1587

MAES Y FELIN, GLAN CONWY

Gwerthusiad Archeolegol Adroddiad Terfynol / Archaeological Evaluation Final Report

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

MAES Y FELIN, GLAN CONWY

Gwerthusiad Archeolegol Adroddiad Terfynol/ Archaeological Evaluation Final Report

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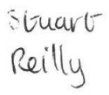
Originated by	Document Author	Stuart Reilly		06/10/20
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CRYNODEB ANNHECHNEGOL

Comisiynwyd Ymddiriedolaeth Archeolegol Gwynedd gan Brenig Construction i gynnal ffosio treialon archeolegol i gefnogi cais cynllunio ar gyfer datblygiad preswyl arfaethedig ym Maes y Felin, Glan Conwy. Roedd ffosio'r treial yn cynnwys deunaw ffos o wahanol faint a oedd yn targedu anomaleddau geoffisegol ac yn ymchwilio'r safle yn gyffredinol. Ymgymerwyd â'r ffosio rhwng 21 a 29 Medi 2020.

Cadarnhaodd ffosydd y treial bresenoldeb nodweddion archeolegol, taeniadau twmpathau wedi'u llosgi yn bennaf a nodweddion cysylltiedig fel pyllau yn ogystal â ffosydd ffiniau caeau. Roedd mwyafrif o'r gweithgaredd cynhanesyddol wedi'i ganoli ar hyd ymylon ffynnon naturiol wedi'i lleoli ar ymyl ogleddol y safle.

Ychydig o dystiolaeth arteffactig a gafwyd o'r nodweddion yr ymchwiliwyd iddynt fel rhan o'r gwerthusiad ond daethpwyd o hyd i swm o sorod haearn o ffos ddraenio yn Ffos 03.

Yn seiliedig ar y canlyniadau hyn, argymhellir cynnal rhaglen lliniaru archeolegol os bydd y datblygiad yn mynd yn ei flaen. Yn ogystal, argymhellir y dylid lliniaru ôl-gloddio ar gyfer y slag haearn a adferir o'r safle ynghyd ag ecofactau a gymerwyd o nodweddion cynhanesyddol tebygol. Anfonwyd y samplau paleoamgylcheddol at Grŵp Archaeoleg yr MD ar gyfer asesu a dadansoddi ecofact cyn eu hanfon at SUERC ar gyfer dyddio radiocarbon. Roedd canlyniadau'r dadansoddiad ecoffeithiol a'r dyddiadau ymbelydrol yn cadarnhau presenoldeb gweithgarwch o'r Oes Efydd Gynnar a oedd yn ymestyn i'r Oes Efydd Hwyr ac i ddiwedd y Cyfnod Rhufeinig. Yn seiliedig ar y canlyniadau hyn argymhellir y dylid cynnal rhaglen liniaru ar y safle i ddeall ymhellach gwmpas a graddfa'r gweithgarwch archeolegol

NON-TECHNICAL SUMMARY

Brenig Construction commissioned Gwynedd Archaeological Trust to undertake archaeological trial trenching in support of a planning application for a proposed residential development at *Maes y Felin, Glan Conwy. The trial trenching comprised eighteen trenches of varying size that both targeted geophysical anomalies and investigated the site in general. The trenching was undertaken between the 21st and 29th September 2020.*

The trial trenches confirmed the presence of archaeological features, primarily burnt mound spreads and associated features such as pits as well as field boundary ditches. The majority of the prehistoric activity was centred along the edges of a natural spring positioned at the northern edge of the site.

Little artefactual evidence was recovered from the features investigated as part of the evaluation but a quantity of iron slag was retrieved from a drainage ditch in Trench 03, and paleoenvironmental samples taken from four charcoal filled pits in Trench 05, 11 and 12. The paleoenvironmental samples were sent to AOC Archaeology Group for ecofact assessment and analysis before being sent to SUERC for radiocarbon dating. The results from the ecofact analysis and radiocarbon dates confirmed the presence of Early Bronze Age activity that extended to the Late Bronze Age and into the end of the Roman Period. Based on these results it is recommended that a programme of mitigation is carried out on the site to further understand the scope and scale of the archaeological activity.

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by Brenig Construction to undertake an archaeological evaluation (trial trenching) in support of a planning application for a proposed residential development at Maes y Felin, Glan Conwy (NGR SH8027075250; postcode: LL28 5NR; Figure 01) The trial trenching was the second stage of archaeological evaluation following a geophysical survey undertaken in June 2020 (GAT Report 1550, Hopewell 2020). The trial trenching comprised eighteen trenches of varying size that both targeted geophysical anomalies and investigated the site in general (Figure 02). The anomalies included possible burnt mounds, roundhouses and field boundaries. Based on these results, paleoenvironmental samples taken from four pits [507], [1105], [1107] and [1205] were sent to AOC Archaeology Group for ecofact assessment and analysis before being sent to SUERC for radiocarbon dating. The results from the ecofact analysis and radiocarbon dates confirmed the presence of Early Bronze Age activity that extended to the Late Bronze Age and into the end of the Roman Period.

The trial trenching was undertaken between the 21st and 29th September 2020, with the subsequent post-excavation assessment and analysis conducted between November 2020 and February 2021. All works were in accordance with a written scheme of investigation approved by Gwynedd Archaeological Planning Services (cf. Appendix I), as well as the following guidelines:

Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1 (The Welsh Archaeological Trusts, 2018);

Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015);

Management of Archaeological Projects (English Heritage, 1991);

Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015); and

Standard and Guidance for Archaeological Field Evaluation (Chartered Institute for Archaeologists, 2014).

GAT is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists and a member of the Federation of Archaeological Managers and Employers (FAME).

The regional Historic Environment Record Enquiry No. for the archaeological evaluation is GATHER1322 and the event primary reference number is 45982.

