Archaeology Wales

Gogerddan Campus, University of Aberystwyth, Ceredigion

Archaeological Evaluation

By
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Report No. 1498

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Prepared For: Aberystwyth Innovation and Enterprise Campus Ltd

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Non-Technical Summary

In August 2016 Archaeology Wales Ltd (AW) carried out a trenched evaluation at Gogerddan Campus, University of Aberystwyth, Ceredigion (SN 6268 8359). The proposed development site is divided into three main areas, described within the report as the Cae Lodge Area, the Central Area and the Southern Area. The latter is developed, and unsuitable for evaluation. The archaeological investigation was undertaken as requested by Dyfed Archaeological Trust Development Management prior to the determination of a planning application for development. The archaeological evaluation was commissioned by Aberystwyth Innovation and Enterprise Campus Ltd.

The site has been subject to a previous Desk-Based Assessment (Bell & Murphy 2016) and Geophysical Survey (Day 2016). It lies in close proximity to a site of known archaeological activity, with funerary and ritual activity recorded from the Neolithic, Bronze Age, Iron Age and early medieval periods. The site also lies in relatively close proximity to the late medieval and post-medieval mansion of Gogerddan. Several features of potential archaeological interest were identified throughout the proposed development area by the geophysical survey.

The evaluation comprised the archaeological investigation of ten machine-excavated trenches, five within the Cae Lodge Area, and five within the Central Area. These trenches were largely located to target areas of potential archaeological significance identified on the geophysical survey.

Within the Cae Lodge Area a series of linear features, and potential early medieval burial features, were shown on excavation to relate to a series of modern services and 19th/20th century agricultural land drains, and a naturally-occurring tree bowl. A potential circular enclosure identified from previous aerial photography was not identified within the evaluation trenches, although it was shown that modern landscaping work in this area had reduced ground levels to the fragmented bedrock. No finds, features or deposits of archaeological interest were noted within this area.

Within the Central Area a potential circular enclosure, defined by banks and ditches and visible on the ground as a moderate but significance slope within the field, appeared on excavation to be a naturally occurring river-terrace. Bedrock deposits were exposed on the sloping ground, with colluvium build-up on the lower ground. No banks or significant ditches, or internal features were identified. A small possible gully was identified at the top of the slope, but this is of uncertain archaeological significance, and appeared possibly natural in origin. A double-ditch feature was also identified on the higher ground, characteristic of a field boundary, and potentially pre-19th century in origin. To the southeast a more significant ditch [1010] was revealed, 1.4m wide, 0.7m deep, later overlaid by a possible surface or trackway (1003). No dateable material was recovered from either feature, although stratigraphically both pre-date the later post-medieval agricultural activity and may be of some antiquity.

It is recommended that, if possible, ditch 1010 is preserved in situ, if this is not possible then further archaeological recording may be required on any elements that may be disturbed through development. Despite the lack of archaeological features recorded, due to the quantity and complexity of sites in the vicinity there remains a potential for archaeological features to be present within the development area. It is therefore recommended that an archaeological watching brief be maintained on any ground-breaking activity associated with development, with contingencies in place should significant archaeological remains be present requiring more extensive archaeological recording.

1 Introduction

1.1 This report has been prepared by Archaeology Wales Ltd (AW) in response to a request by Aberystwyth Innovation and Enterprise Campus Ltd to provide an archaeological evaluation of the potential impacts of a proposed development on land at the Gogerddan Campus of the University of Aberystwyth, Ceredigion.

1.2 The site comprises three main areas within the Gogerddan Campus. The northernmost area lies adjacent to Cae Lodge, and comprises part agricultural land and part open yard and scrub, the central area includes a triangular field of pasture on the western edge of the main campus with an adjacent area of hardstanding within the farmyard associated with the campus, and the southernmost area comprises a largely developed area within the campus. The southernmost area is currently unsuitable for evaluation. The Gogerddan campus lies to the northeast of Aberystwyth in northern Ceredigion; NGR SN 6268 8359, Figures 1 & 2. Planning permission is being sought to develop the central and southern areas to expand the campus, and to re-locate a silage dump into the northernmost, Cae Lodge, area. The local planning authority is Ceredigion County Council (CCC).

1.3 The development management division of Dyfed Archaeological Trust (DAT-DM), in its capacity as archaeological advisors to the local planning authority, have requested that an archaeological evaluation is undertaken as part of a programme of archaeological investigations prior to the determination of the planning application. The recommendations made by DAT-DM are set out in the 'Brief for an Archaeological Field Evaluation at Gogerddan Campus, University of Aberystwyth, Ceredigion', prepared by DAT-DM for Ceredigion County Council in June 2016.

The Brief includes four key elements, comprising:

1. Documentary Search (Stage 1)
2. Geophysical Survey (Stage 2)
3. Intrusive Field Evaluation (Stage 3)
4. Archiving and Reporting (Stage 4)

Stage 1 and Stage 2 have already been completed by Dyfed Archaeological Trust.

1.4 In order to investigate the archaeological potential of the site Aberystwyth Innovation and Enterprise Campus Ltd commissioned Archaeology Wales Ltd to undertake the archaeological evaluation. A Written Scheme of Investigation (WSI) for the archaeological evaluation was produced by Archaeology Wales and approved by DAT-DM (see Appendix III). The subsequent evaluation fieldwork used strategically placed trial trenches to locate and describe archaeological features present within the proposed development area. The work was designed to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.

1.5 The excavations took place between the 8th and the 12nd August 2016. The work was managed by Phil Poucher and carried out under the supervision of Jerry Bond. A site monitoring visit was undertaken by DAT-DM on the 10th August.

1.6 All work conformed to the CIfA's Standards and Guidance for Archaeological Field Evaluation (2014) and was undertaken by suitably qualified staff to the highest professional standards.

1.7 The AW project number for the work is 2460 and the site code is GCA/16/EV. The project details are summarised on the Archive Cover Sheet (Appendix IV).

2 Site Description

2.1 The proposed development areas are located to the west and southwest 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.

2.2 Gogerddan Campus is situated within the former grounds of Plas Gogerddan; a late Georgian mansion house. The central area and the southernmost area are bisected by a minor B-road, which forks off to run along the western boundary of the central area. The Cae Lodge area is located over 150m to the north, to the south of the Allt Ddel woodland. The A4159 road flanks the western side of the campus.

2.3 The existing university campus is comprised mainly of large post-medieval and modern agricultural buildings, blocks of up to three storey high modern buildings and several glass houses and polytunnels. The southernmost area is presently largely occupied by modern development along with surrounding lawned areas, car parking, footpaths and trees. The development of this area, along with the presence of underground services, meant no suitable area existed to allow for archaeological evaluation. The central area encompasses an area of hardstanding alongside agricultural buildings and a triangular field of pasture. This field is enclosed by post-and-wire fencing, with a row of trees along its western boundary. The Cae Lodge area includes a rectangular field of pasture to the north, with an open area to the south partly used as an agricultural yard and partly scrub covered.

2.4 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 Historical Background

3.1 A detailed study of the archaeological and historical background to the site has been undertaken by Dyfed Archaeological Trust (Bell & Murphy, 2016).

3.2 In summary, the study has shown that the proposed development lies in an area with a high density of archaeological sites of many periods. Of particular note is an area of funerary and ritual activity dated from the late Neolithic/early Bronze Age, through the Iron Age and into the early medieval period. This area lies directly to the southwest of the existing campus, and

in close proximity to the central and southern areas of the proposed development. The main area of activity is protected as a Scheduled Ancient Monument (CD259 – see Figure 2).

3.3 A Bronze Age round barrow and several ring ditches have been recorded, both through crop marks and archaeological excavation (Murphy, 1986 & 1992). Two standing stones are also recorded, one of which was relocated in the 19th century but is surrounded by prehistoric pits and post holes. Radiocarbon dates obtained from some of these features indicate late Neolithic to early Bronze Age activity. A number of Iron Age crouched burials are also recorded close to the Bronze Age ring ditches, and at least 22 early medieval graves have been identified close to one of the standing stones. A radio-carbon date from one of the graves produced a 3rd to 7th century date, making this the only ecclesiastical site in Ceredigion that has been absolutely dated to the early medieval period.

3.4 Also of note is Gogerddan Park Enclosure Cropmark (NPRN 404548), which is located in the southeast corner of the Cae Lodge proposed development area. This cropmark was revealed during aerial reconnaissance in 2006, and is described as an oval ditched enclosure measuring approximately 46m by 37m, likely to be prehistoric in date. The enclosure appears to largely lie under modern development associated with the Gogerddan Campus, and the area containing the segment revealed in aerial photography in 2006 appears to have since been resurfaced.

3.5 During the medieval period this area became part of the Y Dywarchen Grange of the extensive holdings of Strata Florida Abbey. It is possible that the early medieval cemetery site was further developed during this period. This is suggested by a late 16th century reference to a chapel at “Gogirthan”, which may point to a now vanished chapel site in the area (Ludlow, 2004).

3.6 Following the Dissolution the area passed into the hands of the independent estates of Court Farm and Gogerddan, although it is possible a house may have stood at Gogerddan since the medieval period. A house is recorded in the area since at least the 15th century, owned by the influential Pryse family. The current country house was built in the late 17th or early 18th century, from money made primarily through lead-mining, and became the principal house of the county. The house was largely remodeled in the mid-19th century. A significant formal garden existed at Gogerddan in the 18th century, with a separate deer park. In the 19th century the formal garden was replaced by parkland and structures relating to hunting and racing (Palmer, 2004). It was sold to the University College of Wales and the Welsh Plant Breeding Centre in 1949, with extensive modern development occurring in the later 20th and 21st century.

3.7 A subsequent geophysical survey was undertaken of accessible parts of the Central Area and the Cae Lodge area (Day, 2016). A large part of the central area consists of a triangular field of pasture, lined by trees. A large magnetic anomaly crosses this area, interpreted as a curved double bank and corresponding to a moderate incline that is visible on the ground. The polarity of the results suggested the bank may have been largely built from stone, with readings also suggesting an inner ditch. If part of a circular enclosure, the projected dimensions would be comparable to Iron Age defended enclosures, or early medieval ecclesiastical enclosures, both of which are possibilities in this area given the known

archaeological activity recorded to the southeast. Other lengths of bank and ditch were also recorded within the field, as well as a possible buried wall.

3.8 The surveyed part of the Cae Lodge area identified a number of possible archaeological features, including a square pit with a central feature, reminiscent of early medieval graves recorded during excavation work in the early medieval cemetery to the south (CD259).

4 Methodology

4.1 Prior to the evaluation fieldwork, a Written Scheme of Investigation was produced detailing the methodology for the archaeological evaluation. This was agreed by DAT-DM and a copy is included in Appendix III.

4.2 Ten evaluation trenches were machine-excavated. Five were located in the Cae Lodge area to the north, to investigate areas of potential interest identified on the geophysical survey, along with the location of the Gogerddan Park Enclosure Cropmark (NPRN 404548) and other accessible areas (Figure 3). Five trenches were also excavated within the triangular field of the Central Area, to investigate areas of potential interest identified on the geophysical survey (Figure 4; Photos 1 & 38).

4.3 Within the Cae Lodge area Trench 1 was positioned to investigate two linear features identified on the geophysical survey result. This trench had to be moved 5m further to the east due to overhanging tree cover and potential root disturbance. Trench 2 was positioned to investigate a square-pit or possible grave feature identified by the geophysical survey. Trench 3 was located to the south to investigate discrete anomalies, possibly pit and grave features, identified on the geophysical survey. Trench 4 was located to the southwest to investigate a general open area outside the area investigated by geophysical survey. This trench had to be shortened by 5m to avoid an area of dense undergrowth to the north and live services to the south. Trench 5 was located to the southeast, in the area of the cropmarked enclosure NPRN 404548). The location of this trench was confined by the presence of surface features (planting frames and hay bales) as well as modern services that cross this area. Trenches 1, 2 and 5 measured 20m in length, by 1.5m in width, Trench 3 was limited to 10m in length due to the presence of modern services identified on the geophysical survey results, and Trench 4 was reduced to 15m in length for the reasons given above.

4.4 Within the central area Trenches 6 and 7 were located towards the northern end of the field, to investigate the 'interior' of a possible circular enclosure, along with a linear feature and discrete features identified on the geophysical survey results. These trenches were 10m in length, by 1.5m wide. Trenches 8 and 9 were positioned to investigate a potential bank and ditch feature identified on the geophysical survey results that would appear to enclose this northern area, and which is also visible on the ground as a distinct gradient. Trench 10 was positioned to the southeast to investigate a linear feature identified as a possible ditch and wall on the geophysical survey, as well as the general area to the southeast of the bank and ditch. Trenches 8 - 10 measured 20m in length, by 1.5m in width.

4.5 The trenches were machine-excavated using a flat-bladed bucket under close archaeological supervision. The trenches was excavated to either the top of archaeological features or to natural geological deposits.

4.6 All areas were hand cleaned to prove the presence or absence of archaeological features and to determine their significance. Sample excavation was undertaken on all cut archaeological features. Recording was carried out using Archaeology Wales recording systems (pro-forma context sheets, etc), using a continuous number sequence for all contexts.

4.7 Context numbers and descriptions are summarised in Appendix I.

4.8 Written, drawn and photographic records of an appropriate level of detail were maintained throughout the course of the project. Digital photographs were taken using cameras with resolutions of 10 mega pixels or above.

4.9 Plans and sections were drawn to a scale of 1:50, 1:20 and 1:10, as required.

4.10 A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure, as laid out in the Project Design (Appendix III).

4.11 The fieldwork took place between 8th and the 12th August 2016.

5 Results of the Evaluation

5.1 *Cae Lodge Area*

Trench 1 (Figure 5, Photos 2-4)

5.1.1 This trench was orientated east-west, measuring 21m by 1.5m, and positioned to investigate two linear features identified on the geophysical results. Due to overhanging tree cover and roots this trench was moved eastward by 5m, although the revised position was still able to investigate both features. It was located close to the western edge of a field of pasture, which sloped slightly southward. To the west lay a post and wire fence with woodland beyond, and to the south lay a high hedge representing the property boundary to Cae Lodge. The pasture field extended to the north and east.

5.1.2 The natural subsoil (deposit 102) was revealed at a depth of 0.65m below current ground levels. This consisted of a mottled pale grey and reddish-brown silty-clay with very occasional small rounded stones, and small charcoal flecks. The deposit became redder, with a lower clay content, towards the east. 1m from the eastern end of the trench deposit 102 was cut by a ceramic land drain [104], running in a roughly north-south direction down the sloping ground. No vertical cut was discerned for the drain, which lay 0.85m below current ground levels. The drain itself had a diameter of 7.5cm, and internal diameter of 5cm. No further features of archaeological interest were revealed cutting into this deposit.

5.1.3 Overlying deposit 102 was a mixed deposit of pale reddish brown silty-clay (deposit 101), 0.4m thick. This deposit was revealed at a depth of 0.25m below current ground levels. No finds were recovered. A second ceramic land drain [106] was identified cutting through this deposit. This drain was revealed 9m from the eastern end of the trench, at a depth of 0.4m below current ground level. This too ran in a north-south direction down the slope of the field, but was slightly larger in dimension, measuring 11.4cm in diameter externally, 7.5cm internally.

The location and orientation of this drain would appear to correspond closely to the linear feature identified on the geophysical survey results.

5.1.4 To the west, approximately 5m from the western end of the trench, a black plastic pipe was revealed at a depth of 0.6m below current ground levels, cutting through deposit 101. The pipe ran in a north-northwest to south-southeast direction, and would appear to correspond closely to the location and direction of the westernmost linear feature identified on the geophysical survey results.

5.1.5 Deposit 101 was overlaid by 0.25m of topsoil (deposit 100), consisting of a pale grey-brown clay loam. This represented a consistent ploughsoil throughout the trench. No finds were recovered from this deposit.

