eastern end of the Gogerddan campus (SN6315583570). The area monitored during the groundworks measured 35m wide and 18m long. The watching brief did not reveal any deposits, features or artefacts or archaeological significance (Halfpenny 2008).

3.4 Extent of Scheduled Ancient Monument CD259

- 3.4.1 Much of the detail of the Scheduled Ancient Monument comes from the excavation undertaken in 1986, which is detailed above. The earliest evidence of activity comes from a series of pits and other features clustered around the original site of a standing stone. These features were dated to a period from the late Neolithic through to the late Bronze Age. A second standing stone stands to the west, separate, but also included within the Scheduled Area, this too is likely to be Bronze Age (c.2300-800 BC) in date. The remains of a round barrow, a Bronze Age burial monument, is also visible on the site, and three further late Bronze Age ring ditches were identified in the excavation, along with associated inhumation cremations. Later Iron Age crouched burials were also identified in this area. More extensive excavation revealed the remains of an early medieval cemetery clustered around one of the standing stones. At least twenty-two early medieval graves were excavated, three of which appear to have been enclosed within rectangular timber structures. A radio carbon date from one of the graves produced a 3rd - 7th century date (Murphy 1992). Consequently, Plas Gogerddan is the only ecclesiastical site in Ceredigion with archaeological evidence that has been absolutely dated to the Early Medieval period. In addition, the excavations demonstrated that the standing stone was re-erected during the 19th century (Murphy, *ibid*).
- 3.4.2 These remains have largely been identified as buried archaeological features, but visible above-ground remains comprise the low remnants of the round barrow, along with the two standing stones. The barrow is circular in shape on plan and measures 16m in diameter and a maximum of 0.5m in height. Aerial photography revealed that a ditch measuring 30m in diameter surrounds the barrow. The standing stone is located 55m NNW of the barrow and measures 1.75m in height, 1.2m in length and 0.75m in width. The second standing stone, which measures 1.55m in height, 1.05m in length and 0.75m in width, is situated 170m WNW of the barrow in an adjacent field. The scheduled areas comprise the remains described and areas around within which related evidence may be expected to survive. The scheduled area is drawn around the known extent of the burial site, as well as the separate standing stone.
- 3.4.3 This group of sites is considered to be of national importance for it is an important relic of a prehistoric and early medieval funerary and ritual landscape. The monument retains significant archaeological potential, including environmental and structural evidence. Accordingly, the area was scheduled in 2009. The main scheduled area is an irregular polygon as it respects the boundary of the modern allotment in the centre of the field. This irregularity is most likely a consequence of pragmatism, in order to avoid incorporating the allotment into the scheduled area, and does not necessarily negate the potential for further buried archaeology in the vicinity.

4 Stage 2: Define and Analyse the Setting

4.1 Identifying the extent of monument settings

4.5.1 Setting is defined as being "The setting of designated monuments and buildings concerns the manner in which the surroundings of a historic asset or place contribute to how it is experienced, understood and appreciated. It encompasses why the asset was built in its particular location, the use of the asset, when constructed and later, and also modern use and

belief". As such it often extends beyond the physical boundaries of the monument or building itself. This may include physical elements in its surroundings, such as boundaries and other structures, relationships with other historic assets and natural features, or associated agricultural, industrial or other surroundings. Less tangible elements are also included, such as function, sensory perceptions, historical, artistic, literary and scenic associations (Cadw 2016).

