ARCHAEOLOGY WALES

Strip Map Excavate (SME):

Cae Mawr, Llanerchymedd Anglesey

October 2022

Report No. 2035

By

Rhiannon Philp

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Prepared for Roger Parry

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Report No.2035

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Summary

In November 2021, Archaeology Wales Ltd carried out an archaeological Strip, Map and Record on land at Cae Mawr Llanerchymedd LL71 8AN, Anglesey centred on SH 42034 86095.

An area measuring approximately 100m by 70m, across two fields divided by a hedge bank and flanking ditches, was stripped of overburden, before underlying archaeology was recorded and then excavated in order to characterise the features present.

A total of five pits, seven post holes, fifteen ditches, one gully and three ploughmarks were identified, all of which were heavily truncated. No finds of archaeological value or reliable dating sources were identified. Three stratigraphic phases were identified, but most features remained unphased.

The lack of dating evidence and known archaeology in the surrounding area limited interpretation, but the evidence indicated multiple phases of activity on the site over an unspecified period of time, related to agricultural activity prior to the 19th century. A small amount of discrete evidence for possible domestic activity and structural remains was also identified.

All work conformed to Standard and Guidance for Archaeological Field Evaluation (CIfA 2020) and Standards and Guidance for Archaeological Artefact and Environmental Collection, Documentation Conservation and Research (CIfA 2020).

Crynodeb Annhechnegol

Ym mis Tachwedd 2021, cynhaliodd Archaeology Cymru Cyf archwiliad stripio, mapio a chofnodi ar dir yng Nghae Mawr, Llanerchymedd, LL71 8AN, Ynys Môn, y mae ei ganolbwynt o fewn SH 42034 86095.

Cafodd ardal yn mesur tua 100m wrth 70m, ar draws dau gae sydd wedi'u rhannu gan ochr cloddiog a ffosydd ar bob ochr, ei chlirio o'r gorlwyth, cyn y cofnodwyd yr archeoleg oddi tano ac yna fe'i cloddwyd er mwyn nodi'r nodweddion a oedd yn bresennol.

Nodwyd cyfanswm o bum pwll, saith twll polyn, pymtheg ffos, un ceunant a thri marc aradr, yr oedd pob un ohonynt wedi'u cwtogi'n fawr. Ni nodwyd unrhyw ganfyddiadau o werth archeolegol neu ffynonellau dyddio dibynadwy. Nodwyd tri chyfnod stratigraffig, ond roedd y rhan fwyaf o'r nodweddion yn parhau heb gyfnod penodol.

Roedd y diffyg tystiolaeth dyddio ac archeoleg hysbys yn yr ardal gyfagos yn cyfyngu ar y dehongliad, ond gwnaeth y dystiolaeth nodi nifer o gyfnodau o weithgaredd ar y safle dros gyfnod amhenodol o amser, sy'n gysylltiedig â gweithgaredd amaethyddol cyn y 19^{eg} ganrif. Nodwyd ychydig o dystiolaeth arwahanol o weithgaredd domestig posibl a gweddillion strwythurol hefyd.

Roedd yr holl waith yn cydymffurfio â'r Safonau a'r Canllawiau ar gyfer Gwerthusiad Maes Archeolegol (Sefydliad Siartredig yr Archeolegwyr 2020) a'r Safonau a'r Canllawiau ar gyfer Casglu Arteffactau Archeolegol ac Amgylcheddol, Gwarchod Dogfennau ac Ymchwil (Sefydliad Siartredig yr Archeolegwyr 2014).

1. Introduction

1.1.1. In November 2021, Archaeology Wales Ltd (henceforth AW) was commissioned by Roger Parry to carry out an archaeological Strip, Map and Record (SME) on land at Cae Mawr Llanerchymedd LL71 8AN, Anglesey centred on NGR SH 42034 86095. The development was in preparation for the erection of a free-range poultry unit (egg production) together with feeding bins and associated works (Figure 1,2 and 3).

1.1.2. The purpose of the archaeological mitigation was to provide IACC with sufficient information regarding the nature of archaeological remains on the site of the development, the requirements for which are set out in Planning Policy Wales (revised edition 11, 2021), Section 6.1 and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work was to ensure that all historic and archaeological assets are fully investigated and recorded if they are disturbed or revealed as a result of activities associated with the development.

1.1.3. The field evaluation was carried out under the supervision of Jerry Bond and Steven Cole, with assistance from Lucy Bagshaw, Rose Griffin and Jessica Woolley. The project was managed by Irene Garcia Rovira (MCIfA – AW Project Manager).

1.1.4. All work conformed to Standard and Guidance for Archaeological Field Excavation (CIfA 2020) and Standards and Guidance for Archaeological Artefact and Environmental Collection, Documentation Conservation and Research (CIfA 2020).

2. Site description and archaeological background

2.1. Location, Topography, and geology

2.1.1. The site is located at Cae Mawr, which is 2km north of Llanerchymedd on Anglesey, centred on NGR SH 42034 86095. The development area occupies and area of c.0.66 hectares and sits between two fields divided by a hedge bank and flanking ditches. The field to the west is defined as agricultural farmland and the field to the east as improved grassland.

2.1.2. The development includes the footprint of the poultry sheds and associated works as well as a 200m long access road connecting the site to the B5111, which runs to the east of the site on a NE-SW alignment.

2.1.3. The underlying geology is defined by Ordovician Rocks (undifferentiated), comprising interbedded mudstone and sandstone. This bedrock is sedimentary and was formed approximately 444 to 485 million years ago in the Ordovician period when the local environment was dominated by shallow seas. The superficial deposits are described

as Till, Devensian – Diamicton, which are superficial deposits formed up to 2 million years ago in the Quaternary period when the local environment was dominated by ice age conditions (BGS 2021).

3. Archaeological and Historic Background

3.1.1. Prior to this excavation, no previously known archaeological sites had been identified within the development site.

3.1.2. A HER search was undertaken in order to identify any known archaeological evidence within a 500m radius of the proposed development. The results of the search indicated that only one site of archaeological significance was present within the search area: PRN 55984, a post medieval building located just to the SE of Cae Mawr, which had been identified through historic Ordnance Survey mapping as part of the Glastir Private Woodland Management scheme.

3.1.3. Within the wider surrounding area, a number of scheduled monuments are present. These include Maen Chwyf burial chamber (CAN076) c.750m to the ESE and Llys Einion standing stone (AN077) c. 500m to the ESE. Approximately 1km to the east of the site is Bryn Dyfrydog, a large sub-circular earthwork of unknown origin investigated using geophysics as part of *The Ancient Landscape of Mon Archaeology Survey Project* (Smith and Hopewell 2010).

3.1.4. Anglesey itself is home to a rich archaeological resource dating from the prehistoric periods through to the post medieval with rich agricultural soils and an accessible coastline making it a key focus for settlement throughout history (Smith and Hopewell 2010, 3). The lack of previously known archaeology within the vicinity of the development site is therefore more likely to be due to a lack of investigation in that area, rather than indicative of a lack of existing evidence.

4. Aims and Objectives

4.1.1. The aim of the Strip, Map, Record was to:

- Establish the extent of the archaeological remains within the area of proposed development.
- Determine the extent, condition, nature, character, quality and date of archaeological remains present.
- Establish the ecofactual and environmental potential of archaeological features and deposits, sampling where necessary.

4.1.2. The objective of the archaeological mitigation was to preserve by record, detailed information on all archaeological deposits within the designated area, prior to their likely destruction as a consequence of the

development.

5. Methodology

5.1.1. The work was undertaken to meet the standard required by The Chartered Institute for Archaeologist's *Standard and Guidance for Archaeological Excavation* (2020).

5.1.2. As per the WSI (Appendix III) the Strip, Map, Record was undertaken in three phases. The development area was stripped of overburden in spits to the level of the archaeological horizon. This was undertaken using a 360°machine excavator, fitted with a toothless ditching bucket, under direct archaeological supervision. All revealed archaeological deposits and features were then planned, after which a programme of limited exploratory excavation was undertaken in order to characterise the features that were encountered.

5.1.3. Any archaeological remains encountered were cleaned, excavated where appropriate, and recorded through the use of proforma recording sheets, technical drawing, photography, and GPS.

6. Results

6.1. Introduction

6.1.1. The natural horizon (102) was encountered at a depth of between c.0.3 and 0.5m across the site. It comprised deposits of clay silts, clays and local shale stone, which varied in colour from mid-red-brown, to pale yellow and grey green.

6.1.2. Cut into the natural were a number of features including ditches, gullies, pits, post holes and ploughmarks. Some of these features were then later truncated by further features.

6.1.3. A total of two features contained material suitable for radiocarbon dating and were found to date to the Neolithic period (see section 6.2). These are included separately to the stratigraphic phasing as they hold no stratigraphic relationship with the rest of the recorded features.

6.1.4. No dateable material was recovered from any of the other features and many were discrete in their positions. Most of the features on the site therefore cannot be phased in relation to each other and are listed as unphased below. Where features truncate or are truncated by other features, they have been organised into three stratigraphic phases, though it must be noted that this does not necessarily mean they are of the same date. All features were very shallow, with many showing signs of bioturbation and ploughmarks were also identified, indicating the site has been heavily truncated by both human and natural causes.

6.1.5. Where multiple interventions have been used to investigate features, group numbers have been assigned to the overall feature. Both original cut numbers and group numbers are listed on all drawings and within the context inventory in Appendix I.

6.2. Neolithic

6.2.1. A total of two pits contained hazelnut shell suitable for radiocarbon dating, which produced Neolithic dates.

6.2.2. Pit [130] (Plate 1, Figure 3-4) was located towards the centre of the site, just to the west of the central hedge and bank feature [262]. It was oval in shape with gently sloping sides and a concave base. It measured 0.8m in length, 0.7m in width, with a depth of 0.1m. The pit had a single fill (131); a loose black-brown sandy silt with burnt stones and charcoal inclusions. No finds were recovered from the pit. A 20 litre environmental sample was obtained and processed, which produced abundant fragmented charcoal and frequent charred hazelnut shell fragments as well as evidence for more recent rooting. The hazelnut shell produced a radiocarbon date of 2810-2740 cal BC, placing it in the late Neolithic period (see section 9).

6.2.3. Pit [138] (Plate 2, Figure 3,5) was located in the lower southwestern corner of the site, close to the limit of excavation (L.O.E.). The pit was an elongated oval shape, c.1m in length, 0.5m in width and 0.1m in depth. It was filled by a single fill (139), which consisted of a loose black-brown sandy silt with frequent fragments of burnt stone and charcoal. No finds were recovered from the feature. A 20 litre soil sample was obtained and processed, which produced abundant fragmented charcoal and a single fragment of charred hazelnut shell. Evidence for rooting was again present. The hazelnut shell produced a radiocarbon date of 3250-3100 cal BC, placing it towards the middle of Neolithic period.

6.2.4. Both pits were fairly discrete in nature and held no stratigraphic relationship with any other feature on the site.

6.3. Unphased

6.3.1. A total of two pits, seven post holes, four gullies, six ditches and three plough marks were cut directly into the natural with no direct dating evidence or stratigraphic relationship with any other features. These have been classified as unphased.

Pits

6.3.2. Pit [200] (Plate 3; Figure 6) was located at the centre of the eastern half of the site. It was irregular in shape with irregular sloping sides and a

concave base. The pit measured c.1.1m in length, 0.5m in width and 0.19m in depth. It contained one fill (201); a firm, mid-orange-brown sandy clay with occasional charcoal flecks and small sub-angular stones. No finds were recovered from the pit. It was truncated to the southeast by ditch [264] .

6.3.3. Pit [239] (Plate 4; Figure 3, 7) was located at the central eastern point of the excavated area. It was oval in plan with gently sloping sides and a concave base. The pit measured 0.6m in length, 0.5m in width and 0.15m in depth and was filled by two fills. The basal fill (241) consisted of a loose orange sandy silt, with a thickness of 0.07m. This was overlain by secondary fill (240); a loose dark brown clayey silt. Some damage due to rooting was recorded during excavation. The feature contained no finds.

Post holes

6.3.4. Post hole [169] (Plate 5; Figure 3, 8) was located in the north-western corner of the site. It was circular in shape with vertical sides and a concave base. The post hole measured 0.28m in length, 0.23m in width and 0.12m in depth. It contained a single fill (170), which consisted of a soft, dark brown-black silty clay with very rare angular stones and frequent charcoal. The post hole produced no finds.

6.3.5. Four shallow post holes was located in the lower southwest area of the site. These included post holes [173] (Plate 6), [175] (Plate 7), [177] (Plate 8) and [179] (Plate 9; Figure 3, 9-12). The post hole furthest north [179] was circular in shape with gently sloping sides and a concave base. It measured 0.25m in length by 0.23m in width and had a depth of 0.08m. It contained a single fill (180); a soft, dark blackish-brown silty clay with rare small subrounded stones and frequent charcoal. No finds were recovered from [179]. A small soil sample (c.2 litres) was obtained from the fill, which produce a moderate quantity of highly fragmented charcoal and evidence of recent rooting.

6.3.6. Approximately 2m to the southwest of [179] was post hole [177]. The feature was circular in shape with shallow sloping sides and a concave base. It measured 0.2m in length, 0.19m in width and 0.03m in depth and contained a single fill (178), which consisted of a soft, dark blackish silty clay with rare small sub-rounded stones. The post hole contained no finds. Approximately 3m to the southeast of [177] was post hole [175]. The feature was circular in plan with shallow sloping sides and a concave base. It measured 0.3m in length, 0.27m in width and 0.06m in depth. The post hole contained a single fill (176), which consisted of a soft, dark blackish brown silty clay with rare small subrounded stones. No finds were recovered from the post hole. Approximately 1.2m to the east of [175] was post hole [173], which was circular in plan, with gently sloping

sides, and a concave base. The post hole measured 0.33m in length, 0.24m in width and 0.07m in depth. It contained a single fill (174); a soft dark blackish brown silty clay with rare small sub-rounded stones. No finds were recovered from the post hole.

6.3.7. Post hole [252] (Plate 10; Figure 3) was a discrete feature located approximately 7.5m from the western L.O.E. in the southwest corner of the excavated area. It was oval in plan with gently sloping sides and a concave base, measuring 0.4m in diameter and 0.1m in depth. The post hole contained a single fill (253); a loose black-brown sandy silt. There was clear evidence of bioturbation through rooting. No finds were recovered.