1.1 Aims and Objectives

The key aims and objectives of the evaluation were to:

- verify and determine the results of the geophysical survey report (GAT report 1550) that identified probable evidence for a burnt mound and associated features as well as a possible roundhouse (Hopewell, 2020, 16-17). As outlined in The Research Framework for the Archaeology of Wales a greater understanding of settlement chronology as well as settlement and land use is required for the Late Bronze Age and Iron Age in Wales. As such, where suitable materials survive radiocarbon dating should be undertaken (Gale 2010, 2-3);
- verify the probable preservation of relict field systems which predate historic mapping may be of medieval (1110 – 1539 AD) or post medieval (1539 – 1750 AD) origin and may contribute to settlement and land use development as outlined in Medieval (1110 – 1539 AD) and Post Medieval Wales (1539 – 1750 AD) by A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document March 2017; and
- if no additional archaeological activity is identified, establish why this may be the case.

1.2 Acknowledgements

GAT would like to thank the following for their contribution and support:

GAT Project team: Carol Ryan Young and Stuart Reilly;
GAT illustrations: Carol Ryan Young;
GAT *post-excavation edit:* Carolina Ferreira
Plant Machinery and welfare: Brenig Construction;
Client (Brenig Construction): Bryn Roberts;
Gwynedd Archaeological Planning Services: Jenny Emmett and Tom Fildes.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

GAT completed an archaeological assessment of the proposed development area in 2019 (GAT Report 1486). The regional Historic Environment Record (HER) did not show any known assets within the confines of the assessment plots and the local area was mostly characterised by post-medieval activity. No other archaeological project work was listed within the HER as having been completed within the proposed development area, but GAT completed an assessment along the A470 road to the immediate southwest for the proposed A470 Trunk Road Pentrefelin to Bodnant Improvement Scheme (Evans & Smith, 2008). The report characterised that local area as “representing a farming landscape with a field pattern little changed from the 18th century, but with some fragments of landscape and possible trackways surviving from earlier periods” (ibid, 04).

In total 23 assets were identified within a 1km radius of the centre point of the proposed development area, with two assets in close proximity: Hafod (PRN 66870) and the garage adjacent to Hafod (PRN 66875), both of which were Grade II listed buildings. A partial walkover survey was completed of the study area as part of the assessment as not all fields were accessible at the time of completion. This walkover survey did not identify any new archaeological assets although they may have been obscured by high grass and vegetation.

The geophysical survey conducted by GAT in March 2020 ((Hopewell 2020), identified multiple anomalies, several of which appeared archaeological in origin (Figure 02). The largest of these (anomaly 30) was located in the centre of the main field and was interpreted as a burnt mound; possible associated features, including what may be a hearth (anomaly 34), were also identified. Further anomalies included possible field boundaries and plough marks; the latter were interpreted as most likely modern, as they respected the current boundaries of the field. A series of circular anomalies were also identified, the majority of which corresponded with the former location of cattle feeders, but one example (anomaly 43) was thought to be a possible roundhouse (Hopewell 2020: 16-17).

3 METHODOLOGY

3.1 Trial Trenching

The trial trenching programme aimed to expose and characterise the possible archaeological anomalies identified during the geophysical survey and to test blank areas in the geophysical survey. Trial trenching was planned at a sampling density of 2%, as agreed with GAPS, and forms part of a phased process, with the results informing subsequent strategies.

A total of 18 trial trenches were excavated (Figure 02):

Trench no.	Size	Start (E/N)	End (E/N)	Rationale
01	25mx2m	280,315.61 / 375,179.09	280,301.54 / 375,158.39	Targeted junction of anomaly 22 field boundary shown on 1843 tithe map and anomaly 24 field boundary that predates 1843 tithe map
02	25mx2m	280,294.48 / 375,173.25	280,296.72 / 375,148.34	Targeted anomaly 39 possible burnt mound
03	25mx2m	280,260.67 / 375,185.17	280,259.95 / 375,160.19	Targeted anomaly 38 possible burnt mound and anomaly 23 field boundary shown on 1843 tithe map
04	25mx2m	280,267.37 / 375,187.93	280,283.06 / 375,207.46	Targeted anomaly 40 linear anomaly of unknown origin
05	25mx2m	280,299.28 / 375,210.96	280,323.66 / 375,205.13	Targeted anomaly 24 field boundary that predates 1843 tithe map
06	25mx2m	280,216.34 / 375,199.46	280,241.41 / 375,199.08	Targeted anomaly 25 field boundary that predates 1843 tithe map
07	35mx2	280,278.56 / 375,238.40	280,313.51 / 375,235.04	Targeted anomaly 30 likely burnt mound and anomaly 34 possible hearth
08	25mx2m	280,276.96 / 375,260.13	280,301.70 / 375,255.82	Targeted anomaly 33 possible burnt mound and anomaly 32 possible source of spring
09	25mx2m	280,213.54 / 375,258.59	280,238.37 / 375,254.94	Targeted anomaly 37 possible burnt mound
10	30mx2m	280,196.06 / 375,284.19	280,206.37 / 375,255.97	Targeted anomaly 43 possible roundhouse
11	25mx2m	280,220.46 / 375,289.13	280,231.53 / 375,266.70	Targeted anomaly 36 possible burnt mound
12	30mx2m	280,273.93 / 375,291.55	280,247.71 / 375,276.78	Targeted anomaly 29 field boundary shown on 1843 tithe map and anomaly 26 field boundary predating the 1842 tithe map

Trench no.	Size	Start (E/N)	End (E/N)	Rationale
13	25mx2m	280,298.11 / 375,336.73	280,317.83 / 375,321.24	Targeted anomaly 27 fragmentary remains of field boundary shown on 1843 tithe map
14	25mx2m	280,199.60 / 375,309.84	280,211.51 / 375,287.80	Targeted anomaly 35 possible burnt mound
15	25mx2m	280,202.49 / 375,333.24	280,180.22 / 375,321.77	Targeted anomaly 47 field boundary predating the 1843 tithe map
16	25mx2m	280,204.70 / 375,384.28	280,181.76 / 375,374.15	Targeted anomaly 48 field boundary shown on 1843 tithe map
17	25mx2m	280331.96 / 375070.52	280286.9 / 375069.19	Targeted anomaly 42 a short isolated linear anomaly interpreted as a field drain
18	25mx2m	280360.67 / 375236.4	280338.64 / 375224.43	Targeted “blank” area at the western end of the site