- 4.5.2 Currently the Scheduled Area lies within an area of pasture, and is largely visible as two standing stones and a low barrow mound occupying slightly elevated ridge which extends, and falls, to the northwest, and soon becomes obscured by modern development to the southeast. The Scheduled Area sits almost at the mouth of the Stewi Valley. Land to the northwest opens into further pasture out at the confluence of the rivers, currently crossed by roads and railway. The topographic boundary to this area is set by rising land either side of the Stewi Valley to the east, rising land to the west of the A487, and rising land to the northwest of Bow Street (see Photos 1 10_.
- 4.5.3 The built form of Gogerddan Campus forms a distinct visual boundary to the current setting of the Scheduled Area. Any relationship with the Stewi Valley further to the east is difficult to understand in the light of this post-medieval and modern development. The triangular area of pasture to the east of the minor road that effectively forms the northeast boundary to the Scheduled Area can be viewed as part of the campus grounds, because it is both enclosed by a road and also very visibly lined with trees, separating it from the more open agricultural land to the northwest of the Scheduled Area.
- 4.5.4 Although the relationship with the Stewi Valley is difficult to understand, the choice of locating this site on this slightly raised ridge on the edge of open ground, surrounded by distinct higher ground would appear deliberate. The views are not extensive, and it is overlooked by surrounding high ground, but the main visual aspect from the site is to the northwest across this flatter ground at the confluence of the rivers (Photo 5). The main visual appreciation of the site is also from the northwest (Photos 17 19). The site is not visible in distant views from the south or east, due to the woodland cover along the banks of the Clarach and the built form of Gogerddan Campus. The site is not a prominent or recognisable feature from any elevated position in the surrounding hills, particularly given the wooded nature of these hills.
- 4.5.5 Given its wide date range from the late Neolithic to the early medieval periods, there are a number of sites in the surrounding landscape to which it may be associated. Bronze Age round barrows are recorded throughout the area, both in similar relatively low-lying aspects, and on surrounding high ground. Burnt mounds and findspots are known, but no distinct settlement area has been established, although it is likely to have been located within the valley base somewhere with the more open area to the northwest seeming to provide a more suitable area. Similarly a number of Iron Age defended enclosures are located in the vicinity. Cropmarked enclosures have been identified relatively close-by to the north (within c.500m), such as PRN 52080 and NPRNs 401562 & 404548, all to the north of Nant Clarach, and a larger hillfort (Hen Gaer SAM CD026) stands on the hilltop just under 1km to the northeast. Any associated early medieval sites have not been identified. A chapel may have been associated with this site, but its location is unknown. No clear visual relationship with any surrounding prominent site could be established.

- 4.5.6 The physical extent of the original cemetery site (Bronze Age, Iron Age and early medieval) has never been fully established. However, recent excavation within the proposed development area (Poucher 2016) has revealed that there is no indication of it extending to beyond the minor road that lies to the northeast of the Scheduled Area. The presence of the standing stone to the west may suggest a general spread of activity in that direction, it is generally believed that this standing stone is associated with further prehistoric activity.
- 4.5.7 The standing stones have long been the most prominent features of this Scheduled Area, most notably the westernmost standing stone, which has long been identified on historic mapping. (The easternmost, although shown on 19th century maps, is not marked on 20th century mapping again until the 1980s). They may also have become features of note within the later post-medieval parkland landscape established around Plas Gogerddan. Nineteenth century mapping shows the standing stones on the edge of a relatively open area of land, used at some time in the early to mid-19th century as a race course (for which the standing stones may have been used as markers), and subsequently as open land around a pheasantry. The edge of this open land has long been defined by the road along the foot of the hill to the north (the A4159) and the local road immediately to the east of the Scheduled Area, and the route of the C1010 highway. It is possible this area may have been incorporated into some form of view from Plas Gogerddan itself, although this is difficult to characterise given the extent of later development. More recently the area has come under the management of the Institute of Biological, Environmental & Rural Sciences, the main campus of which has expanded to the east with a large complex of modern buildings gradually established, and the open area to the west managed as associated pasture and arable land.
- 4.5.8 It would, therefore, appear that although the wider setting of the Scheduled Area could encompass a large area taking in overlooking hillslopes and a wide spread of archaeological sites, the main focus of the setting of the Scheduled Area would appear to spread to the northwest of the site. This encompasses the open area at the confluence of the watercourses, which is overlooked by the site, and from which the best views of the site are obtained. The modern development of the Gogerddan Campus to the east form a distinct visual boundary to this area.

5 Stage 3: Evaluation of the Potential Impact of Change/Development.

- 5.1 Currently the proposed development site includes existing agricultural/university buildings, including a seed bio bank, silage clamp, pyrolysis unit, granary store and associated hardstanding, along with an area of open space lined by trees. Outside this area, the campus includes further agricultural buildings, along with modern buildings associated with the Farmers Union of Wales and the Gogerddan Childcare Nursery. The proposed development will replace some of the existing building, and extend into the open space on the edge of the campus, to the northeast of the minor road northeast of the Scheduled Area.
- 5.2 The proposed development comprises a three-storey innovation and enterprise facility (Figure 4 7). This will include a Future Foods Centre (facilities to analyse emerging products), Analytical Science (laboratories and offices), The Hub (meeting forum and analytical facilities), Seed Biobank and Processing Facility (including a seed-bank store) and a Bio-Refining Centre.