6.3.8. Post hole [181] (Plate 11; Figure 3, 13) was a discrete feature located towards the southeast corner of the excavated area. It was circular in plan with vertical sides and a concave base. The post hole measured 0.5m in length, 0.4m in width and 0.08m in depth. It was filled by a single fill (182); a soft light brown-grey silty clay. The post hole contained no finds.

Gullies

6.3.9. Gully [254] (Plate 12; Figure 3, 14) was located in the southwestern quadrant of the site, c. 6m to the northeast of post hole [173]. The gully was slightly curvilinear in plan and measured c.3m in length. Two interventions were dug to investigate the gully. This included the eastern terminal end and a slot through the feature. The gully measured 0.3m in width, with a depth ranging from 0.05m to 0.07m. It contained a single fill (255) which consisted of a friable dark reddish-brown clayey silt with occasional small, rounded stones. Frequent bioturbation through rooting was observed. No finds were recovered from this feature.

6.3.10. Gully [256] (Plate 13; Figure 3, 15-16) was located in the southwest quadrant of the excavated area. It was orientated on a NE-SW alignment and ran into the southern L.O.E. The visible extent of the gully was 9.5m in length. The gully was investigated through two interventions, which showed it to range between 0.45m and 0.54m in width and 0.07m and 0.08m in depth. It was filled by (257); a friable dark reddish-brown clayey silt with occasional rounded and sub angular small stones. No finds were recovered from this feature.

6.3.11. Gully [134] (Figure 3,17) was again located in the southwest quadrant of the excavated area and was orientated on a NE-SW alignment. The visible extent of the gully measures 8m in length and 0.3m wide with a depth of 0.05m. It was filled by a single fill (135) consisting of a friable dark reddish-brown clayey silt with occasional small round stones. Frequent rooting was observed and no finds were recovered.

6.3.12. Gully [183] (Plate 14; Figure 3, 18) was located in the northwest quadrant

of the excavated area and was orientated on a NW-SE alignment. The visible extent of the gully measured 4.7 in length, 0.35m in width and 0.06m in depth. It had shallow sloped sides and a concave base and was filled by a single fill (184) which comprised a soft mid grey-brown silty clay with occasional sub rounded stones. No finds were recovered from this feature.

Ditches

6.3.13. Ditches [121] and [124] (Plate 17; Figure 3, 35) ran parallel on a SW-NE alignment into the southern L.O.E. in the southwest corner of the excavation area, to the southeast of ditch [258]. Ditch [121] measured 0.52m in width and 0.08m in depth, with shallow sloping sides and a concave base. The full extent of the length of the feature was not realised during excavation, but it measured greater than 1m. The ditch contained two fills: basal fill (122) was a firm pale yellow-grey-brown silty clay with very occasional shale fragments with a thickness of 0.03m; secondary fill (123) was a moderately firm, dark reddish brown clayey silt containing a moderate quantity of shale fragments. A 20 litre soil sample was obtained from this fill, which produced no evidence of archaeological value. Ditch [124] was located roughly 0.25m to the southeast of [121]. It measured 0.4m in width and 0.12m in depth. Again, the full length of the feature remained unrealised, but it measured over 1m in length. Ditch [124] contained two fills: basal fill (125) measured 0.03m in thickness and comprised a firm pale yellow-grey-brown silty clay with occasional shale fragments; secondary fill (125) measured 0.1m in thickness and comprised a firm dark red-brown clayey silt with very occasional medium to small shale fragments and sub-rounded stones. No finds were recovered from either of the features. Overlying the two ditches was deposit (127).

6.3.14. Ditch [163] (Plate 19; Figure 3, 24) ran on a NE-SW alignment in the north-eastern quadrant of the excavated area for c.40m. It was investigated through one intervention and measured 0.54m in width and 0.15m in depth. The ditch had a single fill (164); a friable, reddish-brown, silty clay. No finds were recovered from the feature.

6.3.15. Ditch [192] (Plate 20; Figure 3, 27) ran on a NNW-SSE alignment to the east of [163], with a visible length of c.34m. It was investigated through one intervention and was shown to have a width of 0.57m and a depth of 0.09m at that point. The ditch was steep sided, with a concave base and contained a single fill (193), which consisted of a moderately firm, blackish-brown, silty clay with frequent small stone inclusions. No finds were recovered from this feature.

6.3.16. Ditch [225] (Plate 21; Figure 3, 26) was located at the eastern extent of

the excavation area. It ran on an ENE-WSW alignment for into the eastern L.O.E. The full extent was therefore not realised, but a length measuring c.3.5m was visible. The feature was investigated in one intervention, revealing it to measure 0.88m in width and 0.07m in depth, with very shallow sloping sides and a flat base. The ditch contained a single fill (226); a friable mid greyish-brown clayey silt containing frequent small stones and showing evidence of rooting. No finds were recovered from this feature.

6.3.17. Ditch [227] (Plate 22; Figure 3, 25) was located just to the west of ditch [225]. It was curvilinear in plan, running for c. 19m before disappearing into the eastern L.O.E. The ditch was investigated in one intervention and found to be 0.8m wide and 0.09m in depth with gently sloping sides and a concave base. It contained a single fill (228) which consisted of a friable brown, clayey silt with frequent shale inclusions. No finds were recovered from this feature.

Ploughmarks

6.3.18. Ploughmark [146] (Plate 23; Figure 3) ran for c.22m on a N-S alignment to the west of ditch [258]. It was investigated in two interventions and found to range between 0.14m and 0.2m in width and 0.05m and 0.06m in depth, with moderately sloping sides and concave base. It was filled by (147); a mid greyish-brown silty clay with rare subangular stones. No finds were recovered from this feature.

6.3.19. Ploughmark [237] (Plate 24, Figure 3, 28) was located c.4.5m to the west of [146] and ran parallel to it for c.9m. It was investigated in one intervention and was found to measure 0.18m in width and 0.06m in depth with steeply sloping sides and a concave base. The ploughmark contained a single fill (238), which consisted of a moderately firm, mid reddish-brown-grey clayey silt with evidence of rooting. No finds were recovered from this feature.

6.3.20. Ploughmark [229] (Plate 25; Figure 3, 29) was situated in the north east quadrant of the excavated area, close to the eastern L.O.E. The feature was orientated on an E-W alignment and measured 0.5m in length, 0.35, in width and 0.13m in depth. It had gently sloping sides and a concave base and was filled by a single fill (230), which consisted of a friable brown sandy silt with evidence of rooting. No finds were recovered from the feature.

6.4. Phase 1

6.4.1. A total of one gully and two ditches are assigned to stratigraphic Phase 1. These are features cut directly into the natural and truncated by Phase 2 features.

Gullies

6.4.2. Gully [117] (Plate 15; Figure 3, 19) was situated in the southwest quadrant of the excavated area. It measured over 1m in length and 1m in width, with a depth of 0.15m, and was orientated on a SW-NE alignment. The gully had gently sloping sides and an irregular base. It was filled by a single fill (118), which consisted of a friable reddish-brown silty clay with signs of heavy rooting throughout. The feature contained no finds. Gully [117] was truncated by pit [119] (see Phase 2).

Ditches

6.4.3. Ditch [258] (Plate 16; Figure 3, 20-21) ran on a NE-SW alignment through the western side of the excavated area. It was investigated through three interventions. The measured 53m in length, with a width ranging between 0.33m and 0.64m and depth between 0.09m and 0.17m. The ditch fill (259) was a friable greyish-brown clayey silt, with patches of silty sand and occasional small sub-angular stones. No finds were recovered from [258]. It was truncated by ditch [260] to the south.

6.4.4. Ditch [266] (Plate 18; Figure 23) was located on the eastern side of the excavation area. The ditch ran for c.40m on an E-W alignment, curving slightly to the south at its western end. It was investigated in four interventions and ranged between 0.22m and 0.68m in width, and 0.07m and 0.2m in depth, with gently sloping sides and a concave base. The ditch was filled by a single fill (267), which consisted of a moderately friable, greyish-brown clayey, silt with frequent rooting apparent. Two 20 litre samples were obtained from [266], one of which <3> produced no evidence of archaeological value and the other <7> produced a moderate quantity of fragment charcoal. No finds were recovered. Ditch [266] was stratigraphically truncated by ditch [264] (see Phase 2).

6.5. Phase 2

6.5.1. A total of one pit and two ditches truncated Phase 1 features.

Pits

6.5.2. Pit [119] truncated gully [117] (Figure 3, 19). The pit was oval in shape and measured 0.4m in diameter and 0.17m in depth. It had gently sloping sides and a concave base. The pit was filled by (120), which consisted of a friable mid orangey-brown silty clay with evidence of rooting. No finds were recovered from this feature.

Ditches

6.5.3. Ditch [260] (Plate 26; Figures 20, 30 and 31) ran on an E-W alignment for

c.78m across the southern part of the excavation area. The ditch truncated ditch [258] (see Phase 1) and was truncated by ditches [262], [244], [270], [272] and [274] (see Phase 3). It was investigated in seven interventions and was found to range between 0.37m and 1.1m in width, and 0.05m and 1m in depth (beneath surface – 0.5m was removed with the overburden during the strip). The ditch was found to be at its deepest, with steep sides and a concave base towards the eastern L.O.E. At this point it contained three separate fills. These included a 0.05m thick basal, firm, mixed pale yellow-grey-red-brown silty clay, overlain by a 0.15m thick dark reddish brown clayey silt, overlain by a 0.25m thick mottled red-brown and pale yellow-grey-brown silty clay. Along the rest of the length, the ditch was much shallower, with gently sloping sides and a concave to flat base, sometimes undulating indicating bioturbation. This larger section of ditch contained just one fill; a friable light to mid-grey-brown and in some places reddish brown silty clay. No finds were recovered from this feature. A 20 litre sample was recovered, which provided no evidence of archaeological value.

6.5.4. Ditch [264] (Plate 27; Figure 3, 6,23) ran on a NE-SW alignment for c.39m on the eastern side of the excavation area. The ditch truncated pit [200] and ditch [266] and was truncated by ditches [272] and [274]. It was investigated in five interventions, which found it to measure between 0.2m and 0.44m in width, and 0.1m and 0.5m in depth. The ditch had shallow sloping sides and flat-concave, sometimes irregular base indicating probably bioturbation. A single fill was contained within the ditch, which consisted of a friable greyish-brown silty clay, becoming moderately firm and iron stained in places. No finds were recovered from this feature.

6.6. Phase 3

6.6.1. A total of five ditches truncated Phase 2 features.

Ditches

6.6.2. Ditch [262] (Plate 28; Figure 3,32) ran on a N-S alignment for >90m through the centre of the excavation area from the northern to southernmost extent. It formed the western ditch of the central hedgebank and ditch alignment, which was in existence prior to the area being stripped. The ditch truncated ditch [260] to the south. It was investigated via two interventions and was found to range between 0.24m and 1.55m in width, and between 0.2m and 0.24m in depth, with gently sloping sides and a slightly concave base. The ditch contained a single fill (263), which consisted of a friable mid-dark grey-brown loam with frequent small stones and shale fragments. The feature contained no finds.

6.6.3. Ditch [244] (Figure 3, 33) formed the eastern ditch of the central hedgebank and ditch alignment and again ran for >90m on a N-S alignment. While no relationship was proven during excavation, it is highly likely that [244] also truncated ditch [260]. The ditch was investigated via a single intervention and found to measure 1m in width and 0.15m in depth, with gently sloping sides and a concave base. It contained a single fill (245); a friable mid brown-grey clayey silt with occasional small stones and heavy rooting. The feature contained no finds.

6.6.4. Ditch [270] (Plate 29) was located in the south-eastern corner of the site and ran on a NNW-SSE alignment for approximately 36m in length. It was investigated via four interventions and was found to range between 0.36m and 1.2m in width, and 0.05m and 0.1m in depth, with gently sloping sides and a concave base. The ditch contained a single fill (271), which consisted of a friable mixture of greyish and reddish-brown silty clay with occasional small stones and frequent rooting observed. No finds were recovered from this feature.

6.6.5. Ditch [272] was located c.2m to the east of [270] and ran parallel for approximately 86m on a NNW-SSE alignment. The ditch was investigated via four interventions and found to range in width between 0.3m and 1.2m. It ranged in depth between 0.1m and 0.24mm with shallow sloping sides, becoming slightly steeper in the deeper sections. Most of the ditch was filled by a single fill (273), which consisted of a friable silty clay ranging in colour from brown, to greyish-brown, to reddish-brown. In one intervention, two fills were identified (105) and (104); a lower yellow brown silty clay measuring 0.1m in thickness, overlain by a friable brown clayey silt, also measuring 0.1m in thickness. No finds were recovered from this feature

6.6.6. Ditch [274] was located c.2m to the east of [272] and similarly ran parallel for approximately 86m on a NNW-SSE alignment. The ditch was investigated via five interventions and was found to range in width between 0.5m and 2.62m, and in depth between 0.1m and 0.31m. The majority of the ditch was filled by a single fill (275), which consisted of a soft silty clay, becoming friable in places, and of mixed colour ranging from greyish to reddish browns with orange iron staining in places and containing occasional small subangular stones. In one intervention, two fills were identified, the basal (113) being a compact light grey, reddish brown clayey silt with frequent manganese staining, which was overlain by a compact grey-red-brown clayey silt. No finds were recovered from this feature.

7. The Finds

7.1.1. No artefacts of archaeological value were recovered during the Strip, Map and Record.

8. Environmental Samples

8.1. Methodology

8.1.1. A total of six 20 litre and one 5 litre soil samples were recovered from seven separate contexts for retrieval of ecofacts, artefacts and dating evidence at Cae Mawr. The samples were returned to Archaeology Wales' Finds and Environmental processing facility, where it was processed using a three tank, recycled water flotation system. During the flotation process, a 500µm mesh was used to collect the residue and a 300µm mesh to collect the flot. The residue was then washed through a sieve stack containing 10mm, 5mm, 2mm and 500µm mesh sizes. Each fraction was kept separate to aid drying.

8.1.2. Once dry the residue was sorted for artefacts and ecofacts. Material was extracted from all residues greater than 2mm and separated according to type. A magnet was passed over the <2mm residue in order to collect any magnetic residue present. This was then scanned by eye for any obvious signs of hammerscale. The flots were scanned by eye for environmental remains.