The targeted area comprised two field plots; the largest plot included trenches TR01 to TR14 and TR17 to TR18 and the smaller plot included trenches TR15 and TR16 (cf. Figure 02). The trenches in the largest plot were opened and closed by two 13-tonne tracked mechanical excavators and the trenches in the smaller plot were opened and closed by an 8-tonne wheeled excavator, all machines were under constant archaeological supervision. The trenches were carefully de-turfed by the mechanical excavator fitted with a toothless bucket; the turf was stored close to the trench and re-laid following the backfilling process. The topsoil and subsoil were excavated by machine with a toothless bucket in thin spits until either the natural substrate was reached or archaeological features or deposits were encountered. All archaeological features and deposits encountered were manually cleaned and examined to determine extent, function, date and relationship to adjacent activity.

The following excavation strategy was applied: 50% sample of each discrete small feature, a slot through linear features representing about a 25% sample. The location of the trenches outlines of identified features, and precise locations of drawing baselines and section lines were recorded using a Trimble R8 GPS unit.

A photographic and written record was completed using GAT pro-formas, and by scaled hand drawings. Photographic images were taken using a Nikon D5100 and Nikon D3100 camera set to maximum resolution (4928 × 3264; 16.2 effective megapixels and 4,608 × 3,072 14.2 effective megapixels respectively) in RAW format with a photographic record maintained on site using GAT pro-formas and digitised in Microsoft Access as part of the fieldwork archive and dissemination process. The photographic record was divided between

the two cameras, with the D5100 using photographic record numbers G2649_101 to G2649_164 and the D3100 numbers G2649_501 to G2649_567; in total 129 photographs were taken. The archive was prepared in accordance with the Royal Commission on Ancient and Historic Monuments of Wales Guidelines for digital archives (2015) and the Gwynedd Archaeological Trust Historic Environment Record Historic Environment Record (HER) Guidelines for Archaeological Contractors (Version 1.3; draft). The photographic images were archived in TIFF format using Adobe Photoshop and archive numbering system G2649_101 to G2649_164 and G2649_501 to G2649_567 (cf. Appendix III).

Plans and sections of archaeological features were hand drawn at a maximum scale of 1:20 on pro-forma permatrace. A total of 19 drawings were completed (Appendix IV).

3.2 Data Processing, Report and Archiving

Following the completion of the fieldwork records were checked and data prepared for archiving. Photographic images were converted from RAW to TIFF format for archiving, and metadata on the photographs was produced in *Microsoft Excel* (reproduced as Appendix III). Survey data was downloaded using a Computer Aided Design package, and used to prepare the figures in the current report, in combination with the hand drawn plans.

Both paper and digital archives have been complied, including plans, photographs, written material and other material resulting from the project. The digital archive, including the final report, will be deposited with the Royal Commission on Ancient and Historic Monuments Wales. This will be in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The paper archive is currently held by GAT.

The current report provides a description of the work, conclusions and recommendations. In line with the GAT Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The report therefore includes a non-technical summary in Welsh and English and will be submitted to the HER with a spreadsheet including short bilingual summaries of the principal Historic Assets recorded during the fieldwork. The GAT HER enquiry number is GATHER1322 and the event primary reference number is EPRN 45982. Core Primary Reference Numbers (PRNs) have been obtained for all new assets identified and recorded.

4 RESULTS

4.1 Introduction

All individual features, deposits and fills identified within the trenches were given a unique context number. For a complete list of the contexts identified, depths of topsoil and subsoil and descriptions of the natural substrate see Appendix II. Significant identified features have been given PRN (Primary Reference Number) numbers, for inclusion on the Gwynedd HER. In the text these numbers follow the letters PRN. For the location of trenches with the features therein see Figure 03.

4.1.1 Summary

Trenches 02, 04, 06, 10, 13, 16 and 18 (a total of seven trenches) contained no archaeological evidence. The remaining 11 trenches confirmed the presence of archaeological features, primarily burnt mound spreads, pits and linears; the latter being either land drains or former field boundary ditches. Little in the way of artefacts was recovered during the archaeological evaluation. The artefacts were restricted to iron slag recovered from fill (310) of the linear [305] and limited sherds of glazed earthenware, from (310) of [305]; both in Trench 03.

Land drains (typically stone-filled or ceramic pipes) were found in trenches 03, 05 and 09. These were exposed to enable their identification, and so they could be planned, but were not excavated or breached in any way, to ensure they remained functional.

The geophysical survey (GAT Report 1550) identified several former field boundaries (designated anomalies 22 to 29 and 46 to 48), spread across the two fields of the proposed development. Trial trenches were laid out to investigate the majority of these anomalies (see Table in *Section 3.1*). There was no physical indication of these anomalies in Trenches 01, 05, 06, 12, 13 or 16. Trench 03 did identify anomaly 23 as feature [305], Trench 11 anomaly 28 as feature [1103] and Trench 15 anomaly 47 as feature [1505].

The identified remains of field boundaries in Trenches 03, 11 and 15 were all comparatively shallow, with a maximum depth of 0.30m for feature [305]. The width of the field boundary ditches varied from 0.42m for [1504] to 2.0m for [1109].

The majority of the positive results of the trial trenches coincided with the moderately strong magnetic responses of features concentrated around the natural spring (anomaly 31) located at the northern and northwestern side of the larger of the two fields of the proposed

development. Burnt mound spreads or portions thereof where identified in Trenches 01 (104), 07 (703-05), 08 (804), 09 (906), 11 (1111) and 14 (1408). Anomaly 30 was the most obvious archaeological feature noted during the geophysical survey being "*visible on the ground as a distinctly grey mound in the field*" (Hopewell, 2020, 16). Trench 07, which was excavated across the centre of anomaly 30, identified three distinct burnt mound spreads (703), (704) and (705). The trial trenches confirmed the presence of burnt mound spreads but as these features continued beyond the limit of excavation it was agreed with GAPS that these deposits would be recorded but not excavated.