The proposed building will be a maximum of 15.6m high to the parapet, and cover an overall footprint of 4090.8m². The finished ground floor level will be set at 25.1mOD. The layout will be based on three main rectangular elements, connected via an internal circulation route and the Hub. Each floor level will be stepped back to allow for green roof space. External plant on the roof of the building will be screened behind a louvered powder coated aluminium screen to match the timber of the façade. This will be set back from the perimeter to minimise visual impact. The building will use a variety of timber, corrugated aluminium, brick and living walls and roofs.

- 5.3 The area surrounding the buildings, largely to the east, will be hardstanding. To the west the area will be soft landscaped with additional tree-planting and semi-improved grassland to soften the built form and mitigate for the loss of existing trees (a mature beech tree will be retained). Landscaping works will also be undertaken to the south around existing buildings.
- 5.4 In terms of affecting the surviving physical remains of the setting of the Scheduled Area, historical maps and topography suggest it is more likely to extend away from the proposed development area, to the northwest of the Scheduled Area, which has been confirmed through archaeological evaluation. The minor road would appear to be something of a limit on the archaeological extent in this direction, possibly affected by later landscaping, but little evidence exists for it extending beyond the road.
- In terms of the visual setting, the views and topography link the site with the open agricultural land to the northwest, around the confluence of the various streams and rivers.
- The proposed development area is therefore confined to an area already understood as developed, with a variety of large modern buildings. Even the open space, with its line of trees and road boundary, is more readily understood in association with the campus, rather than in association with the agricultural land to the northwest which incorporates the Scheduled Area. The proposed development does not infringe on any notable existing views of the Scheduled Area, neither does it interfere with any inter-visibility between sites.
- 5.7 The proposed development is of a size that is in keeping with the existing campus buildings. Although, that being said, it will provide a distinct and obvious backdrop to the Scheduled Area. When viewed from the Scheduled Area the current existing view of campus buildings is broken up by tree cover. The proposed development will replace some of this tree cover with three-storey high buildings, therefore it will be a very visible addition to views from the Scheduled Area in this direction. It will also be more visible in distant views of the site. Attempts are made within the design scheme to prevent the proposed development from being visually overpowering. Although at 15.6m high it is a large building, the ground level in this area will be lower than that of the SAM. The building is also set back from the roadside, with grassland and tree planting provided to soften to line between agricultural land and developed land.
- 5.8 The visual impact will still be clear, however, which is considered to be an adverse impact on the Scheduled Area. Given the discussion above, this is considered to be Slight to Moderate adverse impact.

6 Stage 4: Mitigation Options.

- 6.1 Mitigation measures are already incorporated into the development proposals. Although a prominent building, elements of the main structure have been designed to reduce its visual impact. It has been set back from the road front, and additional tree planting has been introduced to help soften the impact.
- 6.2 In addition to this Visual Impact Assessment, the archaeological resource has been investigated, through a programme of desk-based assessment, geophysical survey and archaeological evaluation. Further archaeological work is also planned, both prior to and during development works to provide a more complete record of potential archaeological features located within the proposed development area.
- 6.3 Therefore, no further mitigation measures are proposed.