8.1.3. Quantities of remains are described as occasional + (<5 items), moderate ++ (5-25 items), frequent +++ (25-100 items) or abundant ++++ (>100 items).

8.2. Results

8.2.1. The results of the environmental sampling are laid out in Table 1 below:

Sample No.	Context No.	Charcoal	Charred plant remains	No finds	Flot	Comments
1	131	++++	+++ hazelnut shell		Charcoal ++, CPR + (hazelnut shell)	Rooting
2	139	++++	+ hazelnut shell		Charcoal +	Rooting
3	157			YES		Rooting
4	180	++				Rooting
5	123			YES		Rooting
6	249			YES		Rooting
7	247	++				Rooting

Table 1: Results from environmental samples

Flot Report

8.2.2. Of the seven samples, five produced no flot material of archaeological significance. Moderate quantities of highly fragmented charcoal and occasional small fragments of hazelnut shell were identified in the flot from sample <1> (131) from pit [130]. Occasional highly fragmented charcoal was also identified in the flot from sample <2> (139) from pit [138]. Significant quantities of rooting were noted in all samples indicating that the feature had been disturbed through bioturbation.

Residue Report

8.2.3. No material of archaeological significance was identified in the residues from sample <3> (157), <5> (123) and <6> (249).

8.2.4. Sample <1> (131) from pit [130] produced abundant fragmented charcoal and frequent fragments of hazelnut shell.

8.2.5. Sample <2> (139) from pit [138] also produced abundant fragmented charcoal and a single fragment of hazelnut shell.

8.2.6. Sample <4> (180) from post hole [179] produced a moderate quantity of highly fragmented charcoal.

8.2.7. Sample <7> (247) from ditch group [266] also produced a moderate quantity of fragmented charcoal.

8.2.8. No further material of archaeological significance was identified.

8.3. Summary

8.3.1. Pits [130] and [138] appear to have contained substantial charcoal assemblages, which also contained charred hazelnut shell fragments. Both features also contained heat affected stone, though it is not clear if this has been deposited or originated within the feature. It is therefore not possible to say whether the burning event occurred within the feature, or whether the charred material was deposited as a secondary action.

8.3.2. The charred hazelnut shells within pits [130] and [138] could represent the remains of hazelnut consumption, with the shells having been thrown in the fire afterwards, or they could indicate hazel being used as a fuel source. These remains provide the most suitable source for radiocarbon dating, as a short-lived plant element. However, the substantial truncation on the site and the evidence of heavy rooting within the feature mean there is still a high risk of contamination from later material, which would make any dating obtained potentially unreliable.

8.3.3. The same can be said for the charcoal identified in samples <1>, <2>, <4> and <7>. Charcoal is not an ideal source for radiocarbon dating unless short-lived sources such as twigs or thin branches are present within the assemblage as this helps to counteract the risk of old wood effect, where larger wood elements may have been used for long periods of time prior to being burnt, meaning the date provided by radiocarbon dating is earlier than the burning activity on the site. A charcoal specialist would be required to identify elements suitable for dating, however the contamination risk on the site is deemed to be very high and reduces the reliability of any dating obtained.

8.3.4. That being said, due to the lack of dating evidence obtained across the site, it was decided to date the hazelnut shell from both [130] and [138] in order to ascertain whether any direct dates could be obtained. This process is outlined in section 9 below.

9. Radiocarbon Dating

9.1. Overview

9.1.1. Charred hazelnut fragments were recovered from the fills of discrete pits [130] and [138]. Though there was evidence for bioturbation on the site, the hazelnut shell was deemed more likely to be related to the primary deposits within the pits, rather than intrusive material. This combined with the lack of dating evidence identified across the site led to the decision to submit samples of the hazelnut shell for radiocarbon dating.

9.2. Methodology

9.2.1. The hazelnut shell fragments were sent to the 14CHRONO Laboratory at Queens University Belfast where they were treated using an AAA (Acid-Alkali-Acid) pre-treatment as stipulated in de Vries and Barendsen (1958) and Fischer and Heinemeier (2003), (14 CHRONO 2022) the methodology of which is repeated below:

"The sample is immersed in 0.1M hydrochloric acid and placed on a 70°C hotplate for 20 minutes to remove carbonates, then rinsed with deionised water until neutralised. Humic acids are then removed from the sample through the addition of 0.25M sodium hydroxide. The sample is then warmed on a70°C hotplate for 20 minutes, followed by rinsing in deionised water until neutral. The neutralised sample is then acidified with 1M hydrochloric acid and heated on a 70°C hotplate for 1 hour before the final rinses in deionised water. The pre-treated sample is then placed in an oven until dried" (14 CHRONO 2019).

9.2.2. Dates were calibrated using the IntCal20 calibration curve (Reimer 2020). Calibrated dates were rounded to the nearest 10 years, as recommended

by Mook (1986) due to the conventional radiocarbon ages having error margins greater than 25 years. The full lab report can be found in Appendix II.

9.3. Results

9.3.1. The hazelnut shell recovered from pit [130] returned a date of 2810-2740 cal BC at 2 sigma (95.4% probability).

9.3.2. The hazelnut shell recovered from pit [138] returned a date of 3250-3100 cal BC at 2 sigma (95.4% probability).

9.3.3. The dates returned indicate that both pits likely date to the Neolithic period, with [130] dating to later in the period than [138].

9.4. Summary

9.4.1. The radiocarbon results indicate that humans were active at Cae Mawr during the Neolithic period. The charred hazelnut shells may result from use of hazel as fuel or may represent the remains of hazelnut consumption, with the shells thrown on the fire. As explained in the Environmental Sample section above, it is not completely clear whether fires were burnt within the pits themselves or whether the material originated from a fire elsewhere that was then deposited in the pits at a later date.

10. Discussion and Conclusions

10.1.1. A total of five pits, seven post holes, fifteen ditches, one gully and three ploughmarks were identified during the strip, map, excavate at Cae Mawr. All of the archaeological remains identified were heavily truncated and showed signs of bioturbation through rooting. The presence of ploughmarks within the natural indicate that agricultural activities have directly affected the underlying archaeology.

10.1.2. This coupled with the lack of identified archaeology within the surrounding area means that full interpretation of the results is difficult. No archaeological artefacts were recovered from any of the features, meaning that they could only be phased stratigraphically where they were truncated by other features. The majority of the archaeological evidence is therefore unphased.

10.1.3. The only dating evidence was recovered within environmental samples. Pit [130], contained charred hazelnut shells, which returned a radiocarbon date of 2810-2740 cal BC. Further hazelnut shell and a significant quantity of charcoal was also recovered from pit [138]. Dating from this hazelnut shell produced a date of 3250-3100 cal BC. The dates obtained indicate human presence on the site between the middle to late

Neolithic, with pit [138] shown to be between c.300-500 years older than pit [130].

10.1.4. Three undated phases of activity have been identified stratigraphically. That is not to say that each of the features in each phase are contemporary. Rather, it provides a minimum number of interactions at the site, showing continued use over an unspecified period of time.

10.1.5. The features present are mainly boundary ditches indicating the division of the landscape has changed through time. None of the ditches identified are marked on historic OS mapping or the tithe map from 1841 (*The parish of Amlwch in the County of Anglesey*), suggesting most of the activity on site is pre-19th Century, with the exception of ditches [262] and [244], which are known to be more modern in date.

10.1.6. Unphased ditch [227] cannot be related to any of the other features on site stratigraphically. However, the curvilinear shape in plan and smaller scale to the other ditches on site might indicate that it is the remains of an enclosure of much earlier date than some of the larger scale boundaries. Unfortunately, no dating evidence was present to test this theory.

10.1.7. Two ditches fit within stratigraphic Phase 1: [258] and [266], however it is clear that they are very different in character, and it is highly likely that they are not contemporary with each other. Ditch [266] in the south east corner of the site is slightly curvilinear in plan and gives the impression of being earlier in date. It is truncated by ditch [264] from stratigraphic Phase 2, which, while on a different alignment, is very similar in character and may indicate a second phase of activity within a similar time period. Interestingly, though no relationship has been identified, unphased parallel ditches [121] and [124] in the south west corner of the site appear to sit on a similar alignment to the south west ends of [266] and [264]. Given the high level of truncation on the site it is possible that these were adjoined at some point and are a continuation of the boundary.

10.1.8. Ditch [260] joins [264] in stratigraphic Phase 2, but again is similar in character to later ditches and therefore is unlikely to be contemporary. The ditch runs E-W across the entire site and is likely to have been a substantial field boundary.

10.1.9. The majority of Phase 3 ditches run on a N-S alignment across the length of the site. To the east, the three parallel ditches [270], [272] and [274] may indicate the recutting of ditches along a similar line to aid drainage. Unphased ditch [192] may be an extension of one of the three parallel ditches, however heavy truncation on the site has led to this relationship being lost.

10.1.10. The parallel ditches that truncate the centre of the site from N-S; [262]

and [244], are related to a boundary that was still in existence prior to the site being excavated and so these are likely to represent the most recent boundary activity on the site.

10.1.11. The post holes identified in the south west corner of the site may be indicative of the presence of structures, but the irregular positions of the four post holes does not confirm whether they are related or aid their interpretation. It is quite possible further post holes have been truncated and are no longer visible.

10.1.12. The pitting on site is fairly discrete and not indicative of substantial activity in specific areas. Burnt deposits were identified in pits [130] towards the centre of the site and [138] in the south west corner. It is unclear whether these are primary burn sites or secondary deposits from the evidence gathered on site. Their presence might indicate more domestic activity related to the site, given their relatively small size dimensions, but further interpretation is not possible due to the affect of truncation and bioturbation on the site. Radiocarbon dating from these features has indicated this activity occurred during the Neolithic period, but unfortunately it has not been possible to ascertain if any further features date to this period.

10.1.13. A number of discrete gullies have also been identified. All are highly truncated, to the extent that it is unlikely a full picture of their character is being obtained, and they cannot be directly related to other features on the site. They are therefore of little interpretive value.

11. Conclusion

11.1.1. The Strip Map Excavate at Cae Mawr revealed a selection of highly truncated and disturbed features indicating the site had been used and reused between the middle of the Neolithic period through to the 19th Century and then again in more recent times. Most of the evidence indicates agricultural use with boundary ditches changing the division of the landscape over time. There was some evidence of potential structures having been present towards the south west of the site, but it is not possible to identify how these fit into the chronology of the site.

11.1.2. The two directly dated pits indicate the site was in use in the middle and later Neolithic, but it is not clear whether this use was continuous or discrete events within that timeframe. The charred remains indicate hazel being used either as a fuel or food source at the site during this period.

11.1.3. Further discrete pits and gully remnants hint at further possibly domestic activity on the site, but again cannot be dated or further interpreted from the evidence recorded.

12. Bibliography

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0 2.5 5 km

Figure 1. Site Location.

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Figure 2. Location of SME.

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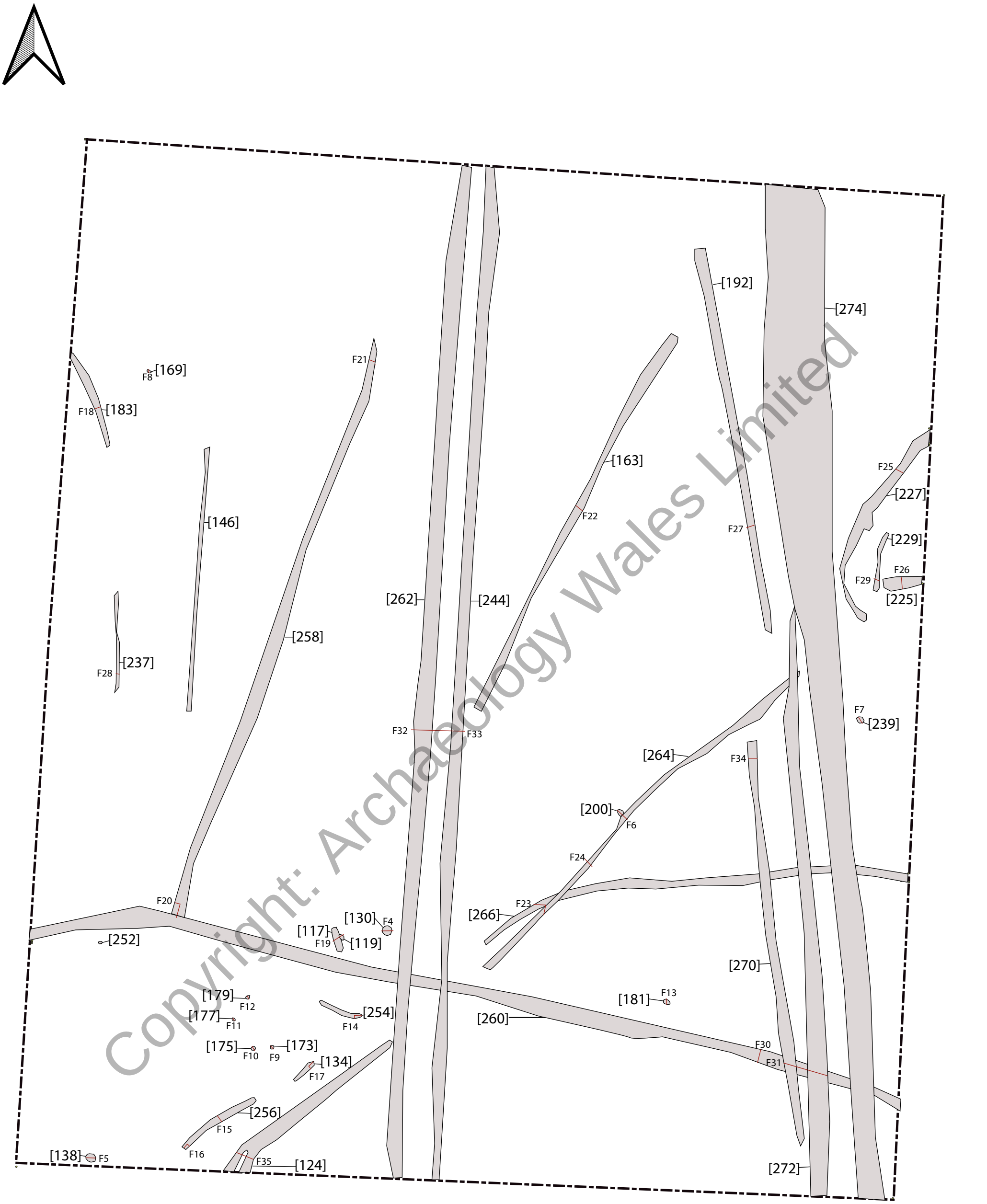
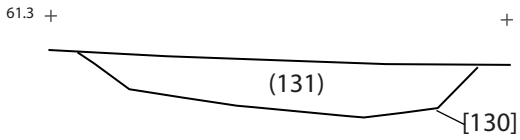
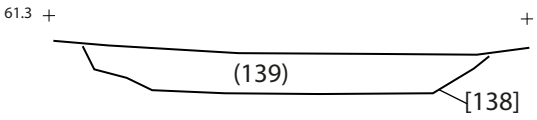


Figure 3. Site plan.