5.1.6 The trench was excavated to a maximum depth of 0.85m. No features of archaeological interest were noted within the trench.

Trench 2 (Figure 5, Photos 5-7)

5.1.7 This trench was orientated east-northeast to west-southwest, measuring 20.5m by 1.5m, and was positioned to investigate a square area and possible internal pit identified on the geophysical survey results, and interpreted as a potential early medieval grave site. It was located close to the southern edge of the pasture field, which extended to the north, west and east. A post and wire fence lay to the south, beyond which was an open yard and scrub-covered area.

5.1.8 Bedrock deposits (deposit 203) were revealed towards the eastern end of the trench at a depth of 0.5m below current ground levels. The base of the trench was excavated approximately level, indicating the bedrock deposits dropped away to the west. The bedrock consisted of fragmented shale or slate. This was overlaid with a natural geological subsoil (deposit 202) of mid orange-brown clayey-silt, containing common to frequent stones, increasing in thickness to the west. This deposit was revealed at a depth of 0.48m below current ground levels.

5.1.9 Overlying these natural deposits was a 0.35m thick deposit of mid grey-brown clayey-silt (deposit 201), with the occasional small to medium-sized stone inclusion. The deposit was revealed at a depth of 0.2m. No finds were recovered from this deposit.

5.1.10 Two ceramic land drains cut through these deposits, both 5cm in internal diameter and running in a north – south direction. The easternmost drain sat within a loose dark brown loam (deposit 204) which filled the steep-sided, U-shaped cut [cut 205]. The cut was visible from below the topsoil, and reached a depth of 0.9m. This drain lay 5.5m from the eastern end of the trench, with a 7.5m gap before the westernmost land drain [cut 207]. This drain sat within a similar cut, and was revealed at a similar depth.

5.1.11 All deposits and features were overlaid by a 0.2m thick topsoil of mid reddish-brown clayey-loam (deposit 200). No finds were recovered from this deposit.

5.1.12 This trench was excavated to a maximum depth of 1m. No features of archaeological interest were noted within the trench.

Trench 3 (Figure 6, Photos 8-11)

5.1.13 Trench 3 was located just to the south of the enclosed pasture field, in an area of partial hard-standing and scrub, used as a general storage area. The trench was positioned to investigate an area of several discrete anomalies of unknown provenance identified on the geophysical survey results. The trench was orientated north-northwest to south-southeast, and measured 10m by 1.5m, its length curtailed by the likely presence of modern services identified on the geophysical survey.

5.1.14 A natural geological subsoil was revealed at a depth of 0.6m from the current ground surface. This consisted of a mid brownish-orange gritty-clay (deposit 306). One feature was revealed cutting into this deposit. Roughly midway along, against the western side of the trench, was an organic looking feature [cut 304] with an irregular shape in plan, measuring 3.5m long and protruding 0.6m in to the trench. It contained a single infilling material (deposit 305) of loose mixed mid greyish-brown to orange-brown sandy-clay with abundant stone inclusions and the occasional small charcoal fleck. Two slots were excavated into the feature, which revealed a very shallow southern end (only 0.03m deep) with gently-sloping, irregular, edges, and a deeper (0.4m deep) northern end with steep, irregular and under-cutting sides. There was a moderate break of slope on to an irregular, northward sloping base. No finds were recovered from the infilling material, and the whole feature was natural in appearance.

5.1.15 Overlying deposit 306 and feature 304 was a 0.37m thick deposit of stony mid greyish-brown clayey-silt (deposit 301). No finds were recovered from this deposit. Cutting through both deposit 301 and 306 was another ceramic land drain. This drain, with an internal diameter of 5cm, ran in a north - south direction. It was contained within a 0.9m deep steep-sided, U-shaped cut [cut 302], containing a loose greyish-brown clayey-silt (deposit 303).

5.1.16 Both deposit 301 and land drain cut 302 were overlain by 0.23m of topsoil, consisting of a mid brownish-grey clayey-silt (deposit 300).

5.1.17 This trench was excavated to a maximum depth of 0.9m. No features of specific archaeological interest were noted.

Trench 4 (Figure 6, Photos 12-14)

5.1.18 Trench 4 was located towards the southwestern end of the site area, to investigate an area that had not been covered by the geophysical survey. However, a dense area of scrub to the north resulted in the trench being shortened and the presence of live services prevented the trench from being moved further to the south. This trench was orientated north-northeast to south-southwest, and measured 12m long, by 1.5m wide.

5.1.19 The topsoil, which consisted of a stony dark grey-brown loam (deposit 400) was 0.25m deep. Underlying this deposit was a naturally occurring firm subsoil of weathered and fragmented shale bedrock in a pale orange-brown clayey-silt matrix (deposit 401). Root patches were visible within this deposit, but no cut features were noted.

5.1.20. The trench was excavated to a maximum depth of 0.5m. No features of archaeological interest were noted.

Trench 5 (Figure 7, Photos 15-17)

5.1.21 This trench was located towards the southeast corner of the site. It was positioned in an area that had not been investigated by the geophysical survey, but in an area where a cropmarked enclosure (NPRN 404548) had previously been identified through aerial photography. This area was surrounded to the north and east by a compacted stone-laid trackway, whilst to the south lay a variety of features including planting frames and hay bales. These obstacles and the presence of live services confined the area available for trenching. As a result, the final trench measured 15m long, by 1.5m wide, and was orientated west-northwest to east-southeast.

5.1.22 The excavation revealed a natural geological bedrock deposit, consisting of weathered and fragmented shale and rounded stone within a pale grey-brown sandy matrix (deposit 501). This was revealed at a depth of 0.18m. Overlying this was a sheet of terram, upon which lay a grass-covered layer of grey angular stone hardcore. The only feature revealed was a blue plastic water pipe towards the eastern end of the trench, running in a north-south direction.

5.1.23 The trench was excavated to a maximum depth of 0.9m. No features of archaeological interest were revealed.

5.2 Central Area

Trench 6 (Figure 8, Photos 18-20)

5.2.1 This trench was located towards the northern end of the site, measuring 11m by 1.5m, orientated north – south. This trench was positioned to investigate a possible linear feature identified on the geophysical survey results, as well as investigating the area within a possible enclosure. The ground dropped to a lower level at the northern end of the field, the break of slope marked by a curving gradient identified on the geophysical survey results as the boundary of the possible enclosure. The field extended to the south, west and east of the trench, a short distance to the north lay a post and wire field boundary fence with a tarmac access road beyond.

5.2.2 A natural geological subsoil deposit (deposit 602) was reached at a depth of 0.53m below current ground levels. This deposit consisted of a fairly compact dark reddish-brown silty-clay, containing frequent inclusions of small to medium sub-angular stones. Up to 0.4m of this deposit was excavated, which may represent a significant build-up of colluvium at the base of the sloping ground. No finds were recovered from this deposit.

5.2.3 Overlying deposit 602 was a 0.3m thick layer of loose mid reddish-brown to grey-brown clayey-silt (deposit 601) containing frequent small sub-angular stones. No finds were recovered from this deposit. Above this was a 0.23m thick topsoil deposit of mid grey-brown clay-loam (deposit 600). One fragment of post-medieval ceramic-building-material (CBM) was recovered from this deposit. All three deposits exhibited a gradual slope down to the north.

5.2.4 The trench was excavated to a maximum depth of 0.95m. No finds, features or deposits of archaeological interest were noted.

Trench 7 (Figure 8, Photos 21-23)

5.2.5 Similar to the previous trench, this was also located towards the northern end of the site, positioned to investigate a linear feature, and possible discrete features identified on the geophysical survey, lying within a possible enclosure. This trench measured 11m by 1.5m. It was located close to the northeast corner of the field, near the field entrance. To the east lay a hedgerow with buildings behind. Buried live services ran in front of the hedge. The ground sloped down slightly to the north, whilst to the south the ground rose up the gradient; these features were indicative of the possible enclosure boundary.

5.2.6 A similar sequence of deposits were recorded in this trench as had been identified in Trench 6. At a depth of 0.55m below current ground levels a natural geological subsoil (deposit 702) was revealed, consisting of a compact mid reddish-brown clayey-silt, with occasional inclusions of small to medium stone and flecks of manganese. Towards the northern end of the trench further excavation revealed an underlying deposit of mottled light reddish-brown and grey clay (deposit 703). This was recorded at a depth of 0.92m below current ground levels. No finds or evidence of archaeological activity were recovered from either deposit.

5.2.7 Overlying deposit 702 was a typical deposit of fairly compact mid grey-brown clayey-silt (deposit 701), with common small stone inclusions and grass roots visible. This deposit was recorded at a depth of 0.25m, and was overlaid by a topsoil of mid grey-brown clay-loam (deposit 700). No finds were recovered from these deposits. All deposits exhibited a gradual slope down to the north.

5.2.8 The trench was excavated to a maximum depth of 1m. No finds, features or deposits of archaeological interest were recorded.

Trench 8 (Figure 9, Photos 24-26)

5.2.9 This trench was positioned across the curving gradient, which dropped to the north. This gradient was identified on the geophysical survey results as a possible enclosure bank, defined by a ditch at the top and bottom of the slope. The field extended to the north, east and west, and to the south lay a row of planted trees. The trench measured 21.5m, by 1.5m.

5.2.10 A natural stony bedrock (deposit 805) was exposed across the main sloping ground in the centre of the trench. The bedrock consisted of a fragmented pale grey shale or slate. Where it was exposed on the slope it lay just 0.18m below the current ground levels, although this was covered by a greater depth of material on the higher ground to the south, and lower ground to the north. The bedrock was overlaid by a natural geological subsoil of fairly compact dark reddish-brown sandy-silt (deposit 806) with the occasional small angular stone inclusion. No finds or evidence of archaeological activity was recovered from this deposit. This deposit was very thin and patchy as it covered the exposed bedrock on the sloping ground, increasing to 0.15m across the higher ground to the south, and in excess of 0.25m across the lower ground to the north. To the south this deposit ran as far as linear feature 804, beyond which lay a similar but lighter deposit of fairly compact light orange-red-brown clayey-silt (deposit 802), containing a greater frequency of stone inclusions. This deposit was visible at a depth of

0.35m below current ground level for the first 4.8m of the trench across the higher ground. No finds or evidence of archaeological activity was recovered from either deposit 802 or deposit 806.

5.2.11 The division between deposit 802 and deposit 806 was defined by, and cut by, linear feature 804. This feature represented a possible narrow, shallow gully, although irregular in profile. It ran across the trench in a roughly east – west direction, with a moderately sloping irregular southern edge with a flat, amorphous base and an indistinct northern edge. It was approximately 0.6m to 0.75m wide, and 0.19m deep. It contained a single infilling material (deposit 803) of loose dark reddish-brown clayey-silt with the occasional stone and gravel inclusions, difficult to distinguish from deposit 806. No finds were recovered from this deposit.

5.2.12 Both deposits 802 and 806, along with feature 804, were overlaid by a loose layer of dark reddish-brown sandy-silt with frequent inclusions of small stones (deposit 801). This deposit was typically 0.15m thick, visible throughout the trench. No finds were recovered from this deposit. It was overlaid by 0.2m of topsoil (deposit 800), consisting of a mid grey-brown clay-loam with occasional stone inclusions. One fragment of late 19th to mid 20th century pottery, along with an iron object of likely 19th or 20th century date, were recovered from this deposit.

5.2.13 This trench was excavated to a maximum depth of 0.5m on the high ground at the southern end of the trench, and 0.95m on the low ground at the northern end of the trench.

Trench 9 (Figure 10, Photos 27-30)

5.2.14 This trench was positioned to the east of Trench 8, but also located to investigate the possible bank and ditch on the sloping ground, along with three discrete features also identified on the geophysical survey results. The trench measured 20.5m by 1.5m, and was orientated north - south. It incorporated a larger area of the higher ground to the south, extending just beyond the gradient to the north.

5.2.15 As with Trench 8, fragmented bedrock deposits (deposit 907) were exposed across the sloping ground at a depth of 0.3m below current ground levels. This was overlaid by a layer of natural geological subsoil (deposit 902), consisting of a light orangey-red clayey-silt with frequent stone inclusions. This deposit appeared consistently throughout the trench, both on the high ground to the south, and the lower-lying ground to the north. Typically it was revealed at a depth of 0.35m below current ground levels, except on the sloping ground where it was covered by thinner (0.25m) deposits of overlying material. No finds or evidence of archaeological activity were revealed within this deposit.

5.2.16 On the higher ground to the south, deposit 902 was cut by a pair of parallel linear features [cut 904 and 906], approximately 3m from the southern end of the trench. Both features ran in an east – west direction across a slight dip in the higher ground, with the start of the downward gradient lying approximately 4.5m to the north, and flatter ground lying to the south. The southernmost linear feature [cut 904] was straight-sided, 0.45m wide, 0.2m deep and concave in profile. It contained a single fill (deposit 903) of mid grey-brown clayey-silt with frequent gravel and grit inclusions. No finds were recovered from this deposit. There was a gap of 0.25m before the northernmost linear feature [cut 906], which was slightly wider at 0.65m to 0.9m wide, splaying out slightly towards the west. This feature was 0.26m deep and

also concave in profile. It contained a very similar single fill (905) of mid grey-brown clayey-silt with frequent gravel and grit inclusions. No finds were recovered from this deposit.

5.2.17 Both linear features, and deposit 902, were covered by a layer of dark reddish-brown sandy-silt (deposit 901), which was up to 0.15m thick. No finds were recovered from this deposit. This in turn was overlaid by a topsoil (deposit 900) of dark grey-brown loam, typically 0.22m thick. One iron horse shoe was recovered from this deposit.

5.2.18 This trench was excavated to a maximum depth of 0.5m on the higher ground to the south, and 0.9m on the lower ground to the north.

Trench 10 (Figure 11, Photos 31-37)

5.2.19 This trench was positioned towards the southeast end of the site, orientated southeast to northwest and measured 20m by 1.5m. It was located to investigate a linear feature identified as a possible ditch and wall on the geophysical survey, as well as the general area to the southeast of the potential enclosure. The ground in this area was relatively level, with hedgerow boundaries to the northeast and southeast, both of which had buried live services running in front of them. A row of planted trees lay to the southwest, and the field opened out to the northwest.

5.2.20 The natural geological subsoil (deposit 1006) was revealed at a depth of 0.45m below current ground levels. This deposit consisted of a fairly compact light orange gritty clay with the occasional small stone inclusion. Throughout much of the trench this was overlain by a layer of loose mid-brown clayey-silt (deposit 1002) with the occasional stone inclusion. This deposit was revealed at a depth of 0.24m below current ground levels, and was typically 0.2m thick. No finds or evidence of archaeological activity was recorded within this deposit.

5.2.21 Towards the southeast end of the trench both deposit 1006 and 1002 were cut by a linear feature [cut 1010]. This feature appeared to be a ditch, slightly curvilinear in plan within the trench, although it corresponded very closely in location to the straight linear feature identified on the geophysical survey results. It had a sharp break of slope on the northern side, more rounded to the south, with smooth moderate sides meeting at a narrow, slightly irregular, shallow concave base. The ditch was 1.4m wide and 0.7m deep. The northern side of the ditch cut deposit 1002, and was apparent at a depth of 0.25m below current ground levels. The southern side was some 0.4m high, extending as a shallow cut to the southeast. The cut was defined by a thin compact layer of orange and black iron panning (deposit 1008), which appeared to have formed along the surface of the exposed ditch cut, presumably through water pooling. This layer of iron panning extended along the surface of the natural subsoil (deposit 1006) to the south of the ditch, and both iron panning and deposit 1006 was higher at the southern extent of the trench.