7 Conclusions

- 7.1 This report assesses the impact of the proposed development upon the site and setting of Scheduled Ancient Monument CD259, which lies in close proximity to the proposed development site. This impact has been assessed using the guidance and methodology outlined in the recent 'Welsh Government Consultation on Secondary Legislation to Support The Historic Environment (Wales) Act 2016 and Various Best-Practice Guidance Documents' (Cadw 2016), which outlines a four stage approach.
- 7.2 Stage 1 identifies the historic assets. In this case the impact of the proposed development upon the archaeological and historic resources has been assessed in a detailed desk-based assessment undertaken by Dyfed Archaeological Trust (Bell & Murphy 2016). After further consultation with Cadw, it was agreed to re-assess the impact on CD259 in light of more detailed development proposals and the results of further archaeological investigations. SAM CD259 represents an area identified through previous archaeological investigations, and includes evidence of late Neolithic and Bronze Age activity, with Bronze Age ring ditches, a round barrow and two standing stones identified. Subsequent Iron Age crouched burials were also identified as well as a number of burials that have been radiocarbon dated to the early medieval period. The extent of the scheduled area covers these identified remains and visible above ground remains, which include the low remains of a round barrow, and two standing stones (one of which stands separate to the west). The extent of the archaeological activity has not been defined, however, and is likely to be more extensive than the Scheduled Area.
- 7.3 Stage 2 defines and analyses the setting of the archaeological site. Topographically, the site is located at the mouth of the Stewi valley, on a slightly raised prominence overlooking an area of relatively flat low-lying land to the northwest, at the confluence of several watercourses. The site is overlooked by higher ground in all directions. The flatter ground in the northwest appears to constitute the main setting to the monument, due to its topographical and visual connections, with the main views from the monument to the northwest, and the main views of the monument also coming from the northwest. The late post-medieval, but largely modern, built environment of the Gogerddan Campus to the east provides a distinct visual and physical change to the setting. This built campus area includes a number of large modern buildings, as well as a triangular field located immediately to the east of the SAM site, as this is set at a lower level and bounded both by a road and a row of trees. Further archaeological investigations have not identified any evidence of associated archaeological activity extending beyond the minor road to the northeast of the SAM, either because archaeological activity did not extend in this direction, or because subsequent landscaping works have removed the archaeological evidence. As the archaeological site covers a wide date-range, from the late Neolithic through the early medieval period, there are a number of archaeological sites throughout a relatively wide area that may potentially have some association with the activity within the Scheduled Area. However, it may be suggested that associated Bronze Age settlement activity is more likely to lie in the wider valley floor to the northwest, and possible Iron Age enclosures have also been identified to the north. An early medieval chapel site is suggested in the area, but its location has not been established.
- 7.4 Stage 3 evaluates the potential impact of the proposed development. This development comprises a three-storey innovation and enterprise facility, located to the east of the

Scheduled Area. This development will replace some existing buildings, as well as extending into a small triangular field that currently lies between the Scheduled Area and campus buildings to the northeast. Based on the definition of the setting, the proposed development will have a limited impact, as it does not affect the main extent of the setting, which lies to the northwest of the Scheduled Area. The proposed development area is also largely confined to an area already viewable as part of the current campus development (which includes modern development up to three-storeys high), even including the field which is distinct from agricultural land to the west and northwest. The development will not affect notable views to or from the Scheduled Area, or interfere with any inter-visibility between associated archaeological or historical sites. However, the proposed development will be clearly visible as a backdrop to the Scheduled Area, both from the Scheduled Area itself and some more distant views, and increase the visual presence of modern development adjacent to the Scheduled Area. This is considered to represent a Slight to Moderate adverse impact on the setting of the Scheduled Area CD259.

7.5 Stage 4 suggests mitigation options associated with the proposed development. However mitigation has already been incorporated into the design scheme in an attempt to reduce the visual impact, and further archaeological work has been, and will be, undertaken in association with the development to better understand the archaeological resource. Therefore, no further mitigation measures are recommended.