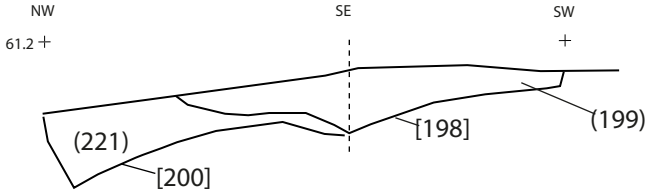
ARCHAEOLOGY WALES



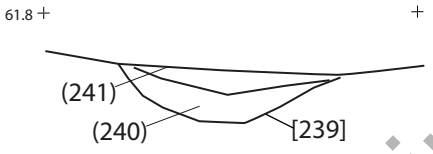
F4 N facing section of [130]



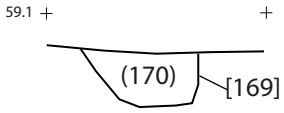
F5 S facing section of [138]



F6 Relationship between [200] and [198] (Group 264)



F7 SSW facing section of [239]

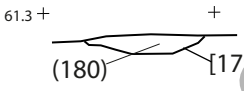


F8 E facing section of [169]

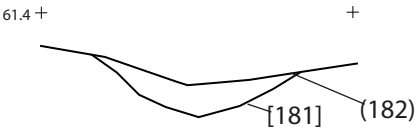
F9 NW facing section of [173]

F10 NW facing section of [175]

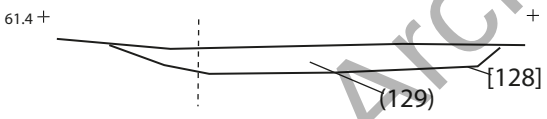
F11 NW facing section of [177]



F12 NW facing section of [179]

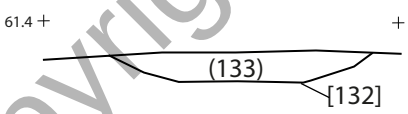


F13 E facing section of [181]

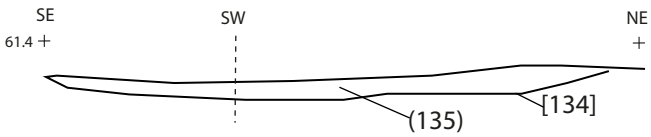


F14 [128] E terminus- Group 254

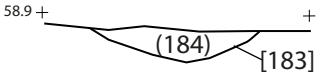
F15 [136], SW terminus - Group 256



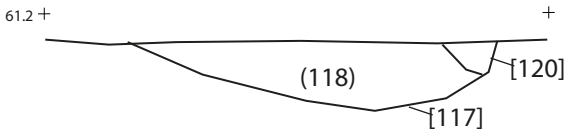
F16 SW facing section of [132] - Group 256



F17 SE facing section of [134]

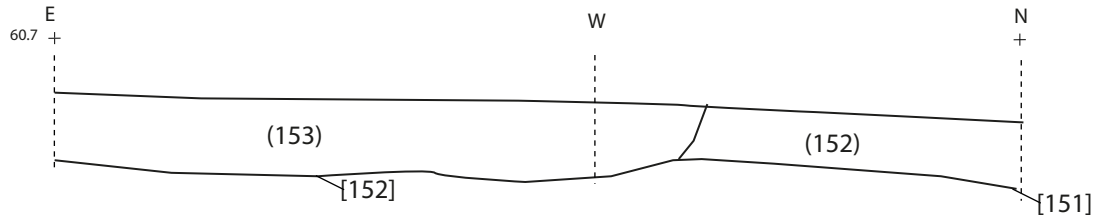


F18 SE facing section of [183]

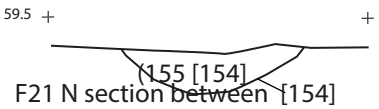


F19 NNW facing section of [117] and [120]

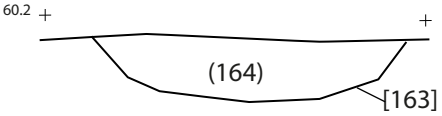
Figure 4 -19: Sections.



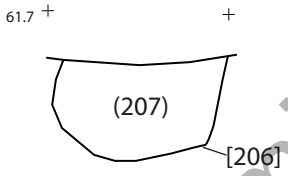
F20 Relationship section between [152] (Group 258) and [151] (Group 260)



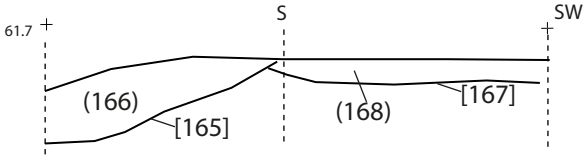
F21 N section between [154] (Group 258)



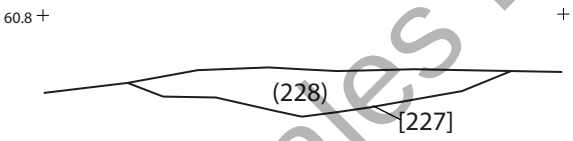
F22 SW facing section of [163]



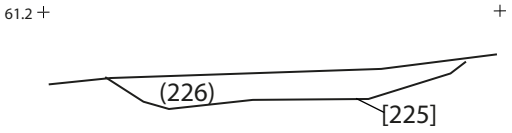
F24 SW facing section of [206] group [264]



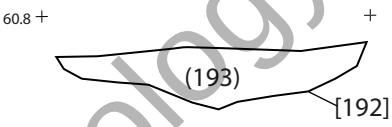
F23 Relationship between [165] (Group 264) and [197] (Group 266)



F25 NE facing section of [227]



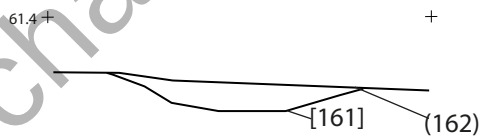
F26 SSW facing section of [225]



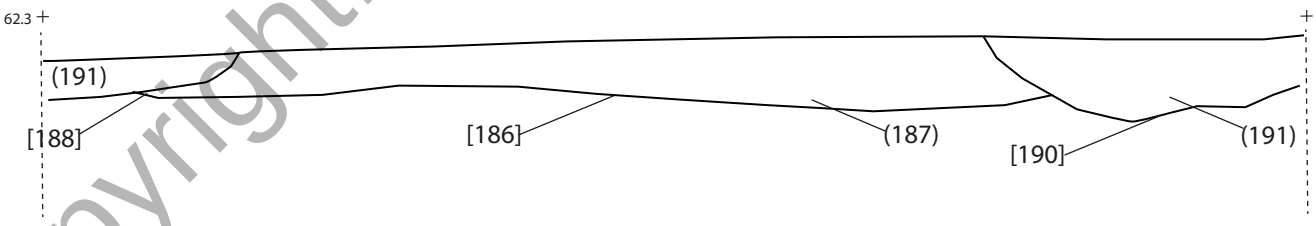
F27 S facing section of [192]

F28 N facing section of [237]

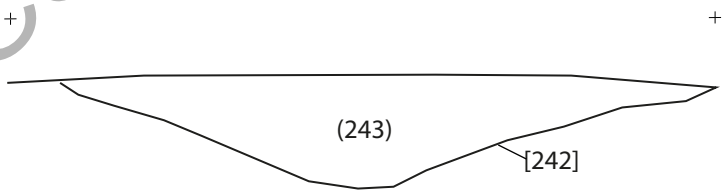
F29 N facing section of [229]



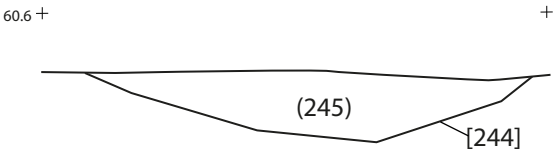
F30 W facing section of [161] - Group [260]



F31 N facing section of [186] (Group 260), [188] (Group 270) and [190] (Group 272)

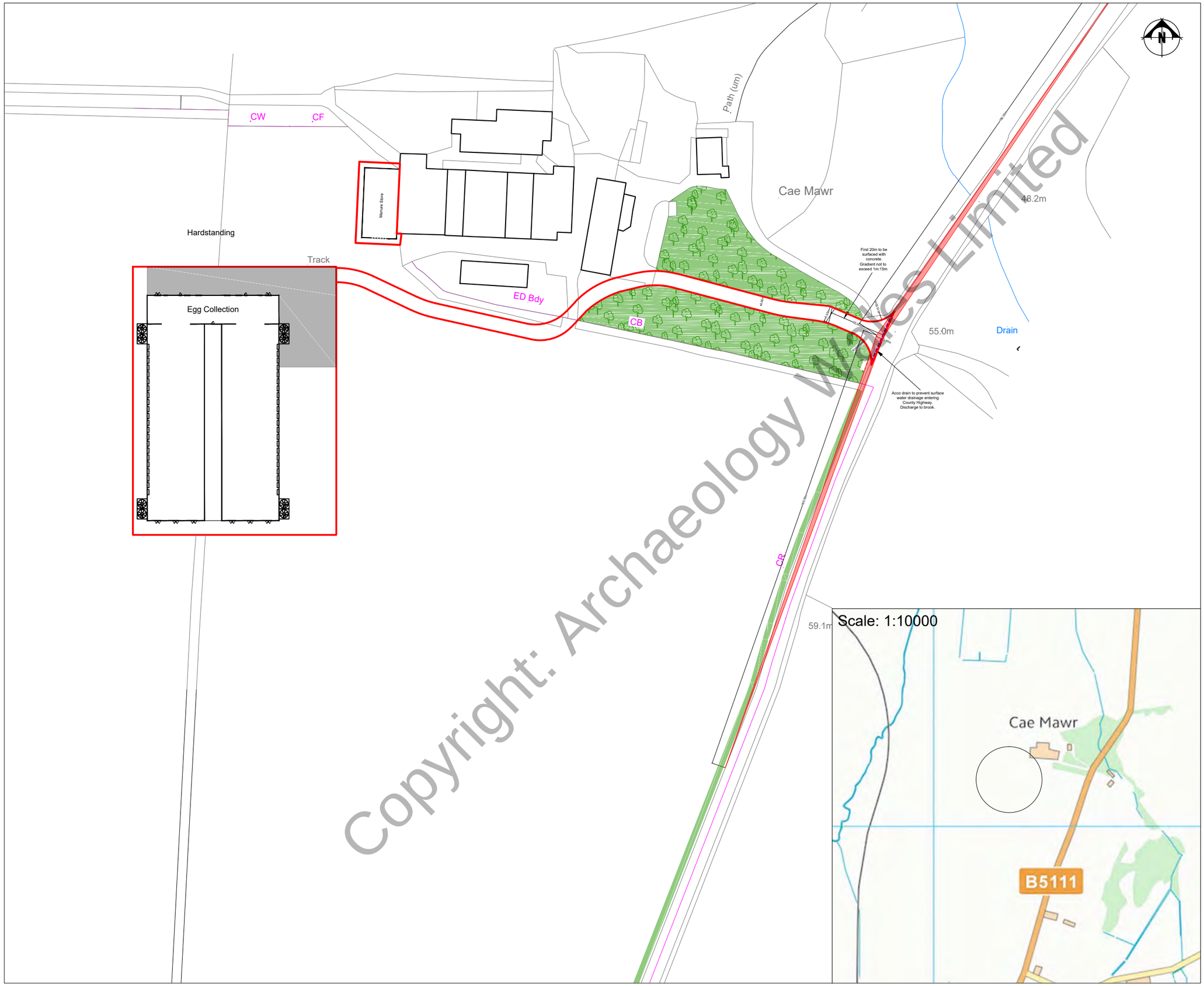


F32 N facing section of [242] Group [262]



F33N facing section of [244]

Figure 20-33. Sections.



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Red Boundary

Rev	Description	Date	Dr by	App by

Original by

Roger Parry & Partners

Residential - Agricultural - Commercial

Job	Proposed egg production unit at Cae Mawr
Title	Location Plan
Location	Llanerch Y Medd Anglesey LL71 8AN
Client	DB & BE Evans
Scales	1:1250 @ A3
Drawing No.	GEL-MZ298-03
Drawn by	AZ
Date	30/01/2020

HOGSTOW HALL, MINSTERLEY
SHREWSBURY, SHROPSHIRE. SY5 0HZ
Tel: 01743 791336 Fax: 01743 792770
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Web address: www.rogerparry.net
Roger Parry & Partners LLP partnership no.OC312203.
Registered Office Hogstow Hall, Minsterley, Shrewsbury, SY5 0HZ
Registered in England and Wales.
A list of members of the LLP is available at the above address.