The remaining archaeological features uncovered within the trial trenches were isolated pits in Trenches 05 [507], 11 [1105] & [1107], 12 [1205] and 14 [1405]. The majority of these pits had fills rich in charcoal and heat fractured stones, being associated with adjacent burnt mound spreads and were most likely broadly contemporary with this activity. Pit [507] and the associated posthole [509] though were more removed from the burnt mound activity concentrated around the natural spring (anomaly 31) being set on slightly higher and drier ground. The fill of the these features, (508) was a fairly homogenous deposit that had moderate flecks of charcoal, which included charred pieces of hazelnut shell and small pieces of cremated bone. This would be more indicative of the remnants of a fire and a meal that had been deposited within the pit and posthole once the ashes had cooled as there was no indication of scorching of the underlying natural clay (504).

The geophysical survey identified the slight possibility of roundhouses (anomaly 43) at the northwestern corner of the large field and this was investigated with Trench 10. The circular anomalies highlighted by the survey corresponded with raised broken shale bedrock (1003) that was close to the surface, being only 0.22m below the turf.

The natural substrate under the area of the proposed development was varied and reflected the undulating topography of the site. The higher, drier ground, located in the smaller field and predominantly the eastern and southern aspects of the larger field the underlying natural was broadly an orange gravelly sandy clay, with protrusions of fractured shale bedrock, notably in Trench 13 and as noted in the geophysical survey with anomaly 44. The lower lying aspects of the site, in particular in close proximity of the natural spring (anomaly 31) at the northern and western side of the larger field, the underlying natural was largely light greyish yellow sandy boulder clay. There were also sporadic outcrops of fractured shale bedrock, the greatest concentration of which was located in the northwest corner of the larger field as denoted in Trench 10.

The topsoil was variable in composition but was predominantly a mid-greyish brown silty loamy clay and where the subsoil was present it was an mid-orangey brown silty or sandy clay and was typically quite stony. The topsoil and subsoil combined depth varied due to the undulating topography of the site. On level, higher ground, such as in Trench 18 it had a depth of 0.36m, while in areas where a trench was excavated across the ridge of a slope, for example, Trench 02, it was as deep as 1.0m. In the more marginal ground of the larger field trench depth was on average 0.30m.

4.1.2 Trench 01

The natural substrate was a maximum of 1.0m below the ground surface and the trench was positioned to investigate anomaly 22, the possible remnants of a former field boundary. The trench did not find physical evidence for the field boundary but did uncover the scattered remnants of burnt mound spread material (104) (Figure 04). The spread was positioned within 3.0m of the southwest terminal of the trench, with an exposed length of 3.20m and maximum exposed width of 0.85m (Plate 1). It continued east, beyond the limit of the trial trench. The spread consisted of a loose, fine dark brownish black silty clay mixed with moderate charcoal flecks and moderate heat affected stones, concentrated at the northeastern end of the deposit. The spread (104) has been allocated GAT HER PRN 90672.

4.1.3 Trench 02

The natural substrate was a maximum of 1.0m below the ground surface, with the soil being deeper at the southern end of the trench. It was positioned to investigate anomalies 23 a former field boundary and 39 a possible burnt mound. The trench did not identify these anomalies and no archaeological features were identified.

4.1.4 Trench 03

The natural substrate was a maximum of 0.70m below the ground surface, with the soil being deeper at the northern end of the trench. It was positioned to investigate anomalies 23 a former field boundary and 38 a possible burnt mound. While there was no physical evidence for the remains of a burnt mound spread, three linears ([305], [307] & [308]) were identified (Plate 2 & Figure 05.1). Linear [307] was most likely a modern land drain, given the distinct, clean line of the cut, located at the northern edge of the trench, with an exposed length of 3.90m and width of 0.44m; as such it was not sectioned to ensure it remained functional.

The largest linear [305] was sectioned and was most likely the former field boundary denoted as anomaly 23 (Figure 05.2). The ditch had an exposed length of 1.90m, width of 1.06m and excavated depth of 0.30m. The cut had an abrupt break of slope at the top with steep sides and a sharp break of slope at the base. The base of the ditch was not fully excavated as the basal fill (311) consisted of compacted shale stone used as a land drain (Plate 3 & Figure 05.3) and its removal may have resulted in flooding the feature and in turn the trench. It was sealed beneath (310) a cohesive mid grey silty clay mixed with very frequent lumps of iron slag and frequent small to medium sized angular stones. The fill was used as packing within the ditch cut and the iron slag was most likely re-purposed for use as aggregate for the land drain. A small sherd of glazed earthenware and a weathered brick was also recovered from

(310). Based on the predominantly prehistoric activity in the near vicinity of this trench it is possible that the iron slag is of an earlier origin than the post-medieval ditch [305] and as such may warrant further examination. This in turn was overlaid by (306) light yellowish grey clay mixed with moderate small pieces of iron slag and occasional small, angular stones. It was redeposited natural used to seal the land drain. The ditch/land drain [305] has been allocated GAT HER PRN 90673.

Ditch [305] cut the linear [308] which was orientated east southeast by west northwest, with an exposed length of 2.0m, width of 0.80m and maximum depth of 0.20m. The cut had a gradual break of slope at the top with gradually sloping sides that merged with an uneven base. Linear [308] was an insubstantial feature that was more apparent in section and was probably a land drain. It cut through the subsoil (302) and barely scratched the surface of the underlying natural (303). No artefacts were recovered from the single fill (309) a light greyish yellow silty clay mixed with the occasional small angular stone.

4.1.5 Trench 04

The natural substrate was a maximum of 0.38m below the ground surface, with the soil being deeper at the southwestern end of the trench. It was positioned to investigate anomaly 40 a poorly defined linear anomaly. No archaeological features were identified.