10 Sources

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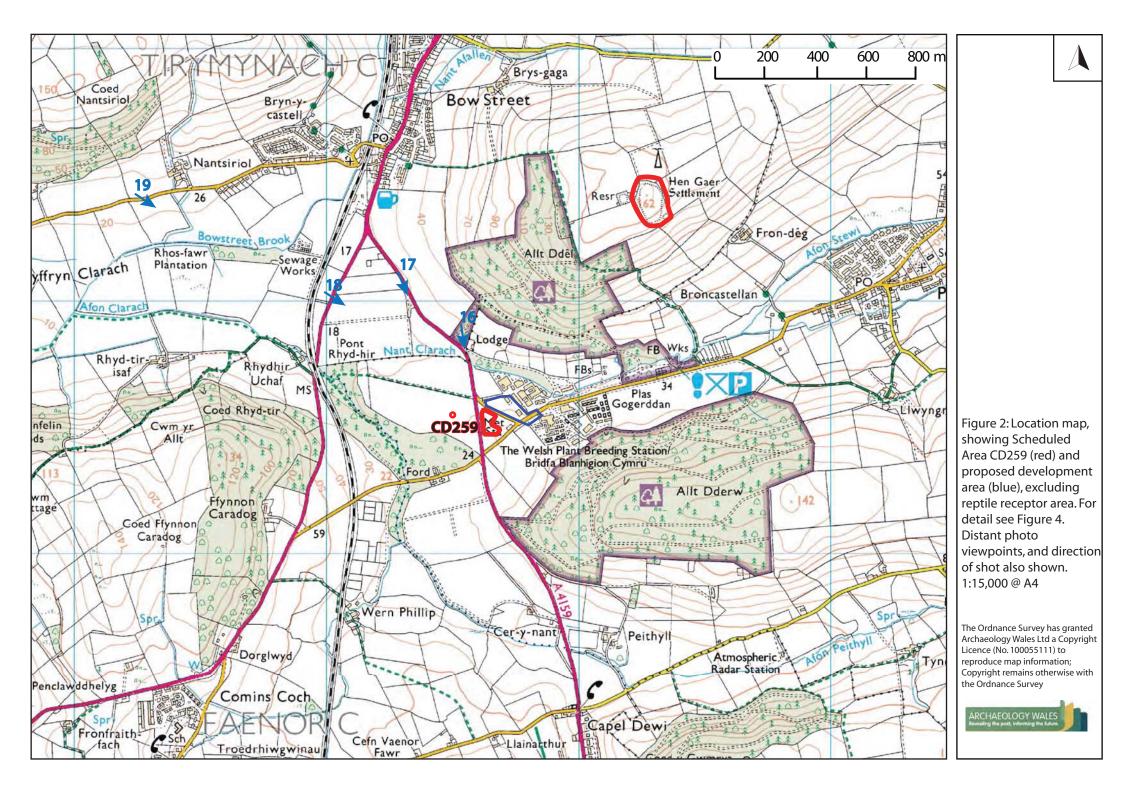
Maps

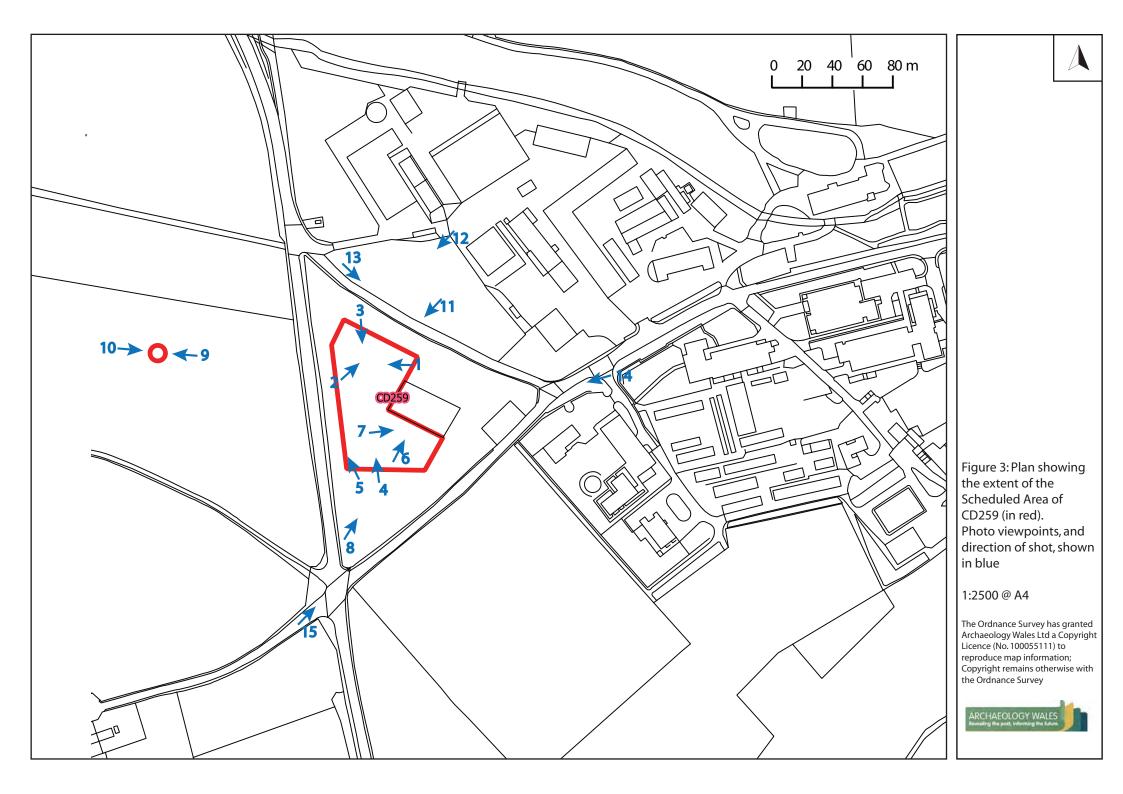
Anon 1842 Llanbadarn Fawr Tithe Map & Apportionments