Plate 1. North facing section of pit [130]

Plate 2. North facing section of pit [138]

Plate 3. North facing section of Pit [200] showing truncation of ditch [264]

Plate 4. South South West facing section of Pit [239]

Plate 5. East facing section of post hole [169]

Plate 6. North west facing section of post hole [173]

Plate 7. North west facing section of post hole [175]

Plate 8. North west facing section of post hole [177]

Plate 9. South east facing section of post hole [179]

Plate 10. North facing section of post hole [252]

Plate 11. East facing section of post hole [181]

Plate 12. North east facing section of gully [254]

Plate 13. East facing section of gully [256]

Plate 14. South east facing section of gully [183]

Plate 15. North north west facing section of gully [117]

Plate 16. North facing section of ditch [258]

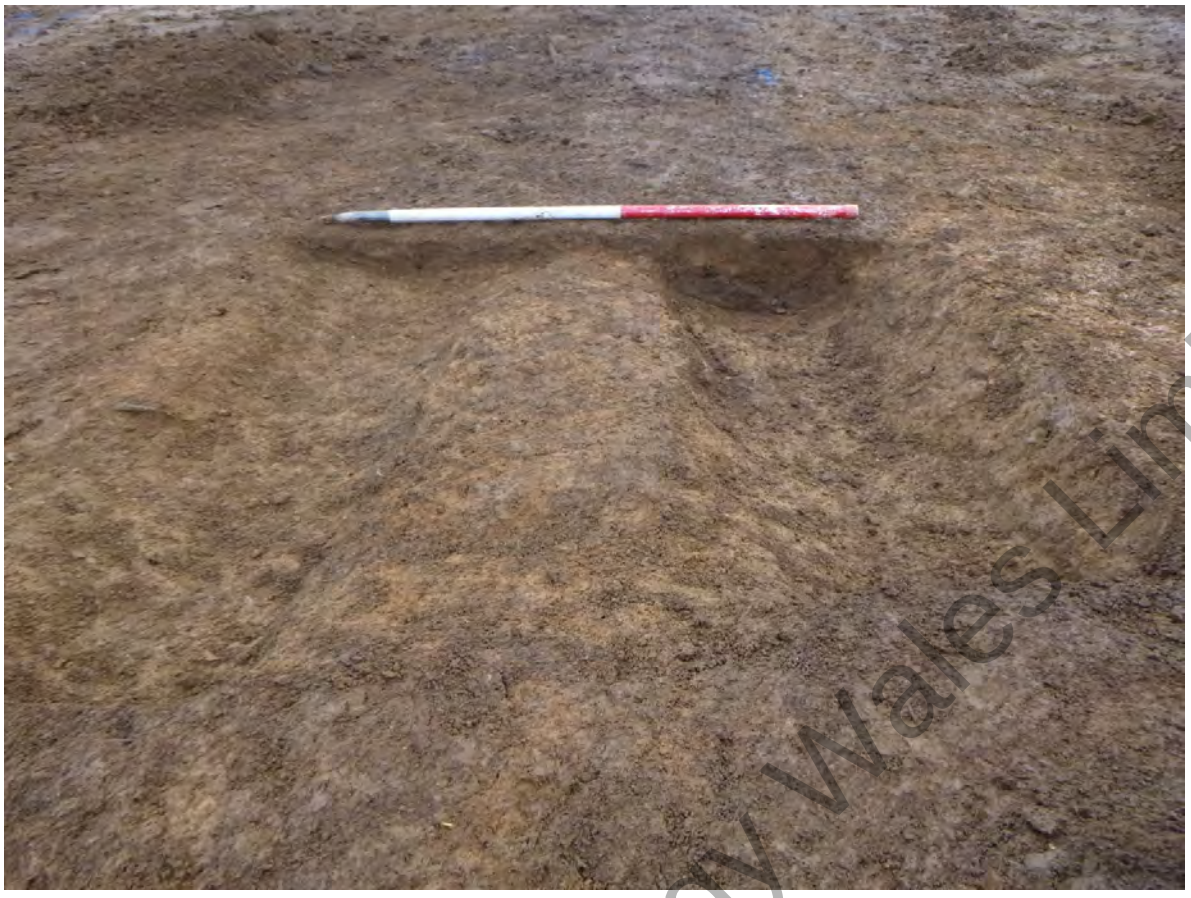

Plate 17. South west facing section of parallel ditches [121] and [124]

Plate 18. West south west facing section of ditch [266]

Plate 19. South facing section of ditch [163]

Plate 20. North west facing section of ditch [192]

Plate 21. West south west facing section of ditch [225]

Plate 22. South west facing section of ditch [227]

Plate 23. North facing section of ploughmark [146]

Plate 24. North facing section of ploughmark [237]

Plate 25. South facing section of ploughmark [229]

Plate 26. East facing representative section of ditch [260]

Plate 27. North east facing representative section of ditch [264]

Plate 28. North facing section of ditch [262]

Plate 29. East facing representative section of ditch [270]

Plate 30. South facing representative section of ditch [274]

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APPENDIX I:
Context Inventory

Context Number	Type	Feature	Group	Description
100	Layer	Topsoil		Topsoil across site = plough soil
101	Layer	Ploughsoil/Topsoil		Ploughsoil/topsoil
102	Layer	Natural		Geological natural
103	Cut	Ditch	272	Ditch filled by (104) and (105)
104	Fill	Ditch	273	Fill of ditch [103]
105	Fill	Ditch		Fill of ditch [103]
106	Cut	Ditch	270	Cut of ditch filled by (107)
107	Fill	Ditch		Fill of ditch [106]
108	Cut	Ditch	260	Cut of ditch filled by (109), (110) and (111)
109	Fill	Ditch		Fill of ditch [108]
110	Fill	Ditch		Fill of ditch [108]
111	Fill	Ditch		Fill of ditch [108]
112	Cut	Ditch	274	Cut of large linear (1m slot) filled by (113) and (114)
113	Fill	Ditch		Lower fill of linear [112]
114	Fill	Ditch	275	Upper fill of linear [112]
115	Cut	Gully	254	Cut of shallow linear (1m slot) filled by (116)
116	Fill	Gully	255	Fill of linear [115]
117	Cut	Gully		Cut of feature filled by (118)
118	Fill	Gully		Fill of feature [118]
119	Cut	Pit		Cut of feature filled by (120)
120	Fill	Pit		Fill of feature [119]
121	Cut	Ditch		Cut of gully filled by (122) and (123)
122	Fill	Ditch		Fill of gully [121]
123	Fill	ditch		Fill of gully [121]
124	Cut	Ditch		Cut of gully filled by (125) and (126)
125	Fill	Ditch		Fill of gully [124]
126	Fill	Ditch		Fill of gully [124]

Context Number	Type	Feature	Group	Description
127	Layer	Layer		Layer across gullies [121] and [124]
128	Cut	Gully	254	Terminal slot of Gully filled by (129)
129	Fill	Gully	255	Fill of terminal slot [128]
130	Cut	Pit		Cut of fire pit filled by (131)
131	Fill	Pit		Fill of fire pit [130]
132	Cut	Gully	256	Cut of shallow gully (1m slot) filled by (133)
133	Fill	Gully	257	Fill of shallow gully [132]
134	Cut	Gully		Cut of gully terminal end filled by (135)
135	Fill	Gully		Fill of gully terminal end [134]
136	Cut	Gully	256	Cut of gully terminal end filled by (137)
137	Fill	Gully	257	Fill of gully terminal end [136]
138	Cut	Pit		Cut of firepit filled by (139)
139	Fill	Pit		Fill of firepit [138]
140	Cut	Pit		Cut of feature (same as [138]) filled by (141)
141	Fill	Pit		Fill of feature [140] (same as [138])
142	Cut	Ploughmark	146	Cut of plough mark filled by (143)
143	Fill	Ploughmark	147	Fill of plough mark [142]
144	Cut	Ploughmark	146	Cut of plough mark filled by (145)
145	Fill	Ploughmark	147	Fill of plough mark [144]
146	Group Cut	Ploughmark		Group cut for plough marks including [142] and [144] filled by group fill (147)
147	Group Fill	Ploughmark		Group fill for plough marks group cut [146] including (143) and (145)
148	Cut	Ditch	258	Ditch filled by (149)
149	Fill	Ditch	259	Fill of ditch [148]
150	Cut	Ditch	258	Cut of ditch filled by (151)
151	Fill	Ditch	259	Fill of ditch [150]
152	Cut	Ditch	260	Cut of ditch filled by (153)
153	Fill	Ditch	261	Fill of ditch [152]

Context Number	Type	Feature	Group	Description
154	Cut	Ditch	258	Cut of ditch filled by (155)
155	Fill	Ditch	259	Fill of ditch [154]
156	Cut	Ditch	266	Cut of ditch filled by (157) and (158)
157	Fill	Ditch		Upper fill of [156]
158	Fill	Ditch		Lower fill of [156]
159	Cut	Ploughmark		Cut of ploughmark filled by (160)
160	Fill	Ploughmark		Fill of ploughmark [159]
161	Cut	Ditch	260	Cut of ditch filled by (162)
162	Fill	Ditch	261	Fill of ditch [161]
163	Cut	Ditch		Cut of ditch filled by (164)
164	Fill	Ditch		Fill of ditch [163]
165	Cut	Ditch	266	Cut of ditch filled by (166)
166	Fill	Ditch	267	Fill of [165]
167	Cut	Ditch	264	Cut of ditch filled by (168)
168	Fill	Ditch	265	Fill of [167]
169	Cut	Posthole		Cut of post hole filled by (170)
170	Fill	Posthole		Fill of post hole [169]
171	VOID	VOID		VOID
172	VOID	VOID		VOID
173	Cut	Posthole		Cut of post hole filled by (174)
174	Fill	Posthole		Fill of post hole [173]
175	Cut	Posthole		Cut of post hole filled by (176)
176	Fill	Posthole		Fill of post hole [175]
177	Cut	Posthole		Cut of post hole filled by (178)
178	Fill	Posthole		Fill of post hole [177]
179	Cut	Posthole		Cut of post hole filled by (180)
180	Fill	Posthole		Fill of post hole [179]

Context Number	Type	Feature	Group	Description
181	Cut	Posthole		Cut of post hole filled by (182)
182	Fill	Posthole		Fill of post hole [181]
183	Cut	Gully		Cut of gully filled by (184)
184	Fill	Gully		Fill of gully [183]
185	VOID	Void		VOID
186	Cut	Ditch	260	Cut of E-W ditch filled by (187)
187	Fill	Ditch	261	Fill of E-W ditch [186]
188	Cut	Ditch	270	Cut of N-S ditch (same as [106]) filled by (189)
189	Fill	Ditch	271	Fill of N-S ditch [188] (same as [106])
190	Cut	Ditch	272	Cut of N-S ditch (same as [103]) filled by (191)
191	Fill	Ditch	273	Fill of N-S ditch [190] (same as [103]
192	Cut	Ditch		Cut of ditch filled by (193)
193	Fill	Ditch		Fill of ditch [192]
194	Cut	Ditch	264	Cut of ditch filled by (195)
195	Fill	Ditch	265	Fill of [194]
196	Cut	Ditch	272	Cut of ditch filled by (197)
197	Fill	Ditch	273	Fill of [196]
198	Cut	Ditch	264	Cut of ditch filled by (199)
199	Fill	Ditch	265	Fill of ditch [198]
200	Cut	Pit		Cut of irregular pit filled by (201)
201	Fill	Pit		Fill of irregular pit [200]
202	Cut	Ditch	260	Cut of ditch filled by (203)
203	Fill	Ditch	261	Fill of ditch [202]
204	Cut	Ditch	274	Cut of ditch filled by (205)
205	Fill	Ditch	275	Fill of ditch [204]
206	Cut	Ditch	264	Cut of ditch filled by (207)
207	Fill	Ditch	265	Fill of ditch [206]

Context Number	Type	Feature	Group	Description
208	Cut	Ditch	264	Cut of ditch filled by (209)
209	Fill	Ditch	265	Fill of [208]
210	Cut	Ditch	272	Cut of large linear filled by (211)
211	Fill	Ditch	273	Fill of large linear [210]
212	Cut	Ditch		Cut of thin linear filled by (213)
213	Fill	Ditch		Fill of thin linear [212]
214	Cut	Ditch	264	Cut of ditch filled by (215)
215	Fill	Ditch	265	Fill of ditch [214]
216	Cut	Ditch	274	Cut of fitch filled by (217)
217	Fill	Ditch	275	Fill of ditch [216]
218	Cut	Ditch	220	Cut of linear filled by (219)
219	Fill	Ditch	221	Fill of linear [218]
220	Group Cut	Ditch		Group cut of linear including [212] and [218]
221	Group Fill	Ditch		Group fill of group cut [220] including (213) and (219)
222	Cut	Ditch	274	Cut of linear filled by (222)
223	Fill	Ditch		Fill of linear [222]
224	Deposit	Natural		Geological deposit under natural
225	Cut	Ditch		Cut of linear filled by (226)
226	Fill	Ditch		Fill of linear [225]
227	Cut	Ditch		Cut of linear filled by (228)
228	Fill	Ditch		Fill of linear [227]
229	Cut	Gully		Cut of linear/plough scar filled by (230)
230	Fill	Gully		Fill of linear/plough scar [229]
231	Cut	Ditch	266	Cut of ditch filled by (232)
232	Fill	Ditch	267	Fill of [231]
233	Cut	Ditch	274	Cut of ditch Filled by (234)
234	Fill	Ditch		Fill of [233]

Context Number	Type	Feature	Group	Description
235	Cut	Ditch	270	Cut of ditch filled by (236)
236	Fill	Ditch	271	Fill of [235]
237	Cut	Ploughmark		Cut of ploughmark filled by (238)
238	Fill	Ploughmark		Fill of [237]
239	Cut	Pit		Cut of pit Filled by (240) and (241)
240	Fill	Pit		Fill of [239]
241	Fill	Pit		Fill of [239]
242	Cut	Ditch	262	Cut of hedge and bank filled by (243)
243	Fill	Ditch	263	Fill of hedge and bank [242]
244	Cut	Ditch		Cut of hedge and bank filled by (245)
245	Fill	Ditch		Fill of hedge and bank [244]
246	Cut	Ditch	266	Cut of ditch filled by (247)
247	Fill	Ditch	267	Fill of ditch [246]
248	Cut	Ditch	260	Cut of ditch Filled by (249)
249	Fill	Ditch	261	Fill of ditch [248]
250	Cut	Ditch	262	Cut of hedge ditch filled by (251)
251	Fill	Ditch	263	Fill of ditch [250]
252	Cut	Pit		Cut of pit filled by (253)
253	Fill	Pit		Fill of pit [252]
254	Group Cut	Gully		Group cut for gully including [115] and [128]
255	Group Fill	Gully		Group fill for gully including (116) and (129)
256	Group Cut	Gully		Group cut for gully including [132] and [136]
257	Group Fill	Gully		Group fill for gully including (133) and (137)
258	Group Cut	Ditch		Group cut for ditch including [148], [150] and [154]
259	Group Fill	Ditch		Group fill for ditch including (149), (151) and (155)
260	Group Cut	Ditch		Group cut for ditch including [108], [152], [161], [186], [202] and [248]
261	Group Fill	Ditch		Group fill for ditch including (109), (153), (162), (187), (203) and (249)