5.2.22 Within the base of ditch 1010 a 0.05m thick deposit of loose, light grey silty-clay (deposit 1009) was recorded; this appeared to represent primary silting of the ditch. Overlying this was a deposit of fairly compact light-grey mottled clay (deposit 1005), with frequent bands and patches of iron panning throughout. This deposit was 0.24m thick. No identifiable finds were retrieved from this deposit apart from a single flat circular piece of slate, 0.15m in diameter, that may have been artificially shaped.

5.2.23 To the south of the ditch, overlying the iron panning layer (1008), was a very thin (0.03m thick) deposit of compact light greyish-yellow gritty clay (deposit 1007). Both this thin layer and the infilling material (deposit 1005) of the ditch were capped by a fairly compact layer of light grey clay with frequent small to medium stone inclusions (deposit 1003). This stony deposit was 0.05m thick, and extended for 1.5m, covering part of the ditch and area to the south up to the point where the underlying natural subsoil (deposit 1006) began to rise at the southern extent of the trench. This deposit appeared to have sunk slightly into the ditch, at which point it was covered by a 0.12m thick deposit of fairly compact mid-grey silty-clay with the occasional small stone inclusion (deposit 1004). Overlying both deposits was a 0.2m thick deposit of friable mid-grey clayey-silt with the occasional stone inclusion (deposit 1001). This deposit extended for at least 4.3m, from the northern edge of ditch 1010 to beyond the southern extent of the trench. No finds were retrieved from this deposit.

5.2.24 A 0.25m thick topsoil overlay deposit 1001 and 1002. This consisted of a loose grey-brown clayey-silt (deposit 1000). One fragment of post-medieval CBM was recovered from this layer.

5.3 *Artefactual and Environmental Data*

5.3.1 A total of six items were recovered from the evaluation trenches, comprising one fragment of pottery, two fragments of ceramic building material, one unidentified iron objects, one iron horseshoe and a possible shaped fragment of slate. These are listed in the finds summary table (Appendix II).

5.3.2 One fragment of ceramic building material was recovered from the topsoil deposit (600) within Trench 6. This fragment is generally dateable to the later post-medieval period, and likely represents waste material mixed in with the ploughsoil. A similar fragment of ceramic building material was also recovered from the topsoil deposit (1000) within Trench 10.

5.3.3 A single sherd of pottery was recovered from topsoil deposit (800) within Trench 8, and is readily identifiable as a fragment of glazed cream-ware jars common in the late 19th to mid-20th century.

5.3.4 An unidentified fragment of iron was also recovered from the topsoil (800) within Trench 8. Although the function is unidentified, the iron appears machine made and likely to represent some form of spring from farm machinery, presumably late 19th or 20th century in date. An iron horseshoe was also recovered from topsoil deposits (900) within Trench 9, also of likely late post-medieval or modern date. These finds are of little intrinsic value, and have not been retained.

5.3.5 Only one find was retrieved from an archaeological feature. Within the upper fill (1005) of ditch 1010, within Trench 10, was a fragment of slate, roughly circular in shape. The fragment is 0.15m in diameter, and 0.018m thick. The shape indicates the fragment of slate may have been artificially formed, but the function and date remains unclear. This find was retained.

5.3.6 Bulk environmental samples were taken from the upper fill (1005) of ditch 1010, within Trench 10. This deposit contained no identifiable organic material or finds, other than the fragment of slate discussed above, but represents the only deposit with the potential to contain finds

or environmental data of archaeological interest. These samples will be processed in due course and the results added to this report as an addendum.

6 Discussion and Conclusions

6.1 *Overall Interpretation*

The Cae Lodge Area

6.1.1 Trench 1 targeted linear features identified on the geophysical survey results. At the western end of the trench a linear feature corresponds closely to a modern black plastic pipe, which would appear to have once provided water to Cae Lodge to the south, although clearly now disused. A second linear feature running through the centre of the trench was identified in the geophysical survey as a potential electrical cable or iron pipe. This appears however to closely correspond to a land drain [106]. The reason for the strong magnetic signal was not apparent, but may be derived from the fired clay of the drain itself. This in turn aligns very closely to a former field boundary identified on historic mapping. No evidence of the field boundary itself was apparent however, suggesting a possible post construction rather than a more substantial bank or wall. Magnetic anomalies identified at the eastern end of the trench would also appear to correspond closely to a land drain [104].

6.1.2 Trench 2 was primarily targeted to investigate an unusual square feature with a central circular feature identified on the geophysical survey results. Comparisons with the early medieval burial remains suggested this may be a feature of some significance. However, upon excavation no evidence of burial activity, or indeed any other archaeological activity of note, was revealed. Instead, the square area appeared to mark a transition from bedrock deposits (203) to the east, to thicker natural subsoil deposits (202) to the west. The square appearance, and central feature, may have been accentuated by the presence of two land drains (205 to the east, 207 to the west), that cross the trench at approximately both edges of the square feature.

6.1.3 These land drains appear to continue to the south of the present pasture field, with a further land drain identified in Trench 3. This trench was positioned to target several discrete features identified on the geophysical survey results. The largest of these features appeared to correspond to feature 304. The irregular nature of this feature is strongly suggestive of a naturally-created feature, likely to be a tree-bowl. The remaining discrete features are likely to correspond to a variety of ferrous items that are strewn across the surface in this area from its use as a general storage yard. No features of archaeological interest were noted in Trench 4.

6.1.4 Trench 5 was positioned to target a possible enclosure identified from aerial photography (NPRN 404548). Due to surface constraints it appears possible that this trench may have been positioned slightly too far north. What is apparent however is that this area has been subject to previous stripping and levelling works, with a terram and hardcore surface laid directly on to bedrock deposits. This is likely to have adversely affected any remains of the cropmarked enclosure, particularly shallow features and deposits, if any existed. However, there remains the potential for deeper cut features, such as an outer ditch, to be partially preserved in this area.

6.1.5 No evidence of archaeological activity was identified within the Cae Lodge area. The geophysical survey results would suggest significant modern disturbance through the centre of the site. Other modern services, largely water pipes, were also identified in Trenches 1 and 5, along with several agricultural land drains in Trenches 1-3. With the exception of the southeast corner of the site (the location of NPRN 404548) the archaeological potential of this area would appear to be low.

The Central Area

6.1.6 Within the central area the main feature of interest as identified from the geophysical survey results had appeared to be a possible large circular enclosure, which was defined on the ground by a significant change of slope across the northern end of the site. The magnetic responses suggested a potential stone bank, flanked by ditches to the north and south, and a possible outer bank to the south.

6.1.7 This bank was investigated by Trenches 8 and 9, both of which indicate that the magnetic response for the main bank is caused by underlying bedrock deposits coming close to the surface as overlying deposits are thin on the gradient. These bedrock deposits (805 & 907) were entirely natural in appearance, with no evidence that they had been artificially deposited. Thicker subsoil deposits (806 & 902) indicate colluvium collecting at the base of the gradient. The relative thickness may account for the possible northern ditch feature suggested by the geophysical survey results. These thicker colluvium deposits were also identified within Trenches 6 and 7 (602 & 702) on the lower-lying ground to the north. Within Trench 7 excavation revealed an underlying deposit of reddish-brown and grey clay (703) that appeared to be alluvial in nature. No evidence of linear features or archaeological activity was identified on the lower lying ground to the north.

6.1.8 Three possible linear features were identified across the top of the gradient to the south. Within Trench 8 a possible gully [804] appeared to define the upper edge of the gradient. However, there was no clear indication within the infilling material that this feature was archaeological in nature and may have been naturally occurring, or potentially the result of plough scarring at the top of the slope. More positive linear features were identified within Trench 9, comprising parallel ditches 904 and 906. The size, location and infilling material of the ditches clearly indicating the two are related. No finds were recovered, but the ditches are reminiscent of a typical field boundary, with the size suggesting a relatively ephemeral boundary. No such boundary has been identified on historic map sources, which may be an indication that the boundary is pre-19th century in date.

6.1.9 The sloping ground and identified linear features did not appear to represent a large enclosure. Rather the gradient seemed to be natural in origin, and this most probably represents the southern extent of the former Nant Clarach water course that has now been channelled some 100m to the north.

6.1.10 The only features of any significant archaeological interest identified within the evaluation trenches were a ditch [1010] and a possible surface (1003), both located towards the eastern end of Trench 10. Deposit 1003 may represent deliberate infill of Ditch 1010. This feature (1003) is clearly visible on the geophysical results as an east – west orientated linear feature,

the strength of the magnetic response suggesting a possible buried wall. Upon excavation however the linear feature was represented by a ditch, with magnetic readings to the south likely to be the result of either iron-panning (1008) identified within, and to the southeast of the ditch, or a later compact stony layer (1003). The infilling material gives little indication as to the function of the ditch, although the iron-panning itself is likely to be the result of water-logging, suggesting the ditch may have provided a drainage function. No dateable material was recovered, although the ditch was sealed beneath several layers of later deposits which may be an indication of some antiquity. One such sealing deposit was fairly compact and stony in nature (1003), which may have formed a suitable surface for a trackway, potentially giving access to features associated with medieval or post-medieval Plas Gogerddan.

6.1.11 Despite the proximity to an area of significant archaeological interest to the east (SAM CD259) no positive evidence of prehistoric or early medieval archaeological activity was identified within the evaluation area, with the possible exception of ditch 1010, which remains undated. Given the antiquity of Plas Gogerddan, this area may have been in agricultural use since the medieval period. It is also possible that the area may have undergone extensive landscaping also in association with Plas Gogerddan, which is not uncommon in post-medieval parkland landscapes. There is a significant change of levels from land (containing SAM CD259) to the west of the local road that defines the western edge of the site, and land to the east of the road (the Central Area), which suggests ground levels in this area may have been artificially lowered at some point, and this may have impacted upon any previous archaeological remains.

6.2 *Conclusion and Recommendations*

6.2.1 No finds, features or deposits of archaeological interest were encountered within the Cae Lodge area. There remains the potential for archaeological remains to survive within the area of the enclosure NPRN 404548, although these are likely to have been compromised by stripping and levelling works in this area. It is recommended that no further development is undertaken in the area of the enclosure, but no archaeological constraint was identified elsewhere in the Cae Lodge area.

6.2.2 A geophysical survey identified potentially significant archaeological features within the Central Area, largely comprising a potential enclosure defined by banks and ditches. The archaeological evaluation identified these feature as being largely natural in origin, corresponding to the terrace of a former water course, with alluvial and colluvium building up on the lower-lying ground to the north. Three linear features were identified close to the top of the sloping ground defining this area. One feature also appears to be potentially natural in origin, with the remaining two linear features likely to represent a former field boundary of limited archaeological interest.

6.2.3 One feature of potential archaeological significance was uncovered towards the south-eastern end of the site, corresponding to a ditch [1010] and possible later surface or trackway (1003), both of which are of uncertain date. Remains of these features were first encountered at depths of between 0.25m and 0.38m below current ground levels (29.09mOD – 28.96mOD).

6.2.4 Preservation *in situ* is recommended if possible for any features of potential archaeological significance, which would apply to ditch [1010]. Should such preservation not be possible then further archaeological recording may be necessary to provide preservation through record on any elements of this ditch that may be disturbed during development works.

6.2.5 Despite the lack of significant archaeological finds, features or deposits being uncovered within the proposed development area, the proximity of known areas of archaeological activity means there remains the potential for archaeological features to be present, albeit a reduced potential. Therefore it is recommended that an archaeological watching brief be maintained on any ground-breaking activity associated with the proposed development, with contingencies in place to allow for further archaeological excavation should significant archaeological features be uncovered.

6.3 *Storage and Curation*

6.3.1 The project archive will be prepared in accordance with: *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (CIfA, 2014), the requirements of the National Monuments Record (Wales) and the *Management of Research Projects in the Historic Environment, MoRPHE* (Historic England, 2006). The archive will be deposited with Ceredigion Museum, Aberystwyth and with the RCAHMW.

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Cartographic

Anon 1842 Llanbadarn Fawr tithe map

Ordnance Survey 1823 Original Surveyors drawing: Aberystwyth

Ordnance Survey 1888 1st Edition 1:2500 map Cardiganshire

Ordnance Survey 1905 2nd Edition 1:2500 map of Cardiganshire

Internet Sources

British Geological Survey: Geology of Britain Viewer

http://mapapps.bgs.ac.uk/geologyofbritain/ (Accessed 27/07/16)