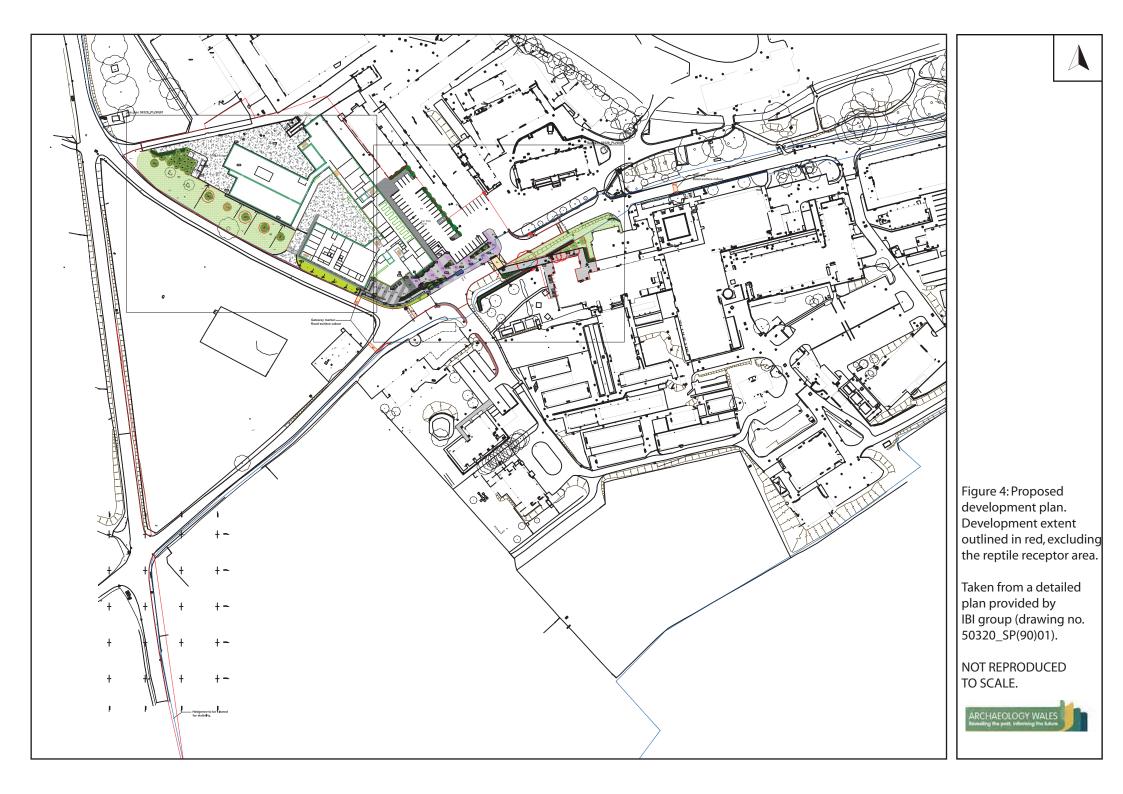
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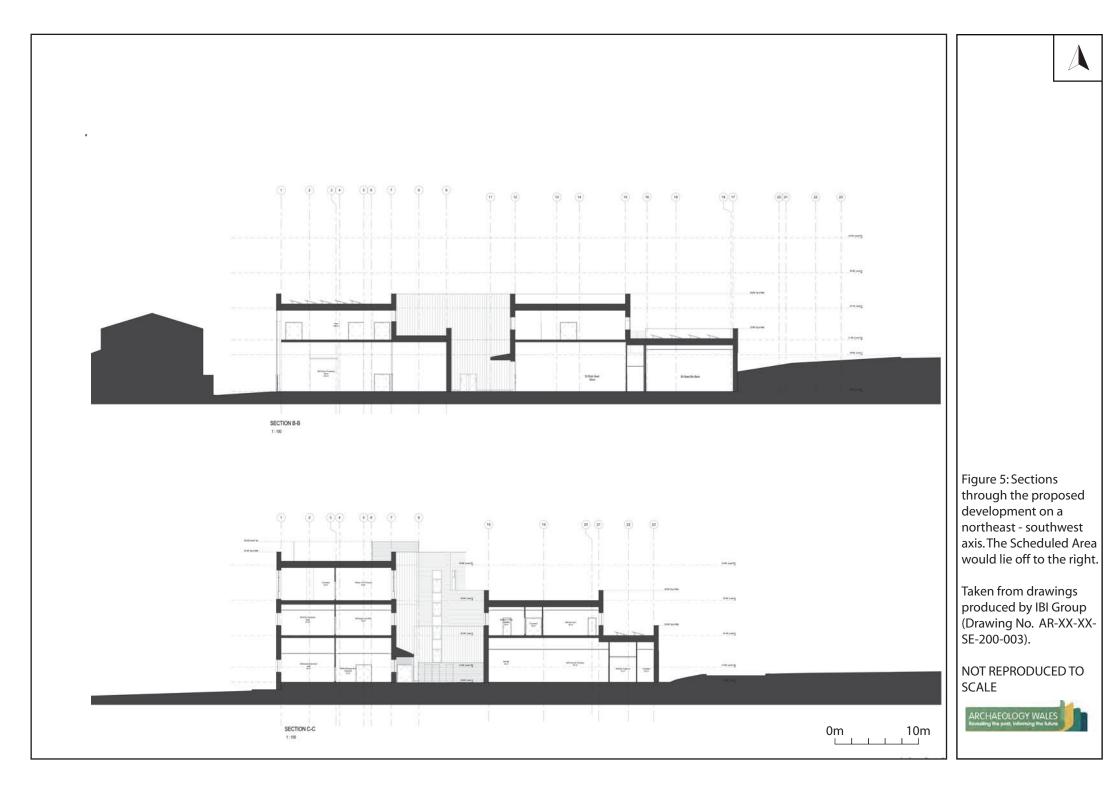