Context Number	Type	Feature	Group	Description
262	Group Cut	Ditch		Group cut for ditch including [242] and [250]
263	Group Fill	Ditch		Group fill for ditch including (243) and (251)
264	Group Cut	Ditch		Group cut for ditch including [167], [194],[198], [206] and [214]
265	Group Fill	Ditch		Group fill for ditch including (168), (195), (199), (207) and (215)
266	Group Cut	Ditch		Group cut for ditch including [156], [165], [246] and [231]
267	Group Fill	Ditch		Group fill for ditch including (157), (166), (247) and (232).
268	VOID	Void		VOID
269	VOID	Void		VOID
270	Group Cut	Ditch		Group cut for ditch including [106], [188] and [235]
271	Group Fill	Ditch		Group fill of ditch including (107), (189) and (236)
272	Group Cut	Ditch		Group cut of ditch including [103], [190], [196] and [210]
273	Group Fill	Ditch		Group fill for ditch [272] including (104), (191), (197) and (211)
274	Group Cut	Ditch		Group cut of ditch including [112], [204], [216], [222] and [233]
275	Group Fill	Ditch		Group fill for ditch [274] including (114), (205), (217), (223) and (234)

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APPENDIX II: Full Radiocarbon Lab Report

UBANo	Sample ID	Material Type	^{14}C Age	±	F14C	±	mg Graphite
UBA-48269	(130) <1>	Hazelnut shell	4197	29	0.5931	0.0022	0.983
UBA-48270	(139) <2>	Hazelnut shell	4513	31	0.5702	0.0022	0.943

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Llandloes, Powys SY18 6BN
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^{14}CHRONO Centre
Queens University Belfast
42 Fitzwilliam Street
Belfast BT9 6AX
Northern Ireland

Radiocarbon Date Certificate

Laboratory Identification:	UBA-48269
Date of Measurement:	2022-08-30
Site:	Cae Mawr
Sample ID:	(130) <1>
Material Dated:	charred seed or nutshell
Pretreatment:	AAA
mg Graphite:	0.983
Submitted by:	Rhiannon Philp

Conventional ^{14}C Age:	4197±29 BP
Fraction corrected	using AMS $\delta^{13}C$

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42 Fitzwilliam Street
Belfast BT9 6AX
Northern Ireland

Radiocarbon Date Certificate

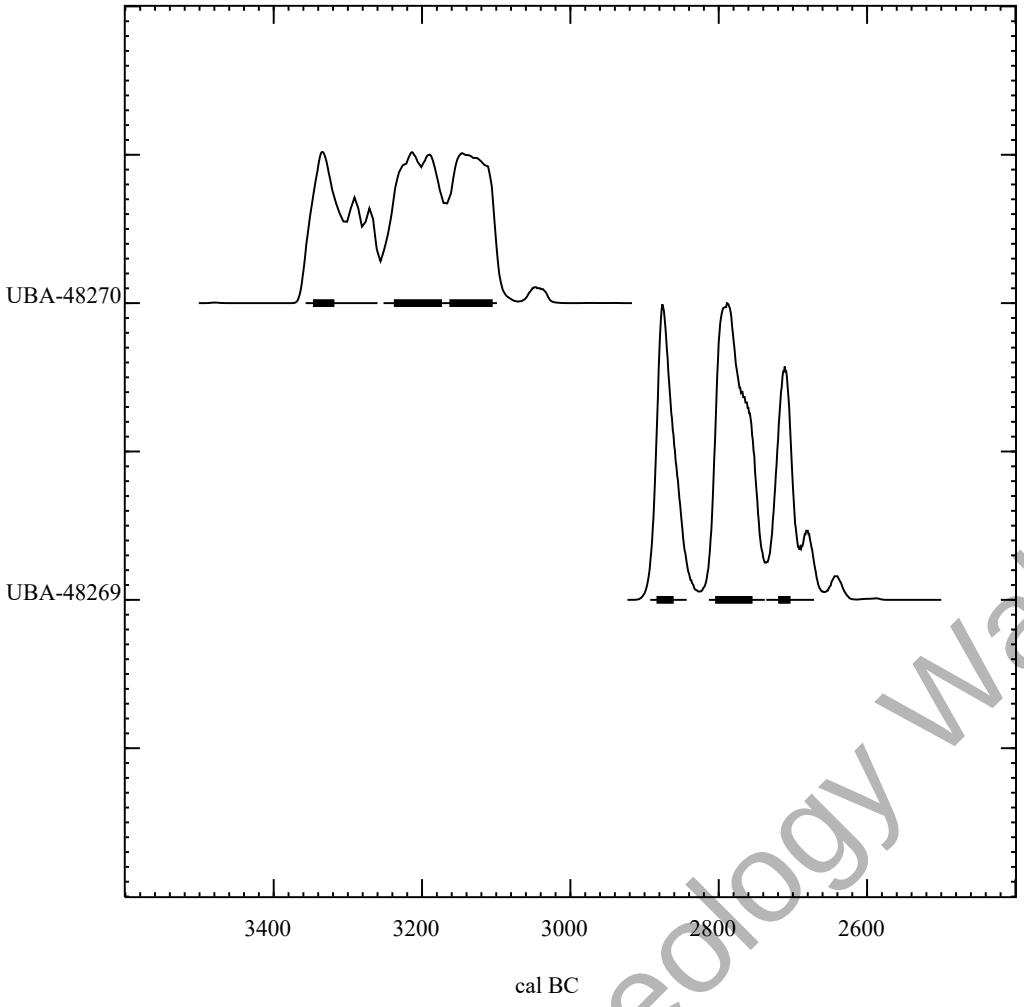
Laboratory Identification:	UBA-48270
Date of Measurement:	2022-08-31
Site:	Cae Mawr
Sample ID:	(139) <2>
Material Dated:	charred seed or nutshell
Pretreatment:	AAA
mg Graphite:	0.943
Submitted by:	Rhiannon Philp

Conventional ^{14}C Age:	4513±31 BP
Fraction corrected	using AMS $\delta^{13}C$

Marine samples will require re-calibration with the marine calibration curve

```
 2
                RADIOCARBON CALIBRATION PROGRAM*
                           CALIB REV8.2
          Copyright 1986-2020 M Stuiver and PJ Reimer
        *To be used in conjunction with:
        Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.

UBA-48269
48269
Radiocarbon Age BP   4197 +/-   29
Calibration data set: intcal20.14c                # Reimer et al. 2020
  % area enclosed       cal AD age ranges           relative area under
                                                  probability distribution
  68.3 (1 sigma)     cal BC 2884- 2861                      0.262
                            2805- 2754                      0.577
                            2720- 2703                      0.161
  95.4 (2 sigma)     cal BC 2892- 2843                      0.271
                            2813- 2738                      0.490
                            2736- 2671                      0.240
  Median Probability: -2784

UBA-48270
48270
Radiocarbon Age BP   4513 +/-   31
Calibration data set: intcal20.14c                # Reimer et al. 2020
  % area enclosed       cal AD age ranges           relative area under
                                                  probability distribution
  68.3 (1 sigma)     cal BC 3347- 3318                      0.184
                            3238- 3173                      0.423
                            3163- 3105                      0.394
  95.4 (2 sigma)     cal BC 3357- 3260                      0.331
                            3252- 3099                      0.669
  Median Probability: -3210

 References for calibration datasets:
Reimer P, Austin WEN, Bard E, Bayliss A, Blackwell PG, Bronk Ramsey C, Butzin M
Edwards RL, Friedrich M, Grootes PM, Guilderson TP, Hajdas I, Heaton TJ, Hogg A
Kromer B, Manning SW, Muscheler R, Palmer JG, Pearson C, van der Plicht J, Reim
Richards DA, Scott EM, Southon JR, Turney CSM, Wacker L, Adolphi F, BÃ¼ntgen U,
Fahrni S, Fogtmann-Schulz A, Friedrich R, KÃ¶hler P, Kudsk S, Miyake F, Olsen J
Sakamoto M, Sookdeo A, Talamo S. 2020.
The IntCal20 Northern Hemisphere radiocarbon age calibration curve (0-55 cal kB
Radiocarbon 62. doi: 10.1017/RDC.2020.41.



Comments:
* This standard deviation (error) includes a lab error multiplier.
** 1 sigma = square root of (sample std. dev.^2 + curve std. dev.^2)
** 2 sigma = 2 x square root of (sample std. dev.^2 + curve std. dev.^2)
where ^2 = quantity squared.
[ ] = calibrated range impinges on end of calibration data set
0* represents a "negative" age BP
1955* or 1960* denote influence of nuclear testing C-14

NOTE:  Cal ages and ranges are rounded to the nearest year which
       may be too precise in many instances.  Users are advised to
       round results to the nearest 10 yr for samples with standard
       deviation in the radiocarbon age greater than 50 yr.
```

Posterior Probability Distributions



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Wales

APPENDIX III:
Written Scheme of Investigation

ARCHAEOLOGY WALES
Revealing the past, informing the future

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E: info@arch-wales.co.uk
www.arch-wales.co.uk

WRITTEN SCHEME OF INVESTIGATION

FOR AN ARCHAEOLOGICAL STRIP, MAP & RECORD

ON LAND AT CAE MAWR, LLANERCHYMEDD (ANGLESEY)

Prepared for:

Roger Parry

Planning Application Number: FPL/2019/251/EIA

Project No: 2760

October 2021

Archaeology Wales Limited
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Contents Page

Figures

1. Introduction & Planning Background

1.1.1. This Written Scheme of Investigation (WSI) details the methodology for a programme of archaeological mitigation, carried out by Archaeology Wales (henceforth – AW), which comprises of a Strip, Map, and Record to be undertaken in association with the erection of a free-range poultry unit (egg production) together with feeding bins and associated works on land at Cae Mawr, Llanerchymedd LL71 8AN, Anglesey centred on SH 42034 86095 (Figure 1 and 2). The Local Planning Authority (LPA) is Isle of Anglesey County Council (IACC), and the planning application number is FPL/2019/251/EIA.

1.1.2. The methodology set out in this WSI will be agreed with Gwynedd Archaeological Planning Service (GAPS) in their capacity archaeological advisors to IACC. GAPS recommended that a programme of archaeological work (Strip, Map, and Record) be undertaken prior to groundworks associated with the proposed development. The programme of works is to mitigate the impact of the proposed development on any surviving buried archaeological resource within the bounds of the site.

1.1.3. The purpose of the archaeological mitigation is to provide IACC with sufficient information regarding the nature of archaeological remains on the site of the development, the requirements for which are set out in Planning Policy Wales (revised edition 11, 2021), Section 6.1 and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to ensure that all historic and archaeological assets are fully investigated and recorded if they are disturbed or revealed as a result of activities associated with the development.

1.1.4. This WSI has been prepared by Irene Garcia Rovira MCIfA, AW. The project will be managed by Irene Garcia Rovira MCIfA, AW.

1.1.5. All work will be undertaken to the standards and guidance set by the Chartered Institute for Archaeologists. AW is a Registered Organisation with the CIfA.

2. Site Description & Historical Background

2.1 Site Description

2.1.1. The proposed development site is located on the grounds of Cae Mawr, 2km north of Llanerchymedd, Anglesey, LL71 8AN.

2.1.2. The proposed development area sits between two fields. The field to the west is defined as agricultural farmland whereas the field to the east is defined as improved grassland. The proposed development occupies an area of approximately 0.66hectares, including an access road connecting the site to the B5111, approximately 200m in length.

2.1.3. The bedrock geology of the site is described as Ordovician Rocks (undifferentiated), comprising Interbedded mudstone and sandstone. This bedrock is sedimentary and was formed approximately 444 to 485 million years ago in the Ordovician period when the local environment was dominated by shallow seas. The superficial deposits are described as Till, Devensian – Diamicton, which are superficial deposits formed up to 2 million years ago in the Quaternary period when the local environment was dominated by ice age conditions (BGS 2019).

2.2 Archaeological & Historical Background

2.2.1. A HER search (GATHER1520) has been carried out to assess the archaeological resource that may exist within 500m of the proposed development (see Appendix I). However, the search only triggered one result: PRN 55984 Building, SE of Cae-mawr.

2.2.2. Sites in the wider area include the scheduled monuments of Maen Chwyf burial chamber (CAN076) and Llys Einion standing stone (AN077) and two possible enclosures. Evidence of later prehistoric settlement is provided by the recorded discovery of a collection of quern stones as Isfron Ceidio, immediately west of the site, and of medieval settlement by the parish Church of St Ceidio (LB 5401), rebuilt in 1845 on the original medieval foundations and is reputed to have early medieval origin.

2.2.3. It is suggested that the scarcity of recorded archaeology is likely to be at least in part the result of a lack of previous archaeological investigation. This has been recently demonstrated by geophysical survey carried out by West

Yorkshire Archaeology Services 1km – 1.75km to the east of the application site.

3. Objectives

3.1.1. This WSI sets out a program of works to ensure that the mitigation will meet the standard required by The Chartered Institute for Archaeologist's *Standard and guidance for archaeological excavation* (2020).

3.1.2. The Strip, Map and Record works will be undertaken in phases. The first phase being the strip, or removal, of overburden to an agreed level. This will be followed by planning of all revealed archaeological deposits and features. Following planning excavation will be undertaken to establish a required understanding of the nature of the archaeology and its chronology.

3.2 Striping & Mapping

3.2.1. The objective of the strip, map and record is to reveal, identify, record, and map any archaeological deposits, features or structures in the development area. Overburden and modern deposits will be removed by mechanical excavator equipped with a toothless bucket under archaeological supervision. Following overburden removal, limited exploratory excavation will be carried out on any revealed archaeological remains to detail the nature of the features encountered. Where there is no archaeology present the strip will be deep enough to reveal the natural deposits.

3.3 Recording/Excavation

3.3.1. The objective of the proposed excavation is to preserve, by record, detailed information on all archaeological deposits within the designated area, prior to their likely destruction as a consequence of the development. All archaeological deposits, horizons and artefacts encountered will be recorded and removed stratigraphically by the excavation team.

3.3.2. The objectives of this work include producing relative and absolute dating and phasing for deposits and features recorded on the site, establishing the character of these deposits in an attempt to define functional areas on the site (industrial, domestic, funerary & ritual etc), and produce information on the economy and local environment to compare and contrast with results of other archaeological work in the area. Detailed objectives will be adjusted,

adapted, and refined as the strip, map and sample work is undertaken and the archaeological resources becomes better understood.