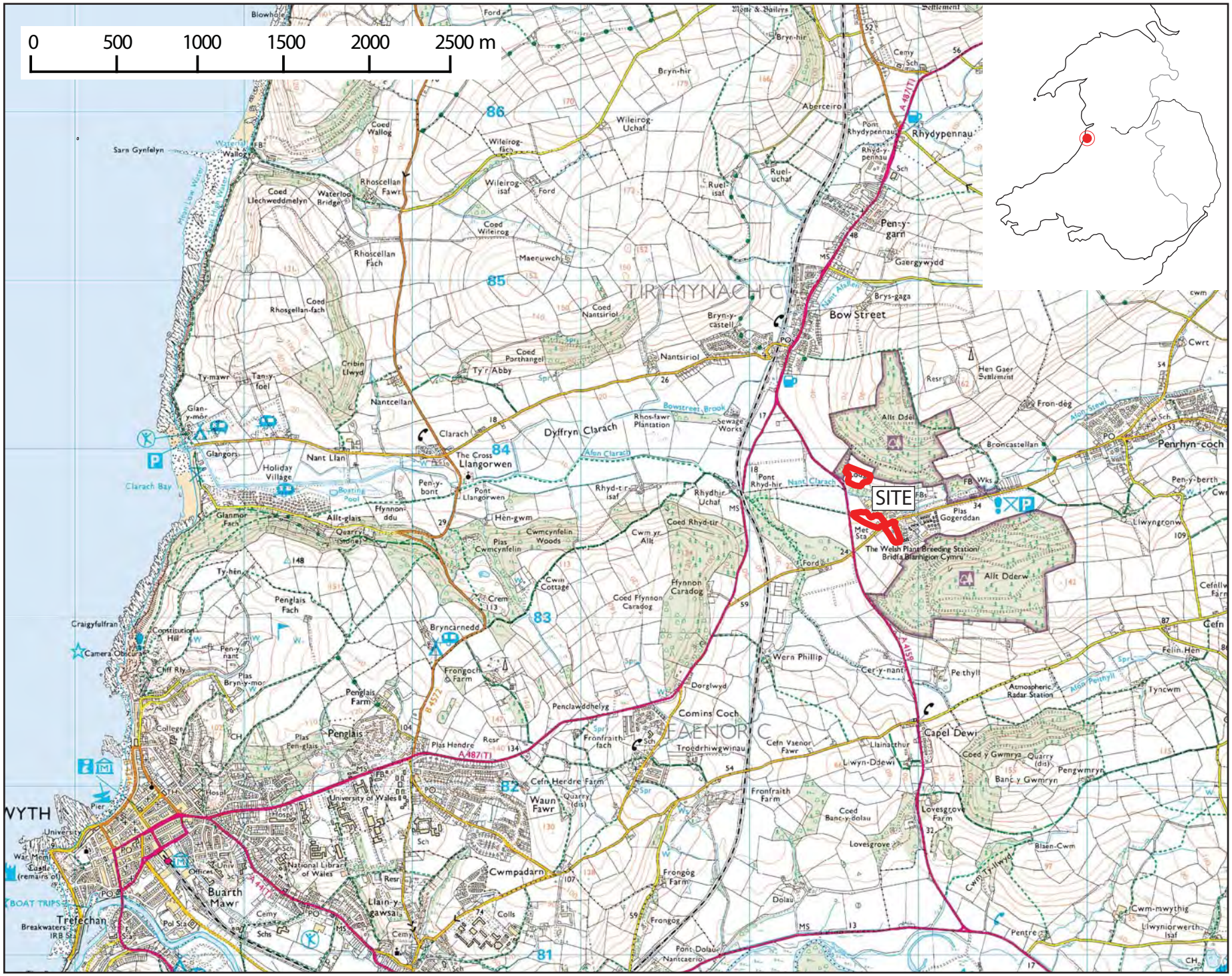

Figure 1: Location map, 1:30,000 @ A4

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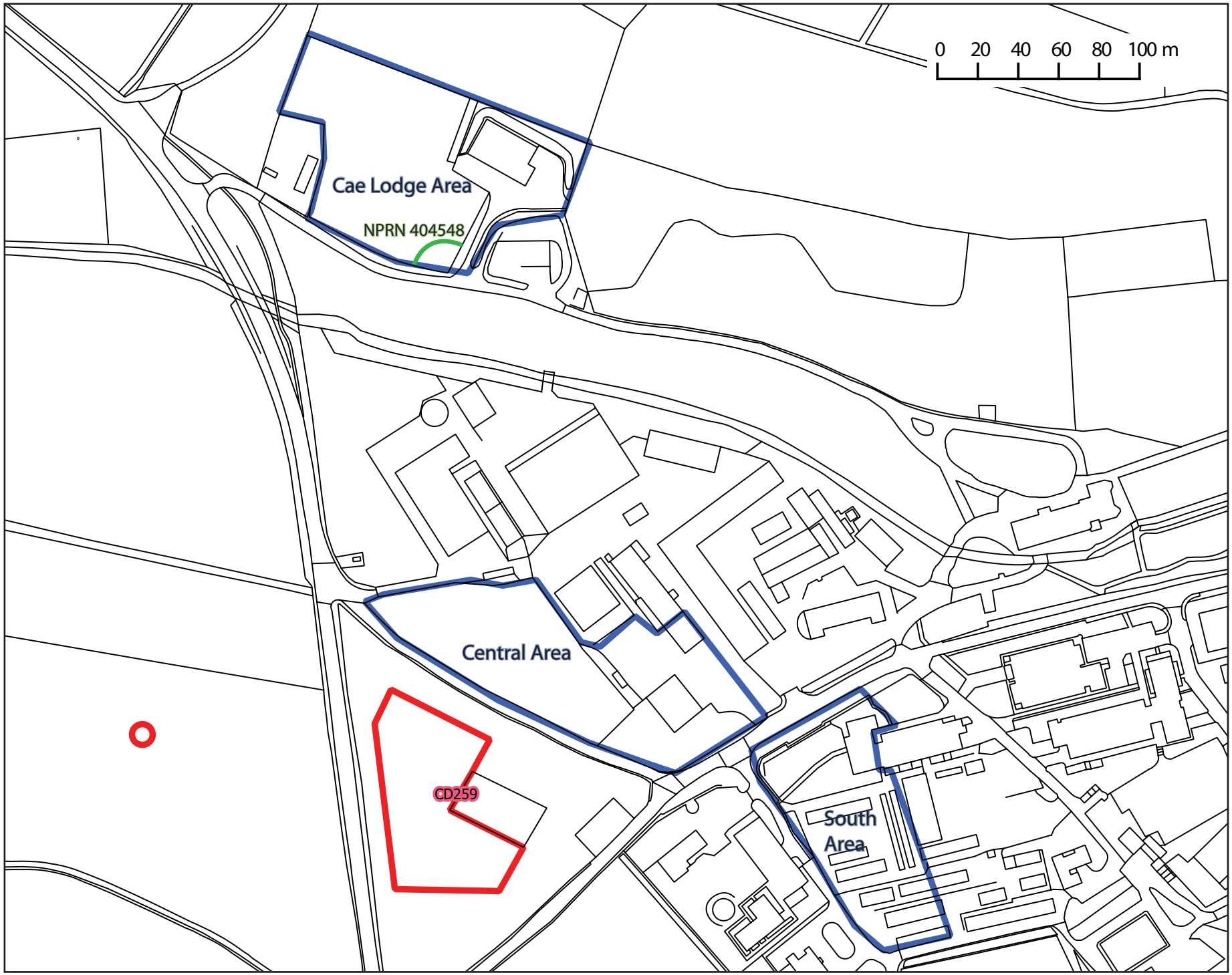

Figure 2: Site layout, showing the areas of proposed development in blue, and the extent of the Scheduled Area in red, and approximate location of enclosure NPRN 404548 in green.

1:2500 @ A4

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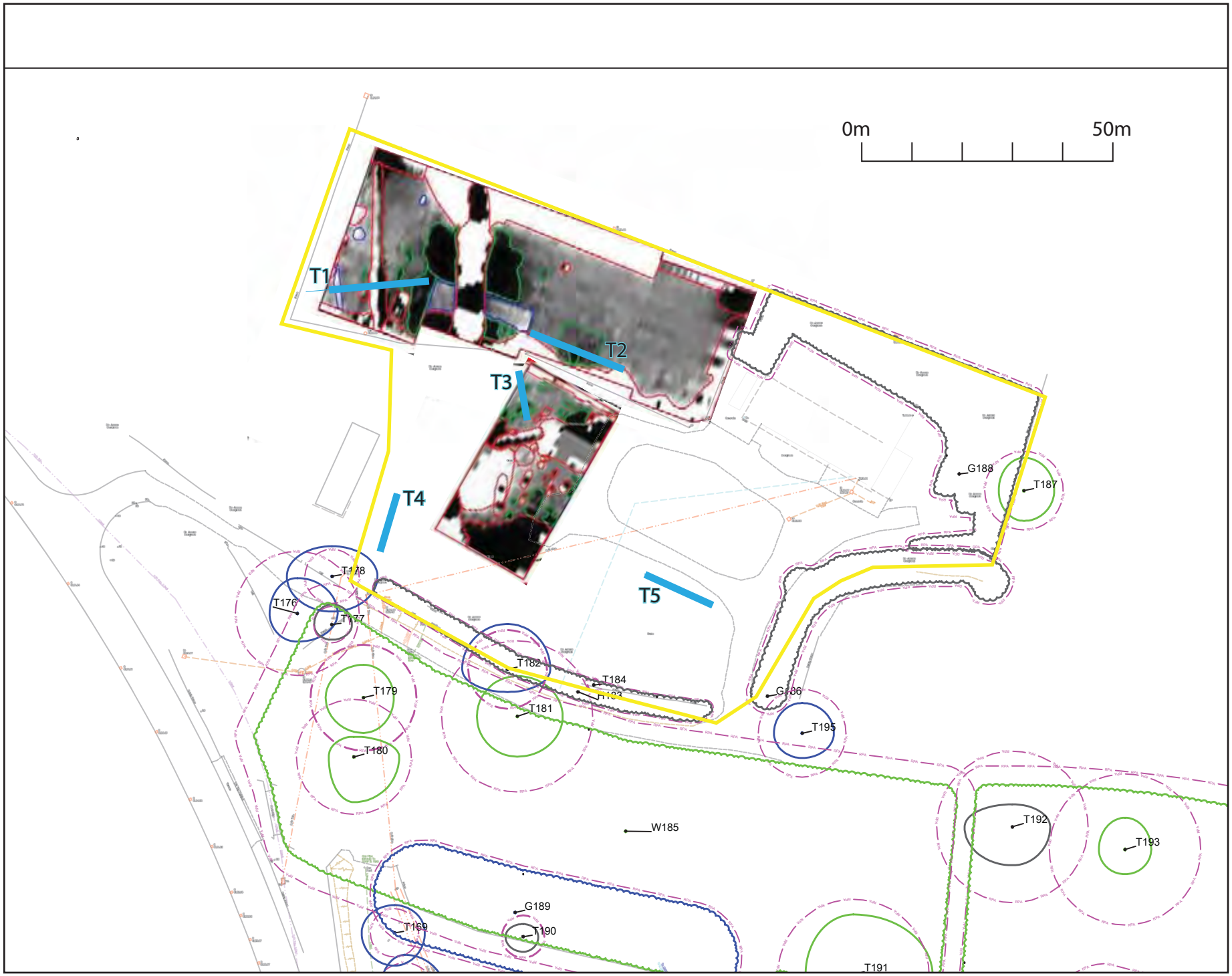

Figure 3: Trench location plan (in blue) in the Cae Lodge Area, overlaid on geophysical survey results and site survey details.

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Figure 4: Trench location plan (in blue) for the Central Area overlaid on geophysical survey and site survey results.

Trench 1 - North facing section

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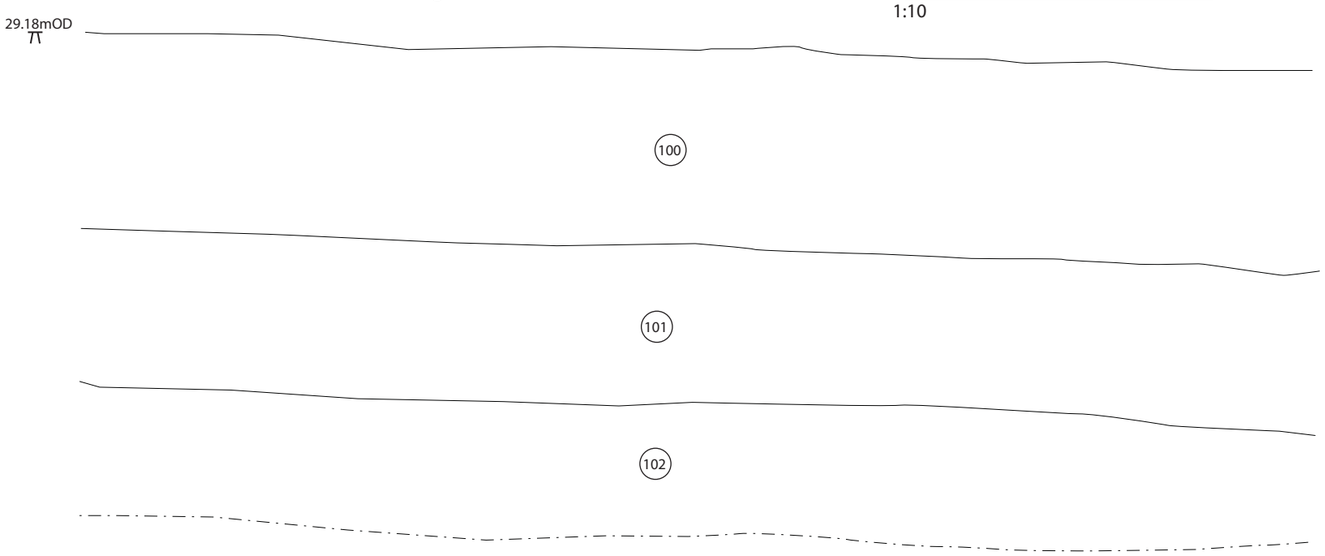

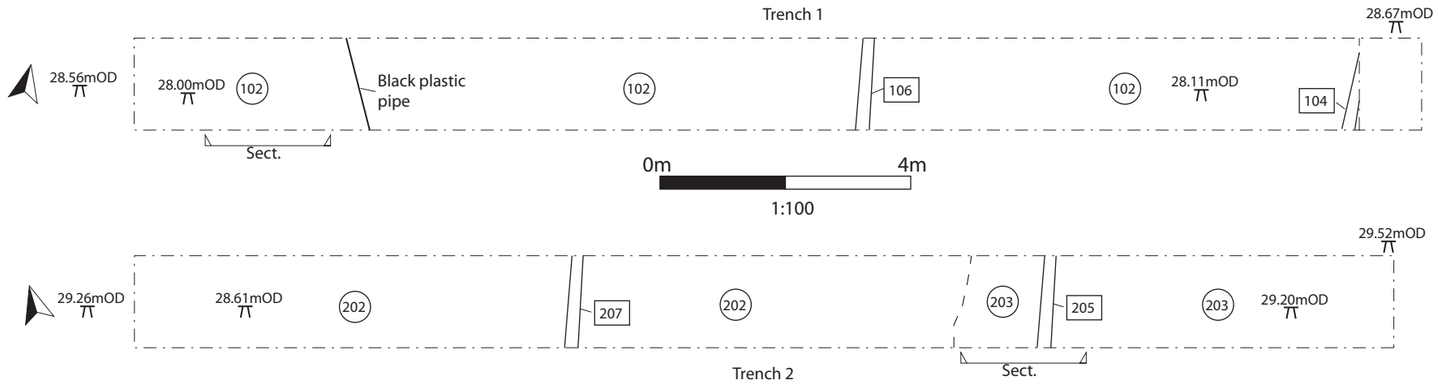

Trench 2 - North facing section

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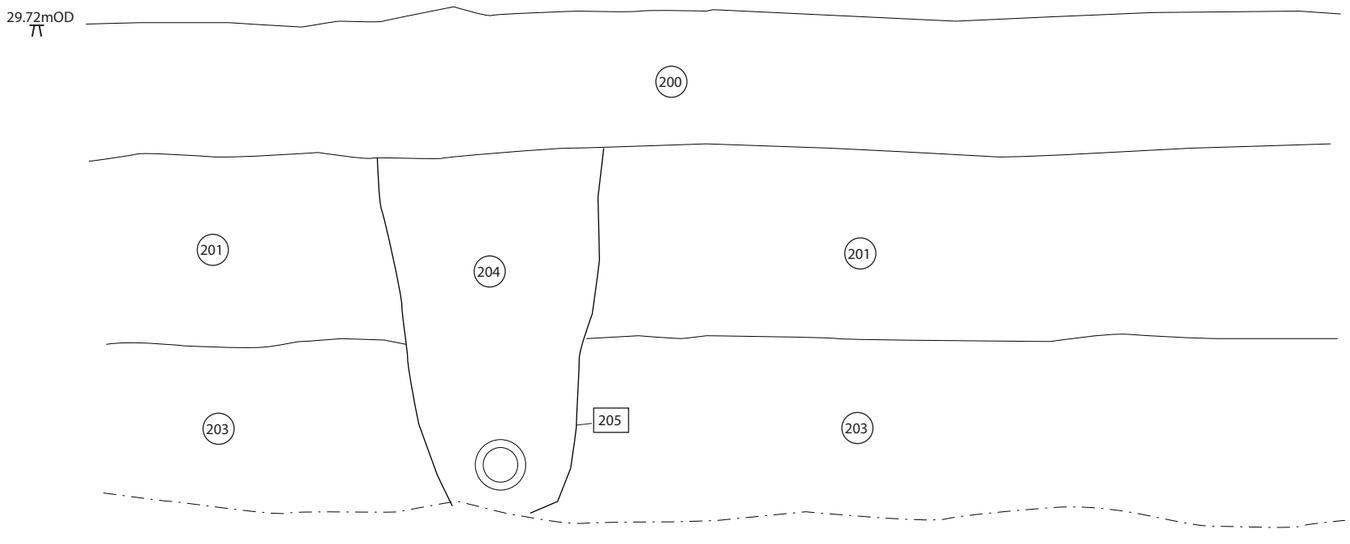

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Drawing Title:	Sections and plans of Trenches 1 & 2
Date:	September 2016
Drawn By:	PP
Scale:	Section 1:10 @ A3. Plan 1:100 @A3
Figure 5	

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Trench 3 - West facing section