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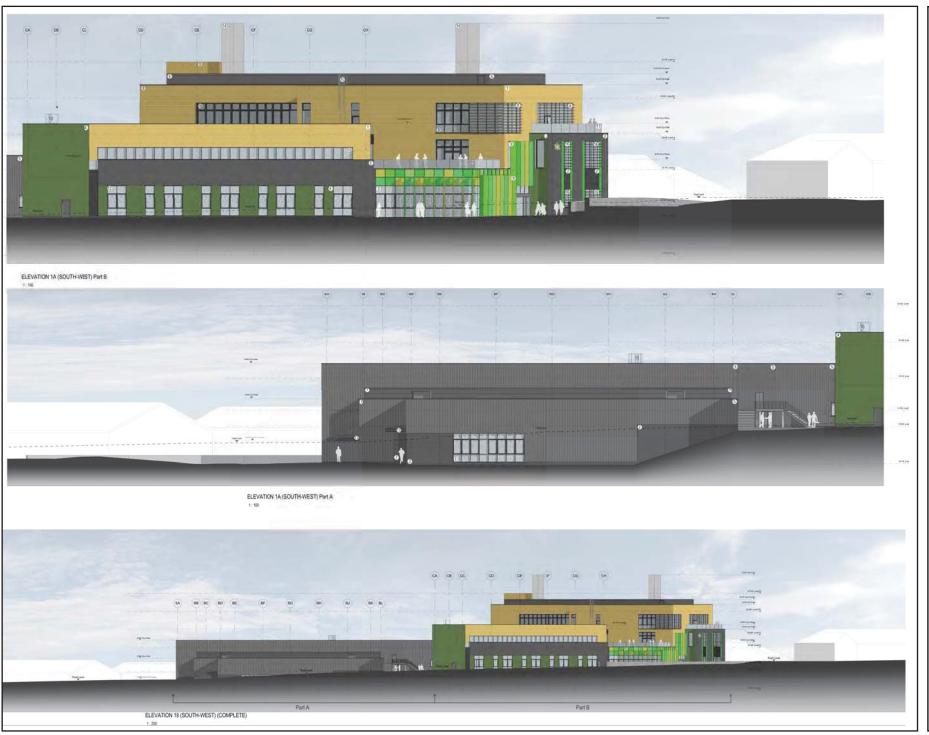