3.4 Reporting & Archiving

3.4.1. Following all stages of the work report will be produced that will provide a detailed account of all the archaeological work undertaken. Sufficient desk-top research will be undertaken to ensure that the results of this work are properly understood, interpreted, and reported.

3.4.2. The report will include a comprehensive assessment of the historic context within which the archaeological evidence rests and will aim to highlight any relevant research issues within regional, national and, if relevant, international research frameworks.

3.4.3. A full site archive will be produced, including project records, artefacts, ecofacts and any other sample residues and summaries of the context, artefact, and environmental records.

4. Timetable of works

4.1 Fieldwork

4.1.1. Stage 1 of the mitigation, i.e., the stripping of the site will take place on week commencing 18/10/2021. Stage 2 will occur after this initial date but is dependent on the discovery of any archaeological deposits, features or structures. AW will update GAPS with the exact date when confirmed.

4.2 Report delivery

4.2.1. The report will be submitted to the client and to GAPS within three months of the completion of the fieldwork. A copy of the report will also be submitted to IACC. A copy of the report will also be sent to the regional Historic Environment Record.

5. Fieldwork detail

5.1.1. The strip, map and record will be used to investigate an area approximately 4,537m², corresponding to the footprint of the egg barn and associated hardstanding.

5.1.2. The project manager in charge of the work will satisfy themselves that all constraints to groundworks have been identified, including the siting of live services, ecological constraints, Tree Preservation Orders and Rights of Way.

5.1.3. Stripping will carried out by a 360º machine excavator fitted with a toothless ditching bucket, working backwards from one front. The designated area will be stripped of modern overburden, comprising topsoil, under close archaeological supervision, to the top of the archaeological horizon or the natural deposits, whichever is encountered soonest. If archaeological remains are found to be present cutting through soil layers that conceal lower archaeological horizons, then the upper levels will be mapped and investigated prior to their removal to the lower levels. Machines will not be allowed to track over the stripped areas until the fieldwork has been completed in these areas and it has been signed off by GAPS. The supervising archaeologist will monitor the movement of any plant on the site and suspend operations that are potentially damaging to underlying archaeological deposits. Spoil heaps will be stored at least 1m from the edge of excavation areas.

5.1.4. If machine stripping does not provide the required clarity to accurately identify archaeological features and deposits, the resulting surface will be hand cleaned using hoes and/or pointing trowels, as appropriate, to prove the presence, or absence, of archaeological features and to determine their significance. All such features will be recorded, and if required, sample excavated. Sample excavation may be undertaken to establish whether features are indeed archaeological in nature or not.

5.1.5. All archaeological features and deposits will be mapped and recorded as per the methods laid out in this WSI. Features and deposits will be recorded in close sequence to the stripping. Exposed surfaces will be regularly monitored to identify any further features that become apparent through weathering. Sufficient levels will also be taken across the site to support future topographic modelling.

5.1.6. Any subsequent archaeological excavation will be undertaken to meet the standard required by The Chartered Institute for Archaeologist's *Standard and Guidance for Archaeological Excavation* (2020). The excavation strategy will be agreed with GAPS and the client following the completion of the

machine stripping. The excavation strategy will continue to be reviewed, developed, and agreed through further consultation with GAPS as further details come to light through the excavation.

5.1.7. All overburden will have been removed and archaeological features revealed, cleaned, and initially recorded during the preceding strip, map, and record phase of the works.

5.1.8. All archaeological features will be planned and sectioned as a minimum objective.

5.1.9. Full excavation will be carried out on individual features relating to structural remains and other areas of significant activity (domestic, industrial, religious, hearths, etc). Pits, postholes, and stake-holes will be half-sectioned, unless the nature or complexity of the features requires quadranting or excavation in plan. The sample rates of linear features such as ditches and gullies will be at a minimum of 25%. Complete sampling of any burials and associated features, i.e., pits under/in the mounds. Pit features and short linear features elsewhere will be at 50% unless they contain burials, or a high proportion of artefacts.

5.1.10. Isolated discrete features such as pits and postholes (less than 2m²) not belonging to structures or other features discussed above will be half-sectioned.

5.1.11. Artefacts, environmental sampling, and human remains are discussed below.

Recording

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

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

5.1.14. All features identified will be tied into the OS survey grid and fixed to local topographical boundaries.

5.1.15. Photographs will be taken in digital format with an appropriate scale, using a 10MP+ camera with photographs stored in Tiff format.

5.1.16. The archaeologist(s) supervising the machine stripping will have access to the AW metal detector and be trained in its use.

Finds

5.2.1. The professional standards set in the Chartered Institute for Archaeologists' *Standard and guidance for the collection, documentation, conservation, and research of archaeological* (2020) will form the basis of finds collection, processing, and recording.

5.2.2. Finds will be carefully excavated by hand. The excavation of fragile or particularly significant finds will be undertaken in consultation with an appropriate archaeological conservator. Finds will be bagged by archaeological context, the location of special finds and flint working deposits will be recorded three dimensionally.

5.2.3. All manner of finds regardless of category and date will initially be retained. These will be suitably bagged, boxed and marked. Following cataloguing and initial analysis finds of little archaeological significance may be discarded[1].

5.2.4. Finds recovered that are regarded as Treasure under The Treasure Act 1996 will be reported to HM Coroner for the local area.

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

Environmental Sampling Strategy

5.3.1. All environmental sampling and recording and will follow Historic England's *Guidelines for Environmental Archaeology* (2011).

[1] See Selection Strategy.

5.3.2. A detailed sampled strategy will be drawn up taking into consideration the results obtained during Stage 1 (Strip, Map). The strategy will be guided by specialist advice and will be discussed and agreed GAPS prior Stage 2.

5.3.3. It is anticipated that the sample strategy will endeavour to obtain material suitable for absolute dating. The latter will consider the date of the first construction and use of the features encountered. It will also seek to obtain suitable dating material that can be used alongside stratigraphic relationships to facilitate the phasing of the site.

Human remains

5.4.1. In the event that human remains are encountered, their nature and extent will be established, the client, GAPS and the coroner informed. Measures will be put in place to ensure that any such remains are fenced off, covered, and protected from deterioration and damage, and that human remains, and burial goods will be treated in a respectful manner.

5.4.2. Where preservation in situ is not possible the human remains will be fully recorded and removed under conditions that comply with all current legislation and include acquisition of licenses and provision for reburial following all analytical work.

5.4.3. Human remains will be excavated in accordance with the Chartered Institute for Archaeologist's *Updated Guidelines to the Standards for Recording Human Remains* (2017). A Ministry of Justice Licence will be obtained before remains can be lifted, this applies to both inhumation and cremated remains.

Specialist advisers

5.4.4. In the event of certain finds, features or sites being discovered, AW will seek specialist opinion and advice. A list of specialists is given in the table below although this list is not exhaustive.

Artefact type	Specialist
Flint	Julie Birchenall (Freelance)
Animal bone	Richard Madgwick (Cardiff University)
CBM, heat affected clay, Daub	Rachael Hall (APS)

etc.	
Clay pipe	Charley James-Martin (Archaeology Wales)
Glass	Rowena Hart (Archaeology Wales)
Cremated and non-cremated human bone	Richard Madgwick (Cardiff University)
Metal work and metallurgical residues	Dr Tim Young (GeoArch)
Neo/BA pottery	Dr Alex Gibson (Bradford University)
IA/Roman pottery	Jane Timby (Freelance)
Roman Pottery	Rowena Hart (Archaeology Wales)/ Peter Webster (Freelance)
Post Roman pottery	Stephen Clarke (Monmouthshire Archaeology)
Charcoal (wood ID)	John Carrot (Freelance)
Waterlogged wood	Nigel Nayling (University of Wales – Lampeter)
Molluscs and pollen	Dr James Rackham
Charred and waterlogged plant remains	Wendy Carruthers (Freelance)

5.4.5. Specialist finds and paleoenvironmental reports will be written by AW specialists, or sub-contracted to external specialists when required.

Monitoring

5.4.6. GAPS will be contacted approximately two weeks prior to the commencement of archaeological site works, and subsequently once the work is underway.

5.4.7. Any changes to the WSI that AW may wish to make after approval will be communicated to GAPS for approval on behalf of IACC.

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

6. Post-Fieldwork Programme

6.1. Site Archive

6.1.1. An ordered and integrated site archive will be prepared in accordance with: Management of Research Projects in the Historic Environment (MoRPHE) (2015) upon completion of the project.

6.1.2. The site archive – including all artefacts, soil samples, paper, and digital records – will be subjected to selection in order to establish those elements that will be retained for long term curation. The selection strategy will be agreed with all stakeholders and will be detailed in the Selection Strategy and Data Management Plan (CIfA 2020). It will be developed taking into consideration the aims and objectives of the project and will be informed through a detailed consideration of the *Research Agenda of the Archaeology of Wales* and other relevant research frameworks. The manner in which the records will be prepared for long time storage will be guided by the requirements established by the repositories. A detailed justification for the disposal of both records and materials will be written and included within the Data Management Plan.

6.1.3. The site archive (including artefacts and samples) will be prepared in accordance with the National Monuments Record (Wales) agreed structure and deposited with an appropriate receiving organisation, in compliance with CIfA Guidelines (*Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*, 2014). It will also conform to the guidelines set out in *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales* (National Panel for Archaeological Archives in Wales 2017). The legal landowner's consent will be gained for deposition of finds. The project will adhere to the Welsh Archaeological Trust's joint *Guidance for the Submission of Data to the Welsh Historic Environment Records* (2018).

6.2. Analysis

6.2.1. Following a rapid review of the potential of the site archive, a programme of analysis and reporting will be undertaken. This will be a two-phase program commencing with an initial Assessment Report in guided by relevant specialists which will lead to a process of analysis and to the development of a Final Report.

6.2.2. This will result in the following inclusions in the report:

- A bilingual non-technical summary
- The aims and methods adopted in the course of the archaeological works, and the background and circumstances of the report (including development proposals and planning background)
- Location plan showing the area/s covered by archaeological works, including the locations of all artefacts, structures and features found
- Plans and section drawings (if features are encountered) with ground level, ordnance datum and vertical and horizontal scales.
- A written description and interpretation of all deposits identified, including their character, function, potential dating, and relationship to adjacent features. Specialist descriptions and illustrations of all artefacts and soil samples will be included as appropriate. An indication of the potential of archaeological deposits which have not been disturbed by the development, and proposals for further necessary analysis
- The report will contain a discussion of the local, regional, and national context of the remains by means of reviewing published reports, unpublished reports, historical maps, documents from local archives and the regional HER as appropriate.
- A detailed archive list at the rear listing all contexts recorded, all samples, finds and find types, drawings and photographs taken. This will include a statement of the intent to deposit, and location of deposition, of the archive.

6.3. Report to Client

6.3.1. Copies of all reports associated with the mitigation, together with inclusion of supporting evidence in appendices as appropriate, including photographs and illustrations, will be submitted upon completion to GAPS for comment and approval. Following approval, a copy will be sent to the client, and for formal submission to IACC .

6.4. Additional Reports

6.4.1. After an appropriate period has elapsed, copies of all reports will be deposited with the relevant county Historic Environment Record, the National Monuments Record and, if appropriate, Cadw. The report and all relevant information will be submitted to the Historic Environment Record following the guidelines and procedures laid out in the *Guidance for the Submission of Data to the Welsh Historic Environment Records* (WAT 2018).

6.5. Summary Reports for Publication

6.5.1. Short archaeological reports will be submitted for publication in relevant journals; as a minimum, a report will be submitted to the annual publication of the regional CBA group or equivalent journal.

6.6. Notification of Important Remains

6.6.1. Where it is considered that remains have been revealed that may satisfy the criteria for statutory protection, AW will submit preliminary notification of the remains to Cadw.

6.7. Archive Deposition

6.7.1. The final archive (site and research) will, whenever appropriate, be deposited with a suitable receiving institution. If artefacts are recovered, and dependent on the size of the final archive, the preferred receiving institution would be a suitable local institution. If the archive is not acceptable the archive will be deposited with Amgueddfa Cymru – National Museum Wales, Cardiff. If no artefacts are recovered then the archive will be deposited with the National Monuments Record, RCAHMW, Aberystwyth. Arrangements will be made with the receiving institution before work starts.

6.7.2. Although there may be a period during which client confidentiality will need to be maintained, copies of all reports and the final archive will be deposited no later than 12 months after completion of the work.

6.7.3. Copies of all reports, the digital archive and an archive index will be deposited with the National Monuments Record, RCAHMW, Aberystwyth.

6.7.4. Wherever the archive is deposited, this information will be relayed to the HER. A summary of the contents of the archive will be supplied to GAPS.

6.8. Finds Deposition

6.8.1. The finds, including artefacts and ecofacts, excepting those which may be subject to the Treasure Act, will be deposited with the same institution, subject to the agreement of the legal landowners.

7. Staff

7.1.1. The project will be managed by Irene Garcia Rovira MCIfA and the fieldwork undertaken by suitable qualified and experienced AW archaeologists. Any alteration to staffing before or during the work will be brought to the attention of GAPS and the client.

8. Health & Safety

8.1. Risk Assessment

8.1.1. Prior to the commencement of work AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with The Management of Health and Safety Regulations 1992. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

8.2. Other Guidelines

8.2.1. AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual *Health and Safety in Field Archaeology* (2002).

8.3. Covid-19 Considerations

8.3.1. If an AW Staff member believes they are at an increased risk from the virus they are to contact management.

8.3.2. Please the Site Operating Procedures/Risk Assessment for full details and work in accordance with them.

8.3.3. If anyone is showing symptoms of Covid-19 they are to go home immediately and notify the appropriate people.

8.3.4. Staff must stay at least 2m away from any person, who does not live within their own household, AT ALL TIMES. This includes on site, within office space, in the canteen and all other parts of the compound.

8.3.5. Wash hands regularly and thoroughly, especially on arriving to site, leaving site and before eating.

8.3.6. The staff members should take their own food and drink to site.

8.3.7. Once returning home, appropriate care should be taken to ensure that contamination does not spread (change clothes, shower etc).

8.3.8. Staff must avoid touching surfaces if possible. If they have to touch a surface, such as a door handle or toilet seat, staff must either wear gloves or wash their hands/ relevant body part with sterilising hand wash immediately afterwards. DO NOT touch your face after touching any surface. Staff should also disinfect surfaces before and after touching. Staff must bring their own sterilising handwash, wipes and gloves and dispose of them safely after use.