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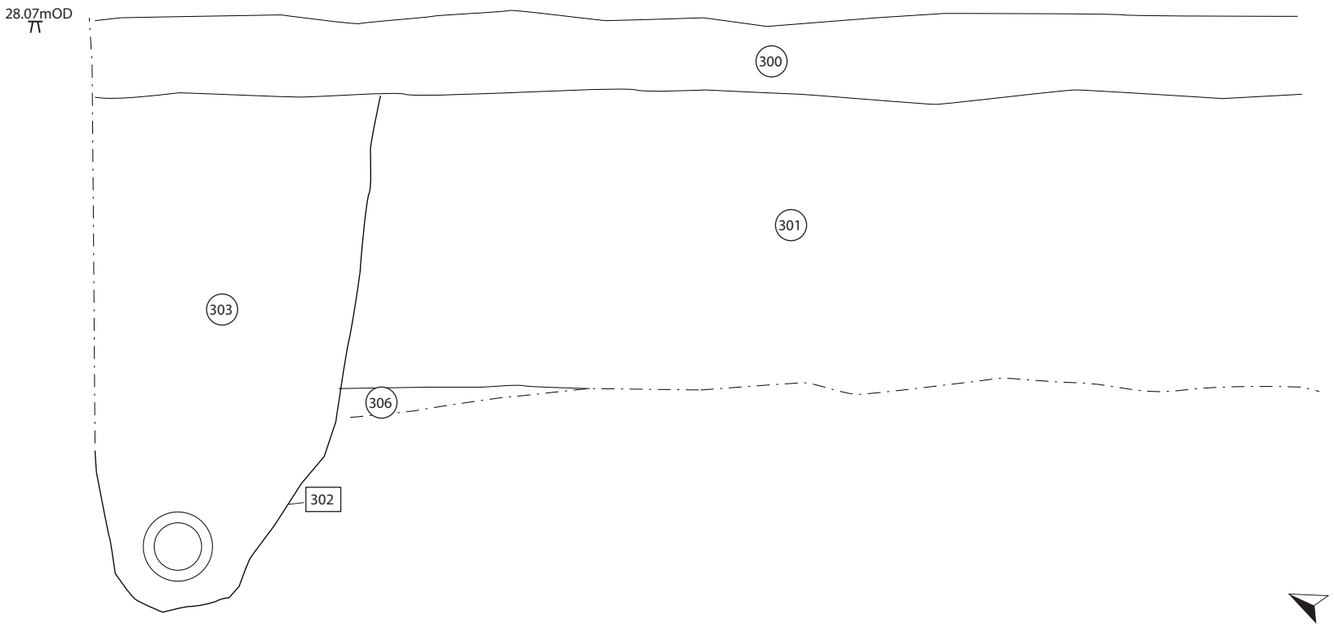

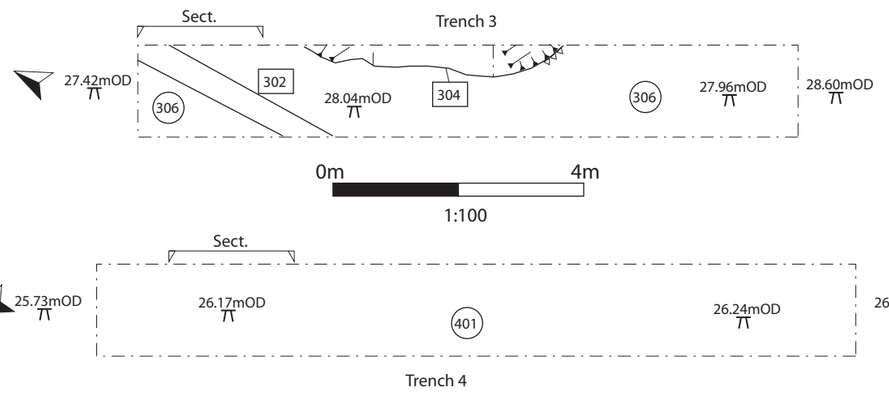

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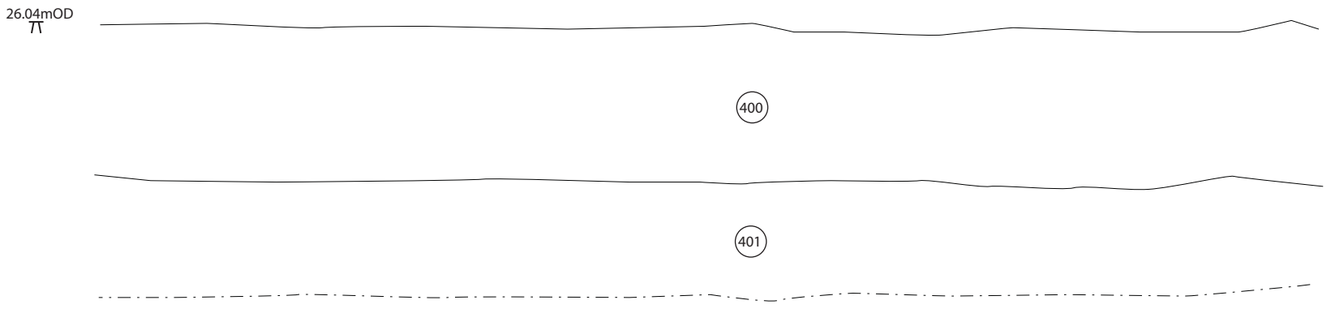

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Drawing Title:	Sections and plans of Trenches 3 & 4
Date:	September 2016
Drawn By:	PP
Scale:	Section 1:10 @ A3. Plan 1:100 @A3
Figure 6	

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Trench 5 - South facing section

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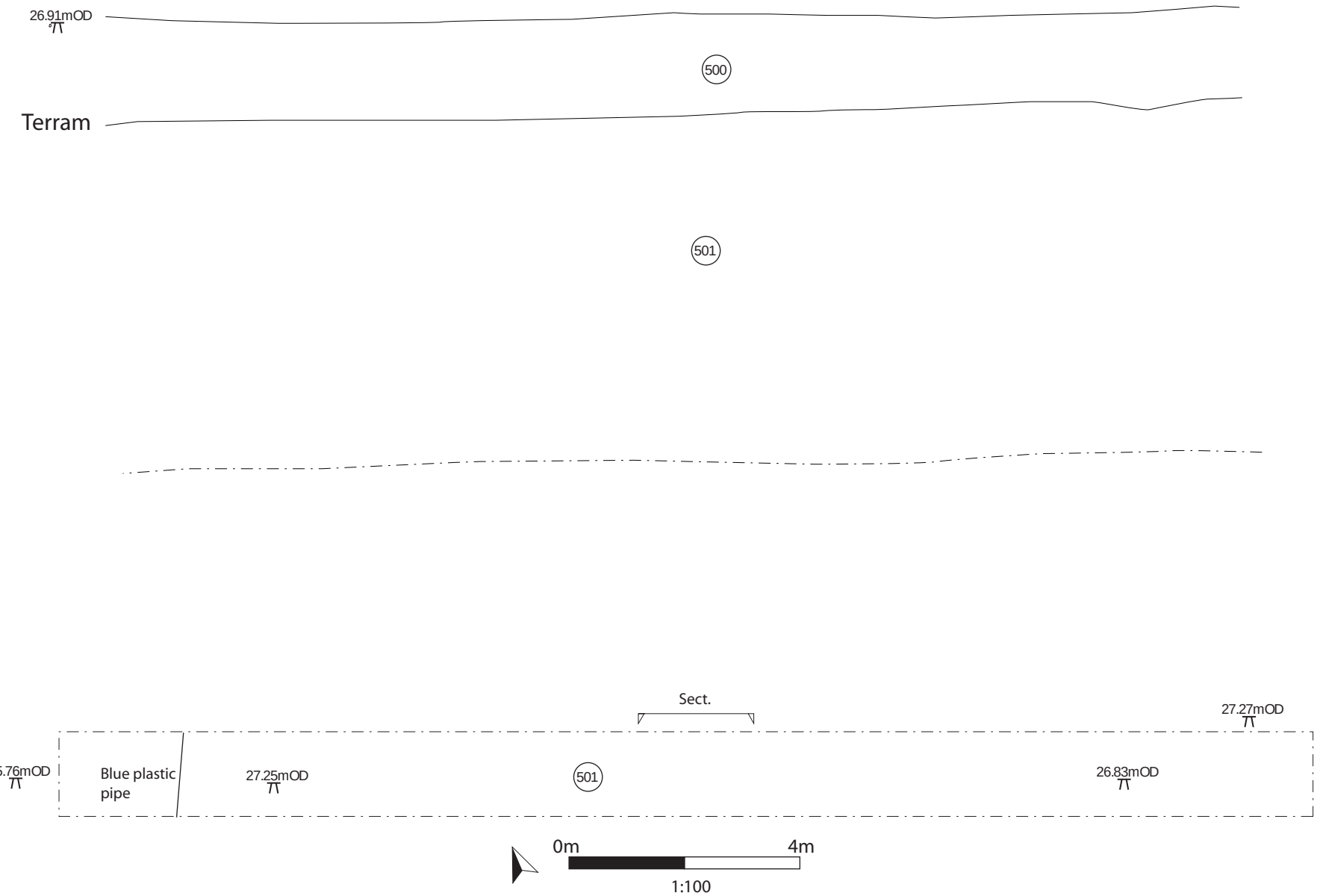

Job Title: Gogerddan Campus

Drawing Title: Section and plan of Trench 5

Date: September 2016

Drawn by: PP

Scale: Section 1:10 @A4
Plan 1:100 @ A4

Figure 7

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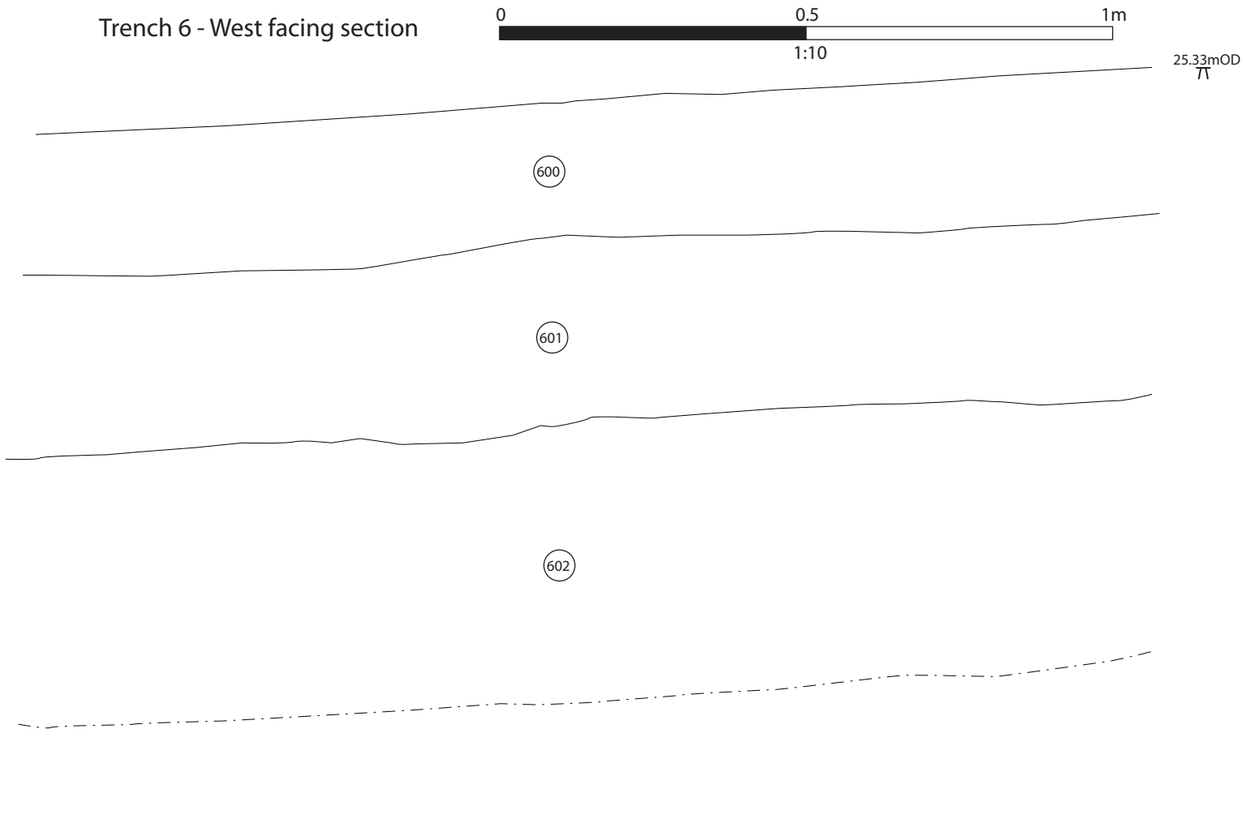
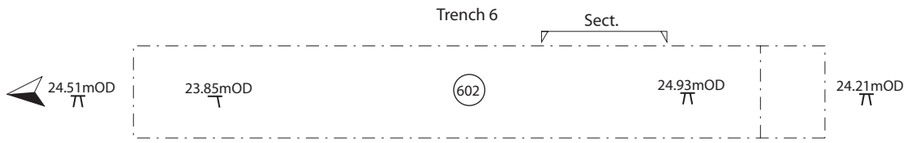
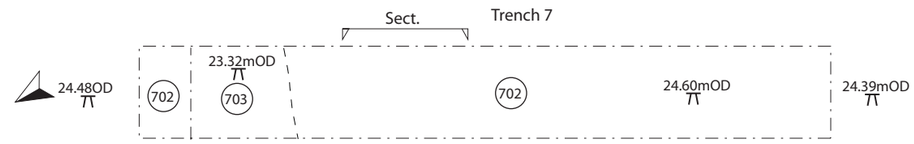
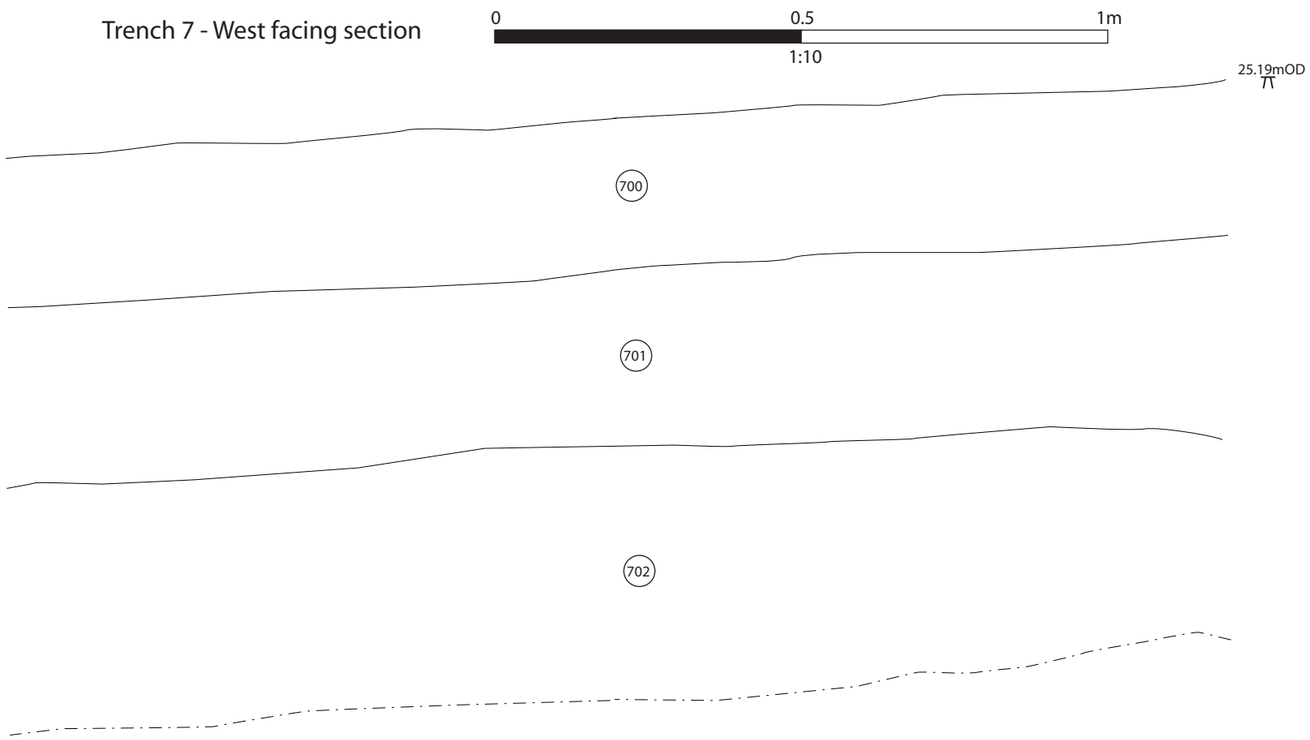
Trench 6 - West facing section