4.1.6 Trench 05

The natural substrate was a maximum of 0.85m below the ground surface, with the soil being deeper at the eastern end of the trench. It was positioned to investigate anomaly 24 a former field boundary. The anomaly was not identified within the trial trench but a land drain [505] (Plate 4) within 13m of the western terminal and a pit and posthole [507] and [509] respectively within 2.0m of the eastern trench terminal (Plate 5) were uncovered (Figure 06.1).

The pit [507] was oval in plan, with rounded corners (Plate 6 & Figure 06.2), measuring 1.15m in length, 0.86m in width and a maximum depth of 0.32m. The cut had an abrupt break of slope, with steep sides and sharp break of slope at the base, aside from the western side which was more gradual (Figure 06.3). The base of the pit was flat and the northern limit of the pit was truncated by [509]. Both [507] and [509] were backfilled by (508) a soft, cohesive mid-orangey brown clayey silt mixed with frequent small subangular stones and thin bands of charcoal flecks, within which there was infrequent fragments of charred hazelnut shell. It was a fairly homogenous fill that produced a moderate quantity of small fragmented pieces of cremated bone. This would be indicative of the remnants of a fire and a

meal that had been deposited within the pit and posthole in sequenced layers (Plate 7) as a deliberate act of backfilling once the ashes had cooled as there was no indication of scorching of the underlying natural clay (504). Samples were taken of (508) for ecofactual assessment and analysis as well as for possible radiocarbon dating.

Posthole [509] was positioned within the northern edge of pit [507] and only became evident during the excavation of the pit as both features were backfilled by fill (508). Provisionally and stratigraphically [509] appears to have cut [507] as the posthole appears to interrupt the flow of the cut for the pit. Posthole [509] was sub-circular in plan, with a maximum circumference of 0.36m and depth of 0.35m. The cut had a sharp break of slope at the top with steep sides, the exception being the southern side which has a more gradual slope. The break of slope at the base was abrupt and the base of the cut was uneven. Pit [507] and posthole [509] have been allocated GAT HER PRN 90674..

4.1.7 Trench 06

The natural substrate was a maximum of 0.53m below the ground surface, with the soil being deeper at the western end of the trench. It was positioned to investigate anomaly 25 a former field boundary. No archaeological features were identified.

4.1.8 Trench 07

The natural substrate was a maximum of 0.27m below the ground surface, with the soil being deeper at the eastern end of the trench. It was positioned to investigate anomalies 30 and 34, which were designated as burnt mound deposits. The trial trench confirmed the presence of a large burnt mound spread (703) that comprised a black silty clay charcoal rich matrix with frequent heat affected stone inclusions (Plate 8) with further adjacent deposits (704) and (705) located to the immediate east (Figure 07). Given the size of the feature it was agreed with GAPS that it would be investigated during the mitigation stage of the residential development. The spreads (703-05) have been allocated GAT HER PRN 90675.

4.1.9 Trench 08

The natural substrate was a maximum of 0.22m below the ground surface, with the soil being deeper at the eastern end of the trench. It was positioned to investigate anomalies 32 a short linear anomaly and 33 an area of moderately strong magnetic responses which could equate to a small burnt mound. Part of a burnt mound spread (804) was identified at the centre of the trench (Plate 9) and was flanked by concentrated deposits of large subrounded cobbles and small boulders (803) and (805) respectively (Figure 08). The burnt mound spread (804)

consisted of black charcoal rich silty clay mixed with frequent heat fractured stones and would correspond with the location of anomaly 32. As the spread continued beyond the limits of the trial trench it was agreed with GAPS that it would be investigated during the mitigation stage of the residential development. The spread (804) have been allocated GAT HER PRN 90676.

4.1.10 Trench 09

The natural substrate was a maximum of 0.33m below the ground surface, with the soil being deeper at the eastern end of the trench. It was positioned to investigate anomaly 37 the possible remnants of a disturbed burnt mound. This coincided with the leached out remains of a burnt mound spread (906) a light grey sandy clay mixed with frequent heat affected stones. It was overlaid by an alluvial deposit (908) and had been truncated by [904] the remnants of a field boundary ditch (Plate 10 & Figure 09.1 & 09.2). The ditch had an exposed length of 2.0m, width of 0.72m and maximum depth of 0.14m. It had a moderately sharp break of slope at the top with irregular to moderately sloping sides that merged with an uneven base (Plate 11 & Figure 09.3). The ditch was backfilled by (905) a firm mid brown sandy clay mixed with moderate subangular stones and seashells. There was also a ceramic field drain [907] adjacent to the ditch. The spread (906) and the ditch [904] have been allocated the respective GAT HER PRN 90677 and 90678.

4.1.11 Trench 10

The natural substrate was a maximum of 0.48m below the ground surface, with the soil being deeper at the northern end of the trench. It was positioned to investigate anomalies 28 the possible remains of a field boundary and 43 the possible remnants of a degraded roundhouse settlement. The circular anomalies highlighted by the survey corresponded with raised broken shale bedrock (1003) that was close to the surface (Plate 12), being only 0.22m below the turf. No archaeological features were identified.

4.1.12 Trench 11

The natural substrate was a maximum of 0.28m below the ground surface, with the soil being deeper at the northern end of the trench. It was positioned to investigate anomalies 28 the possible remains of a field boundary and 36 the possible remains of a disturbed burnt mound. The trial trench confirmed the presence of the former field boundary ditch as [1109] and part of a burnt mound spread (1111). In addition, two pits [1105] and [1107], along with a linear [1103] were identified and investigated (Figure 10.1).

The spread of burnt mound material (11111) was concentrated at the southeastern end of the trench and continued east beyond the limits of excavation. It was exposed for an approximate length of 3.5m and maximum width of 0.90m (Figure 10.1). The spread consisted of loose dark brownish black silty clay mixed with frequent charcoal flecking and heat affected stones. As the spread continued beyond the limits of the trial trench it was agreed with GAPS that it would be investigated during the mitigation stage of the residential development. The spread (1111) has been allocated GAT HER PRN 90679.