8.3.9. All staff must read, sign, and adhere to the separate AW Covid – 19 risk assessment.

8.3.10. If any AW staff, contractor, or any other persons on site are not abiding by these rules, the staff member will remove themselves from the risk and contact the PM immediately.

9. Community Engagement & Outreach

9.1.1. Wherever possible, AW will ensure suitable measures are in place to inform the local community and any interested parties of the results of the site investigation work. This may occur during the site investigation work or following completion of the work. The form of any potential outreach activities may include lectures and talks to local groups, interested parties and persons, information boards, flyers, and other forms of communication (social media and websites), and press releases to local and national media.

9.1.2. The form of any outreach will respect client confidentiality or contractual agreements. As a rule, outreach will be proportional to the size of the project.

9.1.3. Where outreach activities have a cost implication these will need to be negotiated in advance and in accordance with the nature of the desired response and learning outcomes.

10. Insurance

10.1.1. AW is fully insured for this type of work and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

11. Quality Control

11.1. Professional standards

11.1.1. AW works to the standards and guidance provided by the Chartered Institute for Archaeologists. AW fully recognise and endorse the Chartered Institute for Archaeologists' Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology and the Standard and Guidance for archaeological watching briefs currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

11.2. Project tracking

11.2.1. The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

12. Arbitration

12.1.1. Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' *Arbitration Scheme for the Institute for Archaeologists* applying at the date of the agreement.

13. References

Chartered Institute for Archaeologists, 2020. *Standard and guidance for archaeological excavation.*

Chartered Institute for Archaeologists, 2014. *Standards and guidance for the collection, compilation, transfer, and deposition of archaeological archives*.

Chartered Institute for Archaeologists, 2014. *Standards and guidance for the collection, documentation, conservation, and research of archaeological materials*

English Heritage, 2002. *Guidelines for Environmental Archaeology*.

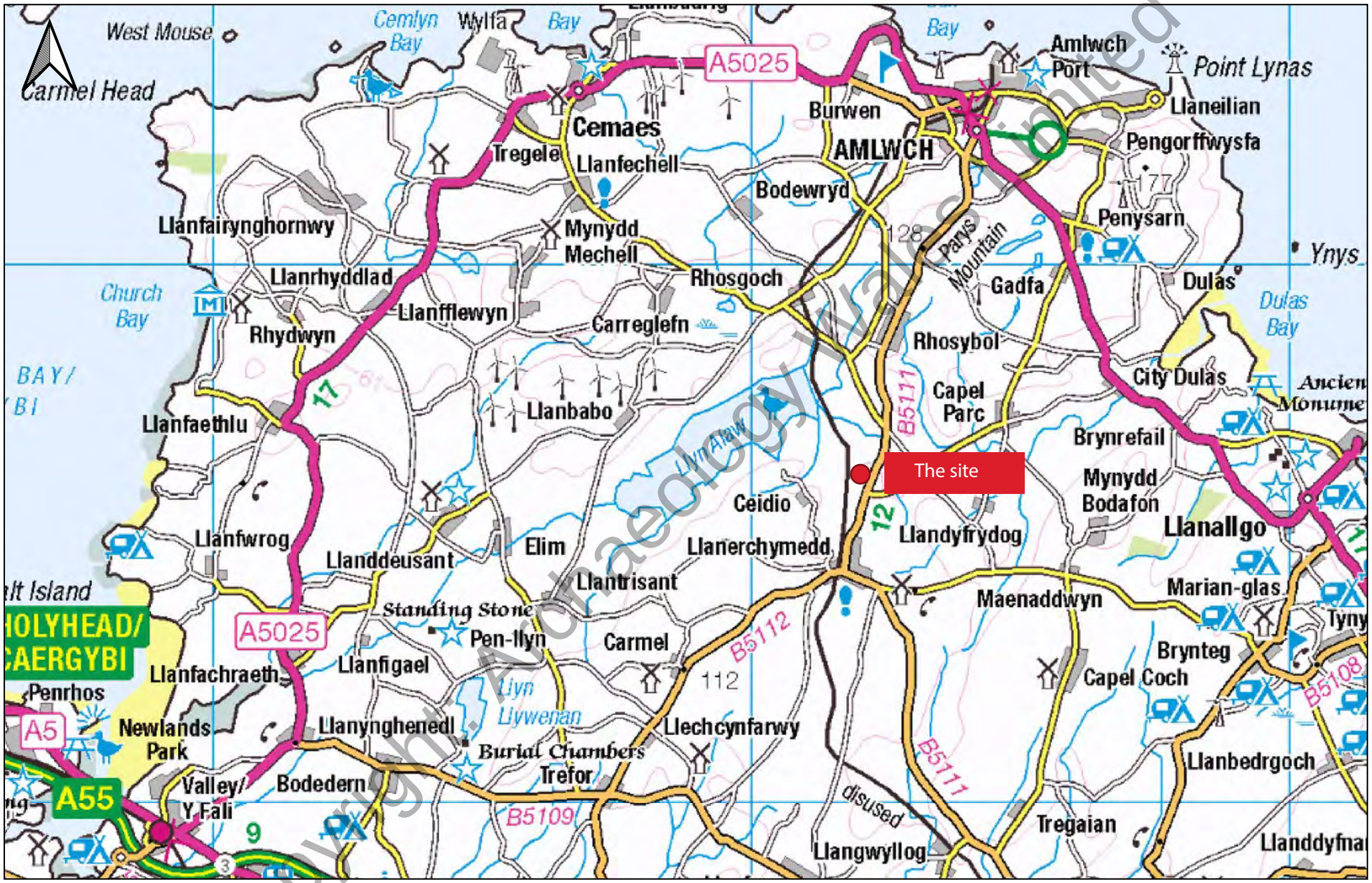
English Heritage, 2015. *Management of Research Projects in the Historic Environment (MORPHE)*.

Historic England 2017, *Research Agenda*.

Mitchell, P.D. and Brickley, M. eds. 2017. *Updated Guidelines to the Standards for Recording Human Remains. Chartered Institute for Archaeologists*

National Panel for Archaeological Archives in Wales, 2017. *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales*

Welsh Archaeological Trusts, 2018. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*



0 2.5 5 km

Figure 1. Site location

ARCHAEOLOGY WALES

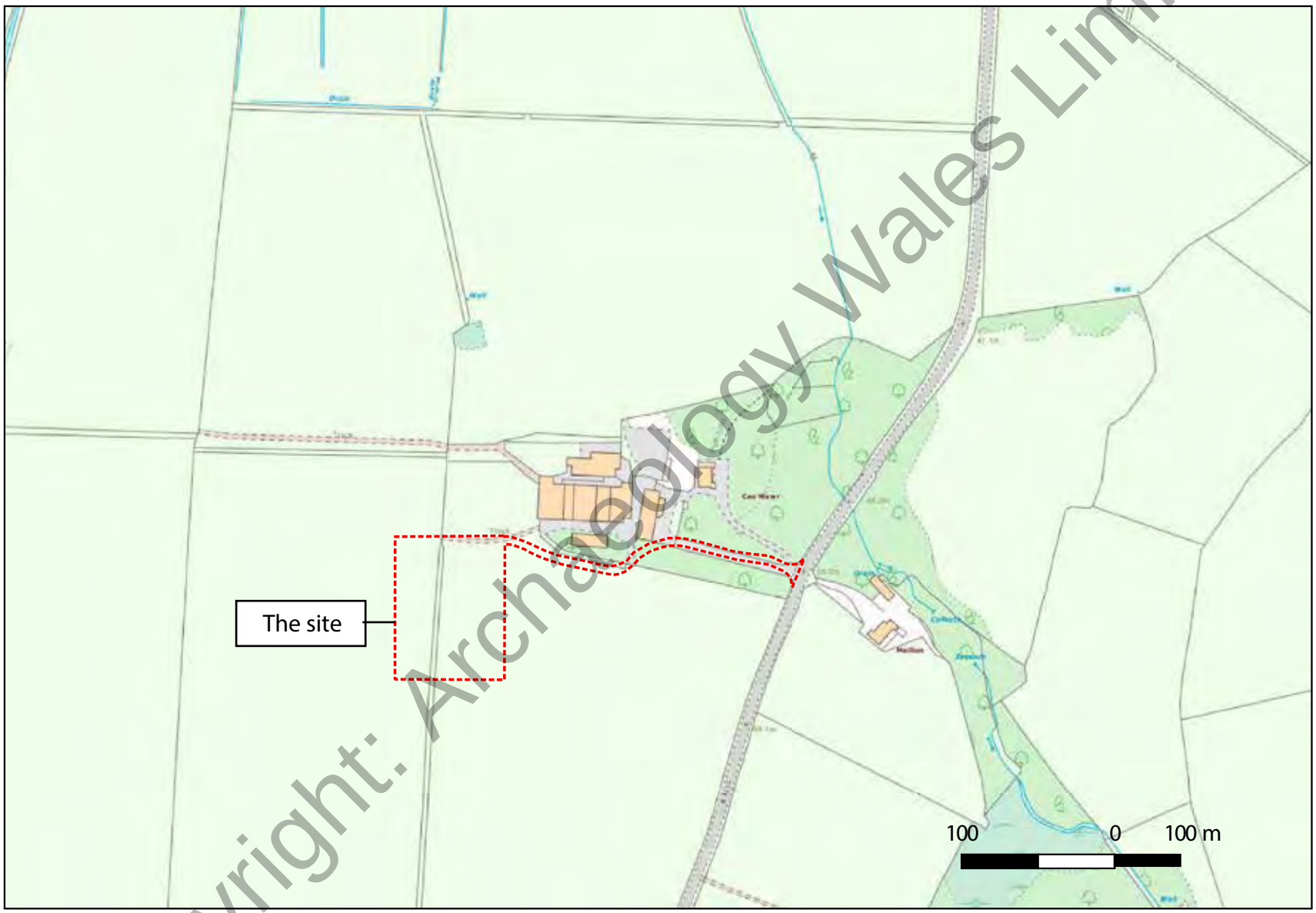
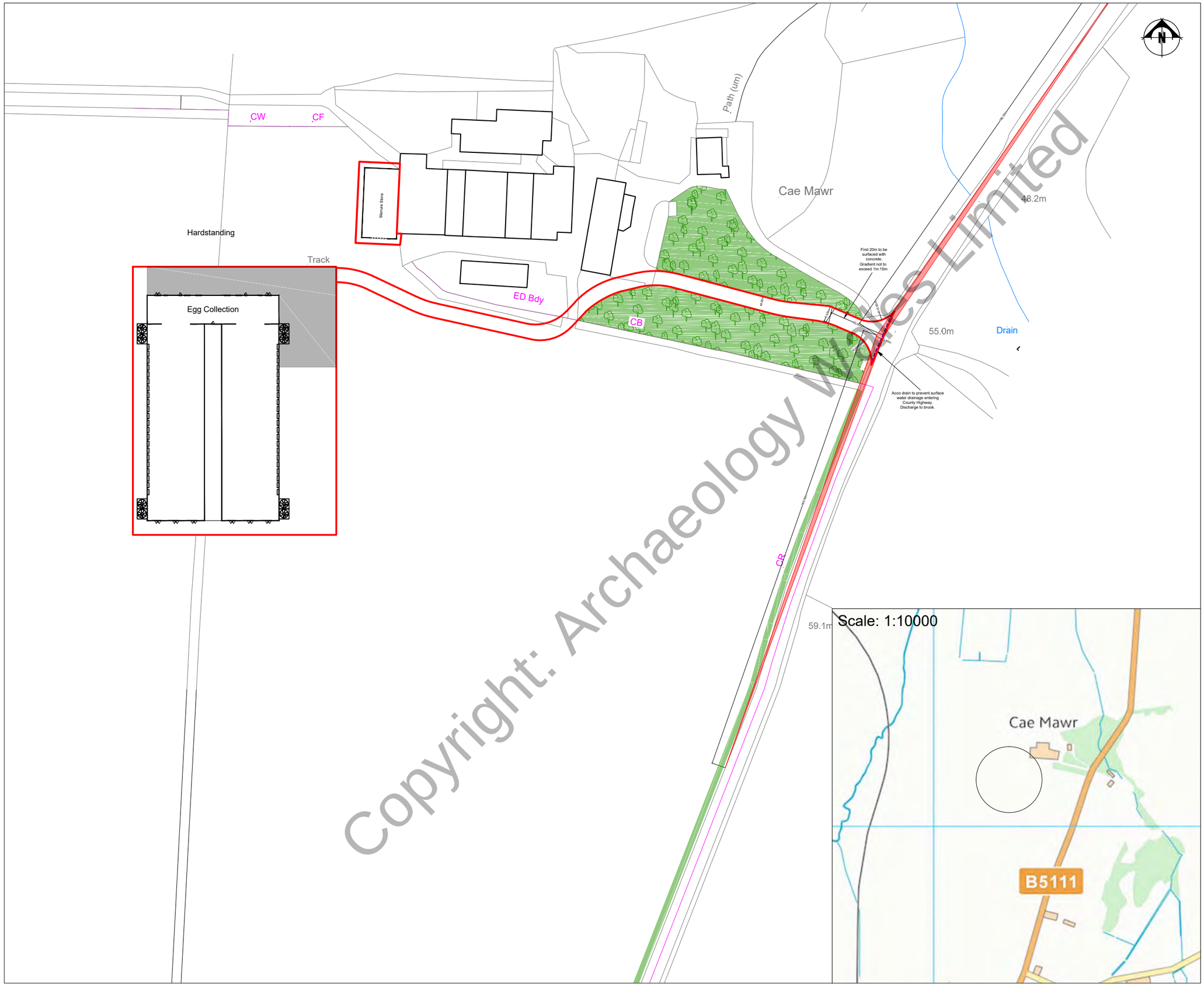


Figure 2. Development boundary.



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Red Boundary

Rev	Description	Date	Dr by	App by

Original by

Roger Parry & Partners

Residential - Agricultural - Commercial

Job	Proposed egg production unit at Cae Mawr
Title	Location Plan
Location	Llanerch Y Medd Anglesey LL71 8AN
Client	DB & BE Evans
Scales	1:1250 @ A3
Drawing No.	GEL-MZ298-03
Drawn by	AZ
Date	30/01/2020

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