Trench 7 - West facing section



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Drawing Title:	Sections and plans of Trenches 6 & 7
Date:	September 2016
Drawn By:	PP
Scale:	Section 1:10 @ A3. Plan 1:100 @A3
Figure 8	

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Trench 8 - East facing section

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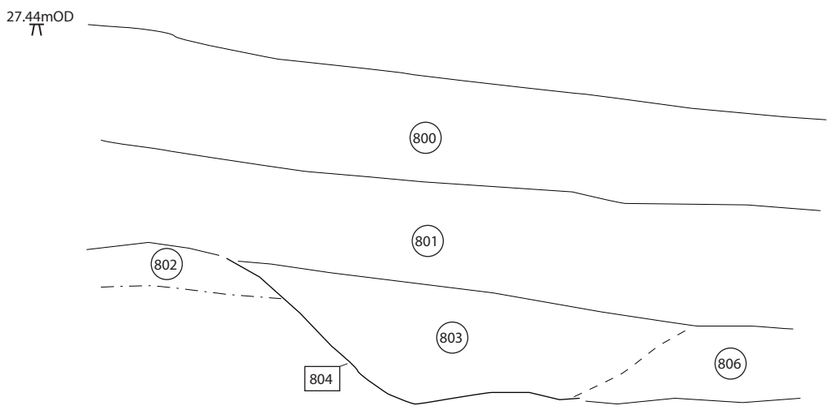

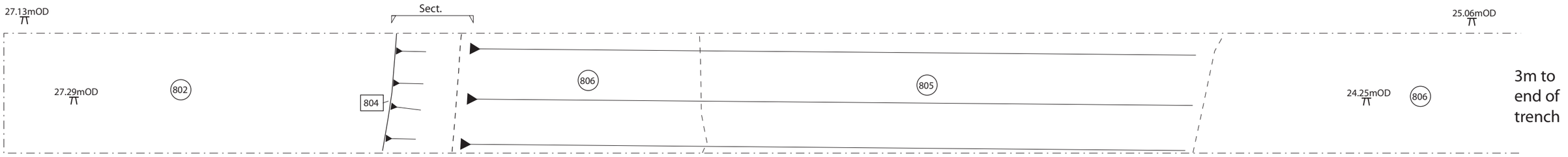

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Date:	September 2016
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Figure 9	

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Trench 9 - East facing section

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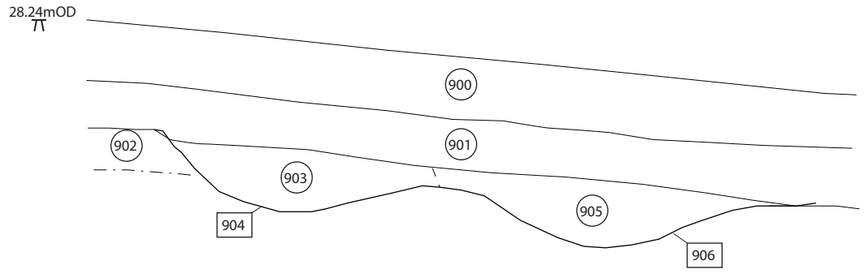
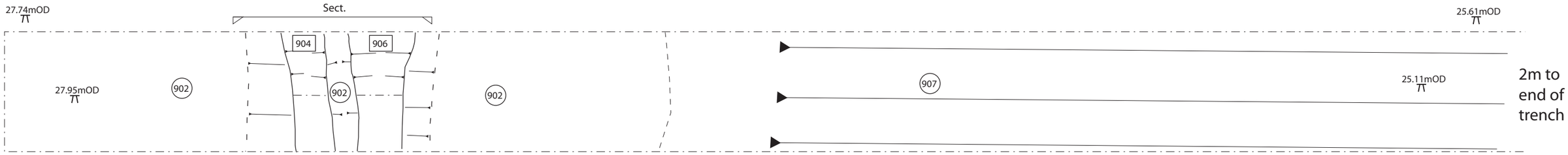
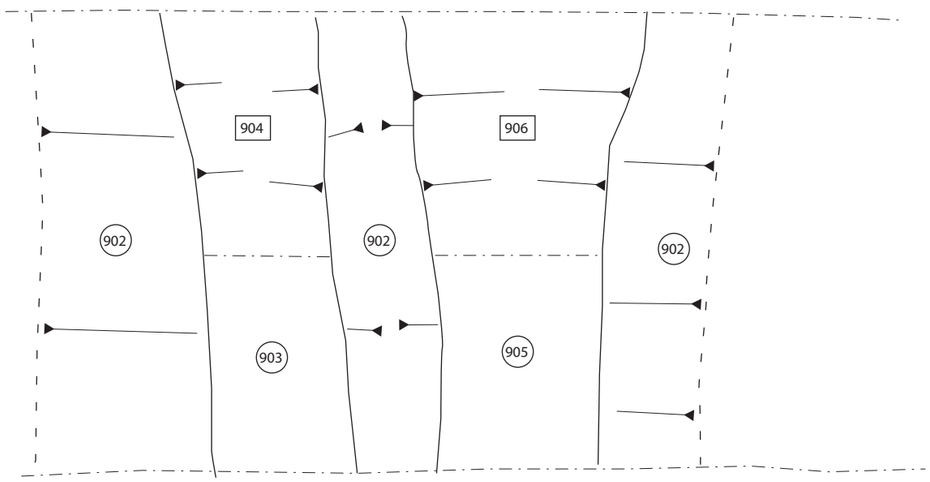




0m 4m

1:50



0m 1m

1:20

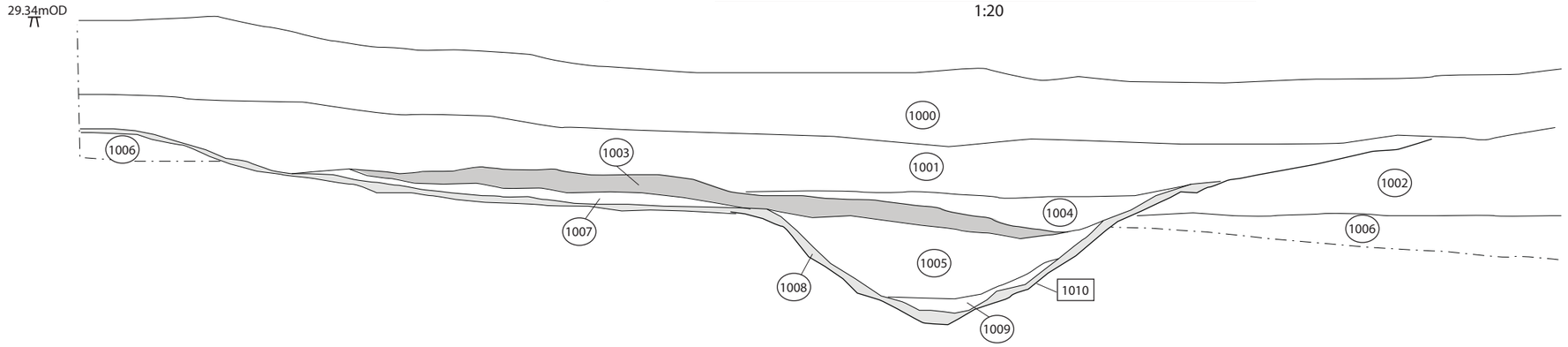
Job Title:	Gogerddan Campus
Drawing Title:	Section and plans of Trench 9
Date:	September 2016
Drawn By:	PP
Scale:	Section 1:10 @ A3. Plans as shown
Figure 10	

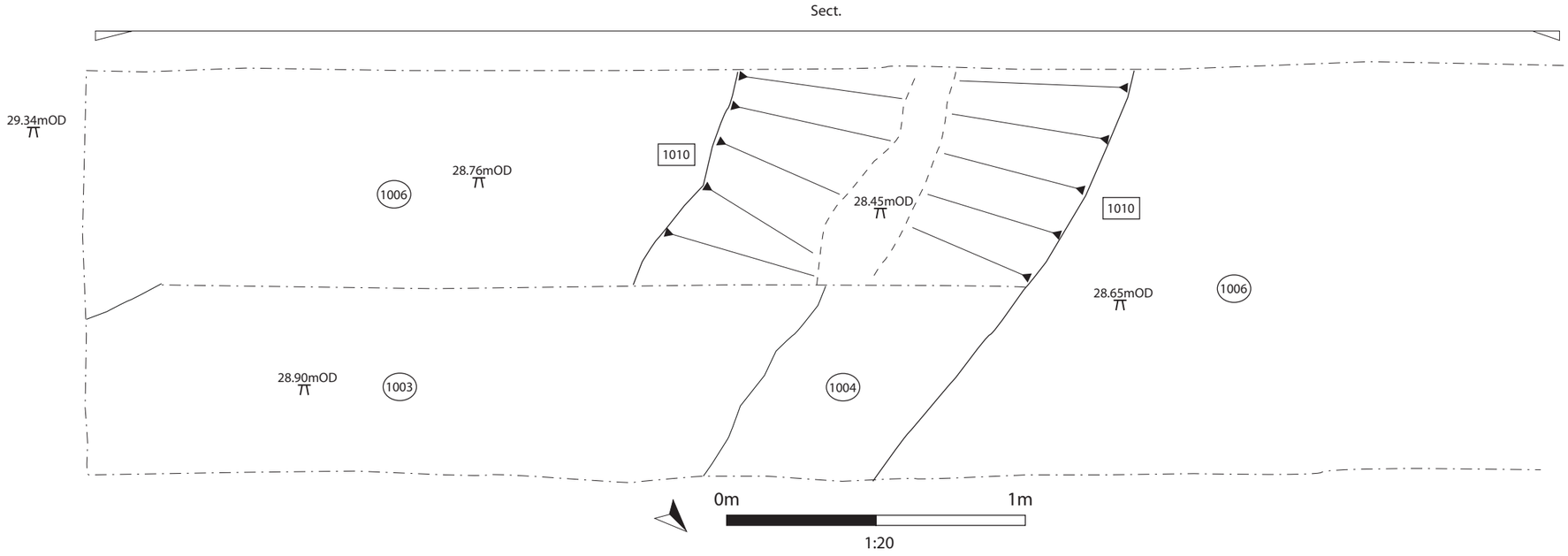
ARCHAEOLOGY WALES
Revealing the past, informing the future

Trench 10 - Northeast facing section

0 1m 2m

1:20





Job Title:	Gogerddan Campus
Drawing Title:	Section and plan of Trench 10 (SE end)
Date:	September 2016
Drawn By:	PP
Scale:	1:20 @ A3
Figure 11	

ARCHAEOLOGY WALES
Revealing the past, informing the future

Photo 1: The Central Area prior to groundworks commencing. Note the change of slope within the field, and the difference in levels between the field and field to the right of the road, which contains the Scheduled Area of archaeological remains.

Photo 2: Trench 1, post excavation. View East. 2m & 1m scale.

Photo 3: Trench 1, post excavation. View West. 2m & 1m scale.

Photo 4: Trench 1. Representative North-facing section. 1m scales.

Photo 5: Trench 2, post excavation. View West. 2m & 1m scale.

Photo 6: Trench 2, post excavation. View East. 2m & 1m scale.

Photo 7: Trench 2. Representative north-facing section, also showing field drain [205]. 1m scales.

Photo 8: Trench 3, post excavation. View Southwest. 2m & 1m scale.

Photo 9: Trench 3, post excavation. View Northeast. 2m & 1m scale.

Photo 10: Trench 3. West-facing section, including feature [304]. 1m scales.

Photo 11: Trench 3. West-facing section, including land drain [302]. 1m scales.

Photo 12: Trench 4, post excavation. View South. 2m & 1m scale.

Photo 13: Trench 4, post excavation. View North. 2m & 1m scale.

Photo 14: Trench 4, representative east-facing section. 1m and 0.3m scales.

Photo 15: Trench 5, post excavation. View Southeast. 2m & 1m scale.

Photo 16: Trench 5, post excavation. View Northwest. 2m & 1m scale.

Photo 17: Trench 5, representative Southwest-facing section. 1m scales.

Photo 18: Trench 6, post excavation. View North. 2m & 1m scale.

Photo 19: Trench 6, post excavation. View South. 2m & 1m scale.

Photo 20: Trench 6, representative West-facing section. 1m scales.

Photo 21: Trench 7, post excavation. View North. 2m & 1m scale.

Photo 22: Trench 7, post excavation. View South. 2m & 1m scale.

Photo 23: Trench 7, representative West-facing section. 1m scales.

Photo 24: Trench 8, post-excavation. View North. 2m & 1m scale.

Photo 25: Trench 8, post-excavation. View South. 2m & 1m scale.

Photo 26: Trench 8. East-facing section, also showing linear feature [804]. 1m & 0.5m scales.

Photo 27: Trench 9, post excavation. View North. 2m & 1m scales.

Photo 28: Trench 9, post excavation. View South. 2m & 1m scales.

Photo 29: Trench 9. West-facing section showing linear features [904] to the left, and [906] to the right. 2m, 0.5m & 0.3m scales.

Photo 30: Trench 9, view South, showing linear features [904] to the rear, and [906] to the front. 2m & 1m scales.

Photo 31: Trench 10, after machine excavation and initial cleaning. View Northwest. 2m & 1m scales.

Photo 32: Trench 10, after machine excavation and initial cleaning. View Southeast. 2m & 1m scales.

Photo 33: Trench 10. Northeast-facing section of ditch [1010]. 2m & 1m scales.

Photo 34: Trench 10. Southwest-facing section of ditch [1010]. 2m & 0.3m scales.

Photo 35: Trench 10. Oblique shot, view East, of ditch [1010], showing the extent of deposit (1003). 2m & 0.3m scales.

Photo 36: Trench 10, view Southwest. Showing excavated ditch [1010], and area of unexcavated deposit (1003) to the rear. 1m scales.

Photo 37: Trench 10, view North. Excavated ditch [1010]. 1m scales.

Photo 38: The Central Area after backfilling, looking Southeast. Showing the change of slope within the field.