To the immediate northwest of the spread there was an oval in plan pit [1107] that was 1.30m long, 0.96m wide and 0.24m deep (Figure 10.2). The cut had an abrupt break of slope at the top with step sides and a sharp break of slope at the base which was flat. The primary fill of the pit, (1108) was a soft black silty clay mixed with very frequent heat fractured stones and frequent charcoal flecking (Plate 13). The stone was mainly shale but there were occasional bits of quartzite as well. The fill was found throughout the pit and was overlaid by (1112) a loose mid-brown silty clay mixed with moderate small angular stones, some of which were heat affected. The fill was concentrated at the centre of the pit with a maximum depth of 0.13m (Figure 11.1). No artefacts were retrieved from pit [1107] but samples were taken from (1108) for further assessment if required. Pit [1107] has been allocated GAT HER PRN 90680.

At the northwestern end of the trench there was a second pit [1105] with an exposed length of 1.08m, width of 0.42m and maximum depth of 0.53m (Figure 10.3). The pit was only partially exposed within the trial trench and continued west beyond the limit of excavation. The cut had a sharp break of slope at the top with steep sides on the south southeastern edge but with a more moderate break of slope along the north northwestern side. The break of slope at the base was moderate to sharp, with the base being relatively flat (Figure 11.2). The pit was filled by (1106) a loose black silty clay mixed with frequent charcoal flecking and burnt stone; this fill was sampled for further assessment if required (Plate 14). Pit [1105] has been allocated GAT HER PRN 90681.

Based on the close proximity and similar composition of the fills, it is highly likely that the pits [1105] and [1107] are broadly contemporary with the spread (1111). Burnt mound activity was also uncovered in the adjacent Trenches 09 and 14, set along the western edge of the natural spring (anomaly 31).

The linear [1103] was investigated. It barely scratched the underlying natural (1102) sandy clay and was barely visible at the base of the topsoil (1101) along the southeastern baulk of the trench. It was of no archaeological significance.

The field boundary ditch [1109] was located between the pits [1105] and [1107]. It had an exposed length of 1.90m, width of 2.0m and depth of 0.26m (Figures 10.1 & 10.4). The cut had a gentle break of slope along the southern edge and a more abrupt break of slope along the northern edge. It had gently sloping sides on the south side of the cut and a steeper northern side, with a gradual break of slope at the base which was uneven (Plate 15 & Figure 11.3). The ditch was filled by (1110) a cohesive light brown silty clay mixed with the occasional clump of yellow clay and very infrequent small stone. Given the clay inclusions within (1110) it is likely that the ditch had been deliberately backfilled. It was a sterile fill with no artefacts or charcoal. Ditch [1109] has been allocated GAT HER PRN 90682.

4.1.13 Trench 12

The natural substrate was a maximum of 0.40m below the ground surface, with the soil being deeper at the southwestern end of the trench. It was positioned to investigate anomaly 29 the possible remains of a field boundary. The trial trench did not locate the remnants of this former field boundary but did uncover a pit [1205] (Figure 12.1). It was 0.64m long, 0.41m wide and 0.10m deep. The pit was roughly sub-circular in plan (Figure 12.2) with a sharp break of slope at the top, irregular moderately sloping sides and a gradual break of slope at the base, which was concave (Plate 16 & Figure 12.3). It was filled by (1206) a loose black silty clay mixed with lenses of red burnt clay and frequent charcoal flecking. The presence of the burnt clay and charcoal would suggest that this was the remnants of a fire from a hearth. No artefacts were recovered from (1206) but a sample was taken for further assessment if required. Pit [1205] has been allocated GAT HER PRN 90683.

4.1.14 Trench 13

The natural substrate was a maximum of 0.42m below the ground surface, with the soil being deeper at the southeastern end of the trench. It was positioned to investigate anomaly 27 the possible remains of a field boundary. No archaeological features were identified.

4.1.15 Trench 14

The natural substrate was a maximum of 0.55m below the ground surface, with the soil being deeper at the northwestern end of the trench. It was positioned to investigate anomaly 35 the location of a possible burnt mound or more recent infilling adjacent to the stream. The trial trench identified a concentration of stone set within the middle of the trench (1404) as well as part of a burnt mound spread located at the northwestern terminal of the trench (1408); both spreads would correspond with the position of anomaly 35. Positioned between these spreads there was a probable large pit [1405] (Figure 13.1).

The stone spread (1404) had an approximate length of 7.0m and maximum exposed width of 1.90m. It was comprised of a loose light brownish yellow gravelly clay mixed with frequent angular stones a small percentage of which were heat fractured. It was investigated for a concentration of charcoal rich soil at the centre of the spread but this proved to be staining upon investigation as it trowelled away and was mixed within the stones. It is highly likely that (1404) is a natural deposit set within the underlying boulder clay (1403).

The large, sub-square feature [1405] located at the centre of the trial trench had an exposed length of 1.40m and width of 1.40m that continued east beyond the limit of excavation (Plate 18) and was either a large pit or the terminal for a linear feature. It was filled by (1406) a soft, cohesive light grey silty clay mixed with the occasional small stone and (1407) a loose mid-brownish black sandy clay mixed with very frequent small angular stones, a small percentage of which were heat affected and moderate charcoal; (1407) was concentrated around the edge of the cut and appears to have been overlaid by (1406). The feature was not excavated further to a site visit and discussion with GAPS and agreement that it will be investigated fully during mitigation. Pit [1405] has been allocated GAT HER PRN 90684.

At the northwestern terminal of the trench was part of the burnt mound spread (1408). The spread had an exposed length of 2.3m, width of 0.85m and maximum depth of 0.24m (Plate 17 & Figure 13.2). It was comprised of a loose, fine black silty clay mixed with frequent charcoal flecking and heat fractured stones. The spread was sectioned and continued west beyond the limit of excavation. Spread (1408) has been allocated GAT HER PRN 90685.