Figure 6: Southwest elevation of the proposed development - the elevation that faces the Scheduled Area.

Taken from drawings produced by IBI Group (Drawing No. AR-XX-XX-EL-200-001-A).

NOT REPRODUCED TO SCALE







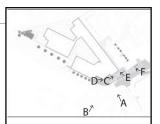






Figure 7: Visual representations of the proposed development.

View B of particular note, taken from the C1010





Taken from drawings produced by IBI Group (Drawing No. AR-XX-XX-SK-200-020).

Highway to the southeast of the Scheduled Area.





Photo 1: Standing stone within the main Scheduled Area, looking WNW towards separate standing stone. The wooded hillslopes of Coed Rhyd-tir in the background. 1m scale.



Photo 2: View NE across of the same standing stone looking towards the campus and area of proposed development. The large beech tree will be retained. 1m scale.



Photo 3: From standing stone, looking SE towards the round barrow within the Scheduled Area. The wooded slopes of Allt Derw in the background. 1m scale.



Photo 4: View NW across the Scheduled Area from the round barrow, towards the standing stone and beyond. The wooded slopes of Allt Ddel lie to the right,



Photo 5: As above, a more general view of the landscape to the NW of the Scheduled Area.



Photo 6: View NE across the Scheduled Area towards the proposed development area. Allotment forming the indented eastern edge of the Scheduled Area lies in the foreground.



Photo 7: As above, view E.



Photo 8: The Scheduled Area as viewed from the SW corner of the field containing the main Scheduled Area, looking NE.



Photo 9: The outlying standing stone to the W of the main Scheduled Area, looking W. 1m scale.



Photo 10: View E from the outlying standing stone towards the main Scheduled Area with modern building beyond.



Photo 11: Scheduled Area as viewed from the east, from the edge of proposed development area. Looking across the minor road connecting the A4159 and the C1010. The Standing stone within the Scheduled Area is visible.



Photo 12: As above, taken from further within the proposed development area.



Photo 13: Looking SE down the edge of the proposed development area, showing the difference in ground levels with the minor road running along the fenceline to the right, and the Scheduled Area on further elevated ground.



Photo 14: Looking W from within the proposed development area towards the Scheduled Area. The main buildings will lie to the right of the large trees. Original photo taken from Bell & Murphy 2016.



Photo 15: View from the SW, at the junction of the A4159 and the C1010. The Scheduled Area lie in the field to the top left, the current campus buildings are visible just beyond the horizon.



Photo 16: View from the north. The A4159 is visible, as is the junction with the minor road that subsequently connects to the C1010. The Scheduled Area lies within the green field to the left of the road, the proposed development area is not visible.



Photo 17: View from the A4159 to the north, looking S towards the Scheduled Area. The main area is partly hidden by the roadside tree, the separate standing stone lies in the lighter crops to the right.

The proposed development site is not visible.



Photo 18: View from the NW, from the A487. The Scheduled Area lies in a green field and lighter crops to the right, the main campus buildings, and area of proposed development, visible in the centre.



Photo 19: Distant view from the NW, taken from the local road between Bow Street and Clarach. The Scheduled Area is indistinct, but the current campus buildings are visible in the centre.

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