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APPENDIX I:
Context List

Context Descriptions

Context Number	Context Type	Description	Dimensions (Length x width x thickness)
Trench 1			
100	Layer	• Topsoil (turf covered) • Moderate, light grey-brown clayey-silt (loam) • Rare, small sub-rounded stone • No finds	Across trench (>21m x >1.5m), 0.25m thick
101	Layer	• Subsoil-ploughsoil mix • Moderate, light reddish-brown silty-clay • Rare, small sub-rounded stone • No finds	Across trench (>21m x >1.5m), 0.40m thick
102	Layer	• Natural geological subsoil • Fairly compact, mottled light grey and reddish-brown silty-clay • Rare, small sub-rounded stone. Very rare, small charcoal flecks • No finds	Across trench (>21m x >1.5m), base not reached (>0.2m)
103	Fill	• Fill of 104 • Loose, mid greyish-brown clayey-silt • Rare, small-medium sub rounded stone • 19th/20th century circular ceramic land drain, 5cm internal diameter	>1.5m x 0.15m, 0.15m thick
104	Cut	• Land drain • Cut not discernible in plan, but land drain is linear, orientated north – south • Single fill (103) containing a 20th century ceramic drainage pipe.	>1.5m x 0.15m, 0.15m deep
105	Fill	• Fill of 106 • Loose, dark greyish-brown clayey-silt • Rare, small-medium sub-rounded stone • 19th/20th century circular ceramic land drain, 7.5cm internal diameter	>1.5m x 0.2m, 0.35m thick
106	Cut	• Land drain • Linear in plan, parallel straight sides. Orientated north – south • Steep straight sides, moderate break of slope on to a concave base • Single fill (105) containing a 19th/20th century ceramic drainage pipe	>1.5m x 0.2m, 0.35m deep
Trench 2			
200	Layer	• Topsoil (turf covered) • Moderate, mid reddish-brown clayey-silt (loam) • Rare, small sub-rounded stone • No finds	Across trench (>20.5m x >1.5m), 0.2m thick
201	Layer	• Subsoil-ploughsoil mix	Across trench

		• Moderate, mid grey-brown silty-clay • Rare, small to medium sub-angular and sub-rounded stone • No finds	(>20.5m x >1.5m), 0.28m thick
202	Layer	• Natural geological subsoil • Fairly compact, mid orange-brown clayey-silt • Common to abundant, small to medium angular stone • No finds	Across trench (>20.5m x >1.5m), base not reached (>0.4m)
203	Layer	• Bedrock • Fairly compact, fragmented light grey shale/slate (brash)	Not fully excavated (>7m x >1.5m), base not reached (>0.4m)
204	Fill	• Fill of [205] • Loose, dark brown clayey-silt (loam) • Rare, small sub-rounded stone • 19th/20th century ceramic land drain, circular, 0.05m internal diameter.	>1.5m x 0.2m 0.9m thick
205	Cut	• Land drain • Linear in plan, parallel straight sides. Orientated north – south • Steep straight sides, moderate break of slope on to a concave base • Single fill (204) containing a 19th/20th century ceramic drainage pipe.	>1.5m x 0.2m 0.9m deep
206	Fill	• Fill of [207] • Loose, dark brown clayey-silt (loam) • Rare, small sub-rounded stone • 19th/20th century ceramic land drain, circular, 0.05m internal diameter.	>1.5m x 0.2m 0.85m thick
207	Cut	• Land drain • Linear in plan, parallel straight sides. Orientated north – south • Steep straight sides, moderate break of slope on to a concave base • Single fill (206) containing a 19th/20th century ceramic drainage pipe.	>1.5m x 0.2m 0.85m deep
Trench 3			
300	Layer	• Topsoil (Turf covered) • Moderate, mid brownish-grey clayey-silt • Common, small sub-rounded stone • No finds	Across trench (>10m x >1.5m), 0.23m thick
301	Layer	• Subsoil/Ploughsoil mix • Moderate, mid grey-brown clayey-silt • Abundant, small-medium sub-angular and sub-rounded stone • No finds	Across trench (>10m x >1.5m), 0.37m thick
302	Cut	• Land drain • Linear, straight parallel sides, orientated NNW-	>2.5m x 0.2m), 0.62m deep

		SSW • Steep, straight sides, moderate break of slope on to a flat base • Single fill (303)	
303	Fill	• Fill of cut 302 • Loose, mid greyish-brown clayey-silt • Rare, small-medium sub rounded stone • 19th/20th century circular ceramic land drain	>2.5m x 0.2m), 0.62m thick
304	Cut	• Possible tree bowl • Irregular semi-circular in plan • Irregular sides, sometimes undercut. Irregular base • Single fill (305)	3.5m x >0.4m, 0.4m deep
305	Fill	• Fill of 304 • Loose, mid orange-brown clayey-silt • Abundant small sub-angular stone, rare small charcoal flecks • No finds	3.5m x >0.4m, 0.4m thick
306	Layer	• Natural Geological subsoil • Fairly compact, mid brownish-orange sandy-clay • Abundant small sub-angular stone • No finds	Across trench (>10m x >1.5m), base not reached
Trench 4			
400	Layer	• Topsoil (scrub covered) • Loose, dark grey-brown clayey-silt (loam) • Abundant, small-medium sub-rounded & sub-angular stone • No finds	Across trench >12m x >1.5m 0.25m deep
401	Layer	• Natural Geological subsoil/weathered bedrock • Fairly compact, light orange-brown clayey-silt • Very abundant (80%) medium-large fragmented shale • No finds.	Across trench >12m x >1.5m, base not reached >0.2m deep
Trench 5			
500	Layer	• Stone hardcore (turf covered) • Compact, light grey angular stone hardcore, laid over a layer of terram • No finds	Across trench >15m x >1.5m 0.18m deep
501	Layer	• Bedrock • Fairly compact, light grey-brown silty-sand • Very abundant (80%) medium-large fragmented shale • No finds	Across trench >15m x >1.5m, base not reached >1.02m deep
Trench 6			
600	Layer	• Topsoil (turf covered) • Loose, mid grey-brown silty-clay (loam) • Rare, small sub-rounded and sub-angular stone • CBM	Across trench >11m x >1.5m 0.23m deep
601	Layer	• Subsoil/Ploughsoil mix	Across trench

		• Loose, mid reddish-brown clayey-silt • Abundant, small-medium sub-angular and sub-rounded stone • No finds	>11m x >1.5m 0.3m deep
602	Layer	• Natural geological subsoil (colluvium) • Fairly compact, dark reddish-brown clayey-silt • Abundant, small to medium sub-angular and sub-rounded stone • No finds	Across trench >11m x >1.5m, base not reached >0.42m deep
Trench 7			
700	Layer	• Topsoil (turf covered) • Loose, mid grey-brown silty-clay (loam) • Rare, small sub-rounded and sub-angular stone	Across trench >11m x >1.5m 0.25m deep
701	Layer	• Subsoil/Ploughsoil mix • Fairly compact, mid grey-brown clayey-silt • Common, small-medium sub-angular and sub-rounded stone • No finds	Across trench >11m x >1.5m 0.3m deep
702	Layer	• Natural geological subsoil (colluvium) • Fairly compact, mid reddish-brown clayey-silt • Common, small to medium sub-angular and sub-rounded stone. Rare, flecks of manganese • No finds	Across trench >11m x >1.5m 0.37m deep
703	Layer	• Natural geological subsoil • Fairly compact, mottled light reddish-brown & grey clay • No finds	>2m x >1.5m, base not reached
Trench 8			
800	Layer	• Topsoil (turf covered) • Loose, mid grey-brown silty-clay (loam) • Rare, small sub-rounded and sub-angular stone • Late 19th/early 20th cent. creamware jar fragment • Iron object – spring/twisted wire	Across trench >21.5m x >1.5m 0.2m deep
801	Layer	• Subsoil/Ploughsoil mix • Loose, dark reddish-brown sandy-silt • Abundant, small-medium sub-angular and sub-rounded stone • No finds	Across trench >21.5m x >1.5m 0.15m deep
802	Layer	• Natural geological subsoil • Fairly compact, light reddish-brown clayey-silt • Abundant, small to medium sub-angular and sub-rounded stone. • No finds	Across trench >21.5m x >1.5m base not reached
803	Fill	• Fill of 804 • Loose, dark reddish-brown clayey-silt • Rare, small sub-angular & sub-rounded stone • No finds	>1.5m x 0.75m, 0.19m thick
804	Cut	• Gully/natural feature	>1.5m x 0.75m,

		• Linear in plan, straight southern edge, uncertain northern edge • Southern edge has gentle break of slope at top, moderately sloping irregular side. Moderate break of slope at base on to a flat, slightly irregular base. • Single fill (803)	0.19m deep
805	Layer	• Bedrock • Fairly compact, light grey fragmented shale/slate	>6m x >1.5m
806	Layer	• Natural geological subsoil • Fairly compact, dark reddish-brown sandy-silt • Rare, small sub-angular and sub-rounded stone • No finds	>15m x >1.5m, 0.25m+ thick
Trench 9			
900	Layer	• Topsoil (turf covered) • Loose, dark grey-brown silty-clay (loam) • Common, small sub-rounded and sub-angular stone • Post-med Fe horseshoe	Across trench >20.5m x >1.5m, 0.22m thick
901	Layer	• Subsoil/Ploughsoil mix • Loose, dark reddish-brown sandy-silt • Abundant, small-medium sub-angular and sub-rounded stone • No finds	Across trench >20.5m x >1.5m, 0.15m thick
902	Layer	• Natural geological subsoil • Fairly compact, light reddish-brown clayey-silt • Abundant, small-medium sub-angular and sub-rounded stone • No finds	Across trench >20.5m x >1.5m base not reached
903	Fill	• Fill of 904 • Moderate, mid grey-brown clayey-silt • Abundant, small sub-angular stone and gravel/grit • No finds	>1.5m x 0.45m, 0.2m thick
904	Cut	• Ditch • Linear in plan, straight parallel edges. Orientated east – west • Moderately sloping concave sides. Moderate break of slope on to a concave base • Contained a single fill (903)	>1.5m x 0.45m, 0.2m deep
905	Fill	• Fill of 906 • Moderate, mid grey-brown clayey-silt • Abundant, small sub-angular stone and gravel/grit • No finds	>1.5m x 0.65m to 0.9m, 0.26m thick
906	Cut	• Ditch • Linear in plan, straight edges, slight splay apart to the west. Orientated east – west • Moderately sloping concave sides. Moderate	>1.5m x 0.65m to 0.9m, 0.26m deep

		break of slope on to a concave base • Contained a single fill (905)	
907	Layer	• Bedrock • Fairly compact, light grey fragmented shale/slate	>10m, >1.5m
Trench 10			
1000	Layer	• Topsoil (turf covered) • Loose, mid grey-brown clay-silt • Rare, small sub-rounded and sub-angular stone • Post-med CBM fragment	Across trench >20m x >1.5m, 0.24m thick
1001	Layer	• Subsoil • Moderate, mid-grey clayey-silt • Rare, small sub-angular stone • No finds	4.3m x 1.5m, 0.2m thick
1002	Layer	• Subsoil • Loose, mid-brown clayey-silt • Rare, small-medium sub-angular and sub-rounded stone • No finds	>15m x >1.5m, 0.24m thick
1003	Fill / Surface	• Fill of 1010 (possible surface for trackway) • Fairly compact, light grey clay • Abundant, small-medium sub-rounded and sub-angular stone • No finds	2.5m x 1.5m, 0.05m thick
1004	Fill	• Fill of 1010 (silting) • Fairly compact, mid grey silty-clay • Rare, small sub-rounded stone • No finds	1.4m x 0.8m, 0.12m thick
1005	Fill	• Fill of 1010 • Fairly compact, light grey clay • Mottled with patches and bands of iron-panning • Rare, medium sub-rounded stone. Rare charcoal flecks • No finds	1.2m x 0.8m, 0.24m thick
1006	Layer	• Natural geological subsoil • Fairly compact, light orange-brown sandy-clay • Rare, small-medium sub-rounded stone • No finds	Across trench >20m x >1.5m base not reached
1007	Layer	• Possible ditch upcast • Fairly compact, light greyish-yellow sandy-clay • No finds	2m x 0.8m, 0.03m thick
1008	Fill	• Fill of 1010 (water-affected subsoil: iron-panning layer) • Compact, dark orange-black sandy-clay • Rare, small-medium sub-rounded stone • No finds	5m x 0.8, 0.05m thick
1009	Fill	• Lower (primary) fill of 1010 • Loose, light grey silty-clay • No finds	0.7m x 0.8m, 0.05m thick

1010	Cut	• Ditch • Linear in plan, parallel sides, slight eastward curve. Orientated east-west • Sharp break of slope on north side, moderate on south side. Moderate, straight sides, moderate break of slope on to a shallow concave base • Five fills – 1008, 1009, 1005, 1003, 1004 (lowest to highest)	>1.5m x 1.4m, 0.7m deep

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APPENDIX II:
Finds Catalogue

Archaeology Wales Ltd.

Finds catalogue Gogerddan Campus, Aberystwyth University

Site code: GCA/16/EV

Number	Context	Description	Amount	Weight	Kept/Disc.
Pottery					
	800	Light brown glazed creamware jar - late 19th/20th C.	1	26	Disc
Metal	800	Corroded Fe object - ?spring	1	36	Disc
	900	Fe horse shoe	1	288	Disc
Other	600	Ceramic Building Material - 19th/20th C.	1	179	Disc.
	1000	Ceramic Building Material - Post med	1	167	Disc.
	1005	?Shaped slate disc	1	321	Kept
		Total finds:			
		Pottery	1		
		Metal	2		
		Others	3		
		Total:	**6**		

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APPENDIX III:
Written Scheme of Investigation

Archaeology Wales

WRITTEN SCHEME OF INVESTIGATION

FOR AN ARCHAEOLOGICAL EVALUATION

AT

Gogerddan Campus, University of Aberystwyth, Ceredigion

Prepared for:

Aberystwyth Innovation and Enterprise Campus Ltd

27th July 2016

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NON TECHNICAL SUMMARY

This Written Scheme of Investigation (WSI) details the proposal for programme of intrusive archaeological trial trench evaluation designed to investigate features of potential significance associated with the development of land at the Gogerddan Campus, University of Aberystwyth, Ceredigion. It has been prepared by Archaeology Wales Limited for Aberystwyth Innovation and Enterprise Campus Ltd, Aberystwyth University.

1. Introduction and archaeological background

Planned development works at the Gogerddan Campus, University of Aberystwyth, encompasses three areas. Two areas lie on either side of a local road, these areas have been referred to previously as the 'North Area' (centred on NGR SN 62707 83574) and the 'South Area' (centred on NGR SN 62848 83504), as well as an area referred as 'Cae Lodge', which lies to the north (centred on SN 62635 83824). These areas area illustrated in Figure 2. These works are being undertaken prior to the determination of a planning application, the planning authority is Ceredigion County Council (CCC).

This WSI has been prepared by Philip Poucher, Project Manager, Archaeology Wales Ltd (henceforth - AW) at the request of Aberystwyth Innovation and Enterprise Campus Ltd (AIEC), Aberystwyth University. It provides information on the methodology that will be employed by AW during an archaeological evaluation at the site.

The methodology set out in this WSI will be agreed with the development management division of Dyfed Archaeological Trust (DAT-DM), in their capacity as archaeological advisors to the local planning authority, prior to the commencement of any intrusive archaeological investigations on the site. DAT-DM recommended that an intrusive archaeological evaluation of the development area should be undertaken, as part of a wider programme of archaeological work, prior to the determination of the planning application. The recommendations made by DAT-DM are set out in the 'Brief for an Archaeological Field Evaluation at Gogerddan Campus, University of Aberystwyth, Ceredigion', prepared by DAT-DM for Ceredigion County Council in June 2016.

The Brief includes four key elements, comprising:

1. Documentary Search (Stage 1)
2. Geophysical Survey (Stage 2)
3. Intrusive Field Evaluation (Stage 3)
4. Archiving and Reporting (Stage 4)

Stage 1 and Stage 2 have already been completed by Dyfed Archaeological Trust. This WSI relates to Stage 3 and 4.

The purpose of the proposed archaeological evaluation is to provide the local planning authority with the information that they have requested from the client, the requirements for which are set out in Planning Policy Wales (revised edition 8, 2016), Section 6.5, and Welsh Office Circular 60/96.

All work will conform to the CIfA's Standards and Guidance for Archaeological Field

Evaluation (CIfA 2014), and be undertaken by suitably qualified staff to the highest professional standards.

2. Site description and historic background

The proposed development areas are located to the west and southwest 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 at the western floor of a narrow, steep-sided and forested valley through which two watercourses converge to become the westward flowing Nant Clarach.

Gogerddan Campus is situated within the former grounds of Plas Gogerddan; a late Georgian mansion house. The North Area and South Area are bisected by a minor B-road, which forks off to run along the western boundary of the North Area. The Cae Lodge area is located over 150m to the north, to the south of Allt Ddel woodland. It is partially occupied by a large agricultural shed and associated yard. The A4159 road flanks the western side of the campus.

The existing university campus is comprised mainly of large post-medieval and modern agricultural buildings, blocks of up to three storey high buildings and several glass houses and polytunnels. The South Area is presently largely occupied by the aforementioned glass houses, whilst the North Area encompasses a number of agricultural buildings and a small triangular field.