4.1.16 Trench 15

The natural substrate was a maximum of 0.54m below the ground surface, with the soil being deeper at the southwestern end of the trench. It was positioned to investigate anomaly 47 a possible field boundary. The boundary was identified within the trial trench as [1504], which was 1.50m long, 0.42m wide and 0.25m deep (Figure 15.1). The ditch was aligned northwest – southeast, with an imperceptible break of slope at the top and sides and a gradual break of slope at the base of the cut with a relatively even base. It was only visible within the baulk and mostly cut through the topsoil (1501) and subsoil (1502) (Plate 19 & Figure 15.2). The ditch was filled by (1505) a firm mid-brownish silty clay mixed with moderate stone inclusions; it was almost indistinguishable from the subsoil (1502). No artefacts were recovered from (1505). The ditch [1504] has been allocated GAT HER PRN 90686.

4.1.17 Trench 16

The natural substrate was a maximum of 0.50m below the ground surface, with the soil being deeper at the southwestern end of the trench. It was positioned to investigate anomaly 48 a possible field boundary. No archaeological features were identified within the trial trench.

4.1.18 Trench 17

The natural substrate was a maximum of 0.47m below the ground surface, with the soil being deeper at the western end of the trench. It was positioned to investigate anomaly 42 a short isolated anomaly best interpreted as a field drain. This corresponded with [1704], located close to the eastern terminal of the trial trench (Figure 15.1). The cut had an exposed length of 1.80m, width of 0.85m and depth of 0.10m. It had a moderately sloping break of slope at the top with irregular gradually sloping sides and a gradual break of slope at the base which was flat (Figures 15.2 & 15.3). The probable field drain was filled by (1705) a loose mid-brownish orange sandy clay mixed with moderate inclusions of stones (Plate 20). No artefacts were recovered from (1705).

4.1.19 Trench 18

The natural substrate was a maximum of 0.36m below the ground surface, with the soil being deeper at the southwestern end of the trench. It was excavated as a ‘blank’ trench to help verify the results of the geophysical survey. No archaeological features were identified within the trial trench.

5 POST-EXCAVATION ASESSMENT AND ANALYSIS

In addition to the fieldworks results, the recovered ecofacts were submitted for post-excavation assessment and analysis.

5.1 Ecofacts

5.1.1 Introduction

Four ecofact samples taken from Trench 05, 11 and 12 were submitted for processing, assessment, and analysis.

Sample no	Context no	Feature type
4	508	Charcoal-rich backfill of Pit [507]
1	1106	Charcoal flecked and burnt stone fill of Pit [1105]
2	1108	Charcoal flecked and burnt stone primary fill of Pit [1107]
3	1206	Charcoal flecked and burnt clay fill of Pit [1205]

5.1.2 Ecofact Processing

The primary aim of the ecofact processing was to recover charred macroplant and charcoal for species identification and radiocarbon dating selection.

The processing was completed by Gwynedd Archaeological Trust and comprised flotation and wet sieving of the samples using a 500 micron mesh to collect the residue (which collects more than the 1mm = 1000 micron), with the flotation debris collected in a 250 micron mesh. The flotation debris was weighed, catalogued and examined for charred macroplant and charcoal; the residues were sorted to recover non-floating ecofacts; once sorted the residues were discarded. Suitable charred macroplant and charcoal were submitted for specialist assessment.

5.1.3 Ecofact Assessment

The ecofact assessment was completed by AOC Archaeology Group (AOC Project no: 25576; cf. Appendix V). Plant macrofossil examination was undertaken using magnifications of x10 up to x450, where necessary to assist identification. The macroplants identified utilised modern reference material and seed atlases stored at AOC Edinburgh (Cappers ***et al.*** 2006; Jacomet 2006), while taxonomy and nomenclature for plants follows Stace (2010). Minimum of ten charcoal fragments larger than 4mm were selected for assessment from each context, and in two contexts the number of fragments was increased to 20 to confirm the presence of a single wood species. Confirmation of species identification referred to keys and texts stored at AOC Edinburgh (Hather 2000; Schweingruber 1990). As a guideline the following criteria was used for interpreting feature usage; samples which contained two or more species were typically designated as fuel waste, whereas larger concentrations of a single species, where viewed, as more likely to represent burning of a structural element or artefact.

The report concluded that all four contexts contained carbonised archaeobotanical material suitable for radiocarbon dating: the charcoal recovered from the backfill (508) of pit [507] which contained 161 plant remains indicative of a short-lived domestic cooking hearth, of which the hazel charcoal, hazelnut shells and the single cereal caryopses were considered appropriate for selection, as well as having the potential to provide some insight to the exploitation of woodland resources in the Welsh prehistoric (Ibid.6). Charcoal fills deriving from single wood species such as the elm sampled from fill (1206) of pit [1207] and the hazel extracted from fill (1106) of pit [1105] which was interpreted as contemporary with the burnt mound, were both thought to be the remnants of in situ burning of a 'small discrete structural component such as a stake or post', are also considered suitable for radiocarbon dating. As is the mixed charcoal fill (1108) of pit [1107] with the presence of fire-cracked stone that was suggested to be the remains of fuel debris from a firepit and thought to be broadly contemporary with the adjacent burnt mound spreads (Ibid.6). In essence, the report highlighted the potential of all four contexts assisting in deepening our understanding of how the prehistoric occupants of the site interacted with their environment and plant resources (Ibid.6). It is recommended that the remaining ecofacts are retained at Gwynedd Archaeological Trust for further comparative analysis if additional archaeological mitigation is undertaken on site.

5.1.4 Ecofact Analysis (Radiocarbon Dating)

Selected charred macroplants and charcoal were submitted to the Scottish University Environmental Research Centre (SUERC) for radiocarbon dating. The results are reproduced below and the radiocarbon dating certificates reproduced in Appendix VI.