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. Previous archaeological investigations

A detailed study of the archaeological and historical background to the site has been undertaken by Dyfed Archaeological Trust (Bell & Murphy 2016), and this study will be used to help interpret the results of the archaeological evaluation. In summary however, the study has shown that the proposed development lies in an area with a high density of archaeological sites of many periods. Of particular note is an area of funerary and ritual activity dated from the late Neolithic/early Bronze Age, through the Iron Age and into the early medieval period. This area lies directly to the southwest of the existing campus, and in close proximity to both the North Area and South Area of the proposed development. The main area of activity is protected as a Scheduled Ancient Monument (CD259 – see Figure 2). A Bronze Age round barrow and several ring ditches have been recorded, both through crop marks and archaeological excavation. Two standing stones are also recorded, one of which was relocated in the 19th century but is surrounded by prehistoric pits and post holes. A number of Iron Age crouched burials are also recorded close to the Bronze Age ring ditches, and at least 22 early medieval graves have also been identified close to one of the standing stones. A radio-carbon date from one of the graves produced a 3rd to 7th century date, making this the only ecclesiastical site in Ceredigion that has been absolutely dated to the early medieval period.

Also of note is Gogerddan Park Enclosure Cropmark (NPRN 404548), which is located southeast corner of the Cae Lodge development area. This cropmark was revealed during aerial reconnaissance in 2006, and is described as an oval ditched enclosure measuring approximately 46m by 37m, likely to be prehistoric in date. The enclosure appears to largely lie under modern development associated with the Gogerddan Campus, and even the area containing the segment revealed in aerial photography in 2006 has since been resurfaced.

There was considered to be a medium to high potential for Neolithic to Bronze Age archaeological remains to be present within the proposed development areas, along with a high potential for early medieval cemetery activity. The potential for Iron Age remains to be present is described as low, but the presence of Iron Age burials and the Gogerddan Park Enclosure suggests the potential may in fact be much higher for the Iron Age period. There was also considered to be a potential for remains associated with the medieval gardens of Gogerddan mansion to be present within the development area, as well as lower potential for parkland features associated with the later post-medieval mansion.

A subsequent geophysical survey was undertaken of accessible parts of the North Area and the Cae Lodge area (Day 2016, Figures 3 & 4). The South Area was inaccessible due to the presence of buildings and other development on this part of the site.

The southeast part of the North Area was inaccessible as it has been developed. A large part of the area however consists of a triangular area of grassland, lined by trees. A large negative anomaly crossed the area, corresponding to a curved double bank or terrace of moderate incline that is visible on the ground. The polarity of the results suggested the bank may have been largely built from stone, with readings also suggesting an inner ditch. If part of a circular enclosure, the projected dimensions would be comparable to Iron Age defended enclosures, or early medieval ecclesiastical enclosures, both of which may potential occur at this location. Other lengths of bank and ditch were also recorded, as well as a possible buried wall.

The north-eastern part of the Cae Lodge area is occupied by a building, with farm machinery and other elements, along with vegetation limiting the area available for survey to the south. The surveyed area however identified a number of possible archaeological features, including a square pit with a central feature, reminiscent of early medieval graves recorded during excavation work in the, now scheduled, early medieval cemetery to the south (CD259).

3 Site specific objectives

The primary objectives of the work will be to locate and describe, by means of strategic trial trenching, archaeological features that may be present within the development area. The work will elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.

The work will include an assessment of regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

The work will result in a report that will provide information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation *in situ* will be advocated where at all possible, but where

engineering or other factors result in loss of archaeological deposits, preservation by record will be recommended.

4 Evaluation Methodology

General

The proposed archaeological work will be concentrated on accessible areas that are likely to contain the greatest archaeological potential.

The aim of the work will be to establish and make available information about the archaeological resource existing on the site. The work will include the following elements:

- A programme of strategic trial trenching (Stage 1)
- The production of an illustrated report and the deposition of the site archive (Stage 2)

5 Method statement for Strategic Trial Trenching (Stage 1)

Preliminary work

The archaeological project manager in charge of the work will satisfy him/herself that all constraints to ground works have been identified, including the siting of live services and Tree Preservation Orders.

The agreed evaluation areas will be positioned to maximise the retrieval of archaeological information and to ensure that the archaeological resource is understood.

It is proposed that ten (10) trenches will be excavated within the planned development area (Figures 3 & 4).

Trenches 1 to 5 will be located within the Cae Lodge area. Trench 1 is positioned to investigate two linear features identified in the northwest corner. Trench 2 is positioned to investigate a square-pit or possible grave feature identified by the geophysical survey. Trench 3 will be located to the south to investigate discrete anomalies, possibly pit features, identified on the geophysical survey. Trench 4 will be located to the southwest to investigate a general open area outside the area investigated by geophysical survey. Trench 5 will be located to the southeast in the area of the cropmarked enclosure NPRN 404548). The location of this trench is confined by the presence of surface features (planting frames and hay bales) as well as modern services that cross this area. All trenches will measure 20m in length, by 1.5m in width with the exception of Trench 3, which is limited to 10m in length due to the presence of modern services identified on the geophysical survey results.

Trenches 6 to 10 will be located in the North Area. Trenches 6 and 7 will be located towards the northern end of the field, to investigate the 'interior' of a possible circular enclosure, along with a linear feature and discrete features identified on the geophysical survey results. These trenches will be 10m in length, by 1.5m wide. Trenches 8 and 9 will be positioned to investigate the bank and ditch feature that would appear to enclose this northern area, and which is also visible on the ground as a distinct gradient. Trench 10 will be positioned to the southeast to investigate a linear feature identified as a possible ditch and wall on the geophysical survey, as well as the general area to the southeast of the bank and ditch. Trenches 8 - 10 will measure 20m in length, by 1.5m in

width.

No trenching is planned in the South Area due to the density of development within that area.

The exact positioning of the trenches will depend on the position of any extant services or other obstructions that come to light during the initial phase of ground works. The locations and dimensions of the trenches will be agreed with DAT-DM prior to the commencement of works.

Evaluation

The evaluation areas will be excavated to the top of the archaeological horizon by machine fitted with a toothless grading bucket under close archaeological supervision.

All areas will be subsequently hand cleaned using pointing trowels and/or hoes to prove the presence, or absence, of archaeological features and to determine their significance. The excavation of the minimum number of archaeological features will be undertaken, to elucidate the character, distribution, extent and importance of the archaeological remains. As a minimum small discrete features will be fully excavated, larger discrete features will be half-sectioned (50% excavated) and long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features. Should this percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits will be required.

Sufficient excavation will be undertaken to ensure that the natural horizons are reached and proven, where this can be practically and safely achieved. If safety reasons preclude manual excavation to natural, hand augering may be used to try to assess the total depth of stratification within each area. The depth of the excavation must conform to current safety requirements. If excavation is required below 1.2m the options of using shoring will be discussed with DAT-DM.

Recording will be carried out using Archaeology Wales recording systems (pro-forma context sheets etc), using a continuous number sequence for all contexts.

Written, drawn and photographic records (b&w, 35mm colour slides and digital) of an appropriate level of detail will be maintained throughout the course of the project. Digital photographs will be taken using a 14MP camera with photographs stored in Tiff format.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required, and these will be related to Ordnance Survey datum and published boundaries where appropriate.

Monitoring

DAT-DM will be contacted approximately five days prior to the commencement of ground works, and subsequently once the work is underway.

Any changes to the WSI that the contractor may wish to make after approval will be communicated to DAT-DM for approval on behalf of Planning Authority.

Representatives of DAT-DM will be given access to the site so that they may monitor the progress of the field evaluation. No area will be back-filled, until DAT-DM has had the opportunity to inspect it, unless permission has been given in advance. DAT-DM will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

Recording

Recording will be carried out using AW recording systems (pro-forma context sheets etc), using a continuous number sequence for all contexts.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required and related to Ordnance Survey datum and published boundaries where appropriate.

All features identified will be tied in to the OS survey grid and fixed to local topographical boundaries. This can be achieved through measured triangulation from various points within the site boundary due to the proximity of extant buildings and other permanent features and their known locations. If required this could be further supplemented using a Topcon GTS725 total station.

Photographs will be taken in digital format, using a 14MP camera with photographs stored in Tiff format.

The archaeologists undertaking the evaluation will have access to the AW metal detector and be trained in its use.

Artefacts

Archaeological artefacts recovered during the course of the excavation will be cleaned and labelled using an accession number, which will be obtained from a suitable museum. A single number sequence will be allocated to all finds. The artefacts will be stored appropriately until they are deposited with a suitable local museum. Contact will be made with the Ceredigion Museum in Aberystwyth for this purpose. If no suitable local repository exists then attempts will be made to deposit the artefacts at the National Museum, Cardiff. In the interim any recovered artefacts will be stored in secure premises at AW's offices.

A catalogue by context of all artefactual material found, quantified by number, weight, or both, and containing sketches of significant artefacts will be compiled.

All finds of gold and silver will be removed to a safe place and Natural Resources Wales, Cadw and the local coroner informed, within the guidelines of the Treasure Act 1996.

Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (Phil Parkes at Cardiff University).

The requirements for the conservation of artefacts will be unpredictable until after the completion of the fieldwork. The archaeological contractor will ensure, however, that at least minimum acceptable standards are achieved (the UK Institute of Conservation's Guidelines for the Treatment of Finds from Archaeological Site should be used as guidance).

Human remains

Human remains will be left *in situ*, covered and protected when discovered. No further investigation should normally be permitted and DAT-DM and the local Coroner must be informed immediately. After discussion, it may be appropriate to take bone samples for C14 dating. If removal is essential it can only take place under the appropriate Ministry of Justice and Environmental Health regulations.

Environmental and technological samples

Samples will be taken where necessary when significant deposits are located. These will be retained for processing. The level of post-excavation processing will be dependent on the results of the field evaluation and following discussion with an environmental specialist and DAT-DM.

Any features containing deposits of environmental or technological significance will be sampled. If required, the project manager will arrange, through a suitably qualified expert the assessment of the environmental potential of the site through examination of suitable deposits. The assessment of potential should consider the guidelines set out in the English Heritage publication 'Guidelines for Environmental Archaeology' March 2002.

Specialists

In the event of certain finds/features etc. being discovered, the site archaeologist may have to seek specialist opinion for assistance. Such specialists will be accessed either internally within AW itself or from an external source. A list of external specialists is given in the table below.

Type	Name	Tel No.
Flint	Dr Amelia Pannett	02920 899509
Animal bone	Jen Kitch	07739 093712
CBM, heat affected clay, Daub etc.	Rachael Hall	01305 259751
Clay pipe	Hilary Major	01376 329316
Glass	Andy Richmond	01234 888800
Cremated and non-cremated human bone	Malin Holst	01759 368483
Metalwork	Kevin Leahy	01652 658261
Neo/BA pottery	Dr Alex Gibson	Bradford University
IA/Roman pottery	Jane Timby	01453 882851
Post Roman pottery	Mr Stephen Clarke	
Charcoal (wood ID)	John Carrot	01388 772167
Waterlogged wood	Nigel Nayling	University of Wales (Lampeter)
Molluscs and pollen	Dr James Rackham	01992 552256
Charred and waterlogged plant remains	Wendy Carruthers	01443 233466

Conservation

All archaeologically recovered artefacts, building materials, industrial residues, environmental material, biological remains (including human remains) and decay products (collectively referred to as 'finds') will be conserved following the guidelines set out in 'Standard and Guidance for the collection, documentation, conservation and research of archaeological materials' (CIfA, 2014).

6 Method statement for the production of an illustrated report and the deposition of the site archive (Stage 2)

Report preparation

The report will contain the following:

- A fully representative description of the information gained from Stage 1 above, even if there should be negative evidence.
- A concise non-technical summary of the project results. This can be presented in Welsh to meet any Welsh language policy requirements.
- At least one plan showing the site's location in respect to the local topography, as well as the position of all excavated areas.
- Suitably selected plans and sections of significant archaeological features. All plans and sections should be related to Ordnance Datum.
- Written descriptions of all features and deposits excavated and their considered interpretation.
- A summary report on the artefactual and ecofactual assemblage and an assessment of its potential for further study, prepared by suitably qualified individuals or specialists.
- A statement of the local and regional context of the archaeological remains identified.
- An impact assessment, with mitigation proposals, of the proposed development on the archaeological resource can be considered and presented for consideration. This could include the mapped archaeological potential of the site in relation to the proposed development.

Copies of the report will be sent to AIEC, the local planning authority, and DAT for inclusion in the HER. Digital copies will be provided in pdf format if required.

A summary report of the work will be submitted for publication to a national journal (eg Archaeology in Wales) no later than one year after the completion of the work.

The site archive

A project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure and be deposited within an appropriate local museum on completion of site analysis and report production. It will also conform to the CIfA's Standards & Guidance for the creation, compilation, transfer and deposition of archaeological archives (2014) and guidelines set out in 'Management of Archaeological Projects Two, Appendix 3' (English Heritage 1991).

Arrangements will be made with the local museum before work starts. Wherever the archive is deposited, this information will be relayed to the HER.

Although there may be a period during which client confidentiality will need to be maintained, the report and the archive will be deposited not later than six months after

completion of the work.

Other significant digital data generated by the survey (ie AP plots, EDM surveys, CAD drawings, GIS maps, etc) will be presented as part of the report on a CD/DVD. The format of this presented data will be agreed with the curator in advance of its preparation.

7 Resources and timetable

Standards

The field evaluation will be undertaken by AW staff using current best practice.

All work will be undertaken to the standards and guidelines of the CIfA.

Staff

The project will be undertaken by suitably qualified AW staff. Overall management of the project will be undertaken by Philip Poucher.

Equipment

The project will use existing AW equipment.

Timetable of archaeological works

The evaluation will be undertaken at the convenience of the client. A start date of early August 2016 is considered likely.

Insurance

AW holds Public Liability Insurance through Aviva Insurance Ltd, with a £5,000,000 Limit of Indemnity (expires 05/12/16), Employers Liability Insurance through Aviva Insurance Ltd, with a £10,000,000 Limit of Indemnity (expires 05/12/16) and Professional Indemnity Insurance though Hiscox Insurance Company Ltd, with a £1,000,000 Limit of Indemnity (expires 05/12/16).

Arbitration

In the event of any dispute arising out of this Agreement (including those considered as such by only one of the parties) either party may forthwith give to the other notice in writing of such a dispute or difference and the same shall be and is hereby referred for decision in accordance with the Rules of the Chartered Institute of Arbitrators' Arbitration scheme for the Institute for Archaeologists applying at the date of this Agreement.

Health and safety

All members of staff will adhere to the requirements of the *Health & Safety at Work Act*, 1974, and the Health and Safety Policy Statement of AW. A site-specific risk assessment will be compiled prior to attendance on site.

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APPENDIX IV:
Archive Cover Sheet

ARCHIVE COVER SHEET

Gogerddan Campus, University of Aberystwyth, Ceredigion

Site Name:	Gogerddan Campus, University of Aberystwyth
Site Code:	GCA/16/EV
PRN:	13005 (Early medieval cemetery) 36859 (Gogerddan Park) 55942 (Prehistoric monument complex)
NPRN:	265098 (Gogerddan Park) 310262 (Plas Gogerddan cemetery) 404548 (Gogerddan Park Enclosure)
SAM:	CD259 Round Barrow and Standing Stonee
Other Ref No:	-
NGR:	NGR SN 62848 83504
Site Type:	Agricultural fields/parkland/farm yard
Project Type:	Evaluation
Project Manager:	Philip Poucher
Project Dates:	August 2016 - September 2016
Categories Present:	All
Location of Original Archive:	AW
Location of duplicate Archives:	Paper copies with RCAHMW, Aberystwyth. Single find to be deposited at the Ceredigion Museum, Aberystwyth
Number of Finds Boxes:	1
Location of Finds:	Ceredigion Museum, Aberystwyth
Museum Reference:	TBC
Copyright:	AW
Restrictions to access:	None

Archaeology Wales

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