Sample No	Context No.	Context Type	Material	Lab Ref. No	Calibrated date	Period
4	508	Charcoal-rich backfill of Pit [507]	Hazelnut	SUERC-96449	988 - 827cal BC	Late Bronze Age
4	508	Charcoal-rich backfill of Pit [507]	Wheat Grain	SUERC-96453	919 – 811cal BC	Late Bronze Age
2	1108	Charcoal flecked and burnt stone primary fill of Pit [1107]	Hazelnut	SUERC-96446	2291 - 2051cal BC	Early Bronze Age
2	1108	Charcoal flecked and burnt stone primary fill of Pit [1107]	Rowan	SUERC-96447	2199 - 1980cal BC	Early Bronze Age
3	1206	Charcoal flecked and burnt clay fill of Pit [1205]	Elm	SUERC-96448	233 - 377cal AD	Roman Period

The radiocarbon dating results identified activity from the end of the 3rd millennium BC to the end of the 4th century AD, suggesting a multi-phased site spanning from the Early Bronze Age to the end of the Roman period.

6 CONCLUSION

6.1 Discussion

Eighteen trial trenches of varying lengths were opened within the limits of the proposed residential development at Maes y Felin, Glan Conwy. Most of these trenches had been positioned to investigate geophysical anomalies, with some intended to investigate areas blank on the geophysical survey. Approximately 40% of the trial trenches did not identify archaeological features, primarily the location of former field boundaries identified through a geophysical survey and cartographic evidence. The comparative lack of corroborative physical evidence for these field boundaries in the trial trenches may relate to them being relatively shallow features that did not leave a physical trace within the underlying natural. In addition, anomalies 22 and 24 were not identified in Trenches 01 and 05, respectively, but their location within the trenches coincided with a greater depth of homogenous subsoil that had a maximum depth of 0.70m in Trench 01 and was a similarly composed deposit being a compact, cohesive, light orangey brown silty clay. The layer was sterile, with no artefacts. The location of these anomalies and the deeper subsoil coincided with the edge of a natural ridge, the ground abruptly dropping on a roughly east-west facing slope from the Top Llan Road to the lowest point of the field where the natural spring is located (anomaly 31).

The trial trenches though did identify and confirm the presence of quite concentrated prehistoric activity in the form of burnt mound spreads and associated features in Trenches 01, 07, 08, 09, 11 and 14. These features are concentrated around a natural spring (anomaly 31) which would have provided a ready source of water for use in troughs and cooking. While troughs were not readily identified within the evaluation trenches, they may exist beneath some of the larger spreads, notably (703) in Trench 07. Also pits with charcoal rich and heat affected stone fills were identified in Trench 11 are commonly associated with burnt mounds.

In addition to these features, stray pits with charcoal rich fill, such as [507] in Trench 05 and [1205] in Trench 12 were identified. These features were not picked up by the geophysical survey and may have been obscured by another geophysical anomaly or the depth of the topsoil and subsoil may have helped to mask it; for example [507] was 0.85m below the current ground level. Such results may indicate the presence of other isolated features on the periphery of the main concentration of prehistoric activity associated with the natural spring.

The research framework for later prehistory in north-west Wales (https://archaeoleg.org.uk/areanorthwest.html) includes settlement, burial and economy as priorities for further research. Although none of the features identified during the trial

trenching could be dated it was considered possible that the majority of the burnt mound spreads and pits date from the Later Bronze Age (1500 – 800 BC). Ecofacts recovered from relevant contexts were sent for processing, assessment, and analysis to confirm this.

The results from the assessment and analysis of the four palaeoenvironmental samples taken from pits [507], [1105], [1107], and [1205] confirmed the presence of Late Bronze Age activity, as well as Early Bronze Age and Roman Period activity.

A range of prehistoric activity was uncovered by the paleoenvironmental assessment and analysis. The carbonised macroplants identified reveal the presence of cultivated crops, wild nuts and weed plants of which many are evidence of domestic food waste (AOC Project no. 25576, 3). Pit [507] contained an astonishing 161 items of macroplant material of which the hazelnut and wheat grain were radiocarbon dated to the 1st millennium BC. Cultivated crops such as emmer/spelt, bread/club wheat, wheat and cereal caryopsis are all evidence of food refuse suggesting this was a domestic hearth for food preparation and disposal. Similarly, evidence of charcoal and burnt clay mixed with the 9 cereal caryopses recovered from pit [1205] are thought to be food refuse making the pit likely a domestic hearth too. Elm from the charcoal extracted from [1205] was radiocarbon dated to the 3rd and 4th century AD. Both pits confirm the presence and use of cultivated crops likely associated with domestic activity in the Late Bronze Age and Late Roman Period.

Other types of prehistoric activity reflected in the ecofact results included structural and ritual. Pits [1105] and [1205] were interpreted by AOC as possible small structural components such as stakes or posts and thought to be contemporary with the burnt mound activity (Ibid.), both contained a single wood species, hazel and elm respectively. While pit [1105] remains undated, surprisingly, the elm item extracted from pit [1205] turned out to date to the Roman Period making it unlikely associated with the burnt mound activity. The hazelnut and rowan items recovered from fill [1108] of pit [1107] date the feature to the Early Bronze Age, coupled with the presence of charcoal and fire-cracked stones, and lack of macroplant material, is indicative of fuel debris consistent with that of a firepit, and it is likely that it bears some relation to the burnt mound activity, however interpretation remains limited until radiocarbon dates are taken from the burnt mound spreads. It appears that the site in question was re-used on multiple occasions for different purposes and durations and has the potential to contribute to our understanding of settlement patterns, the re-use of earlier sites, land use and chronology disparities.

As outlined in The Research Framework for the Archaeology of Wales a greater understanding of settlement chronology as well as settlement and land use is required for the

Late Bronze Age and Iron Age in Wales. As such, where suitable materials survive radiocarbon dating should be undertaken (Gale 2010, 2-3). In this case, both the results from the paleoenvironmental assessment and analysis as well as the radiocarbon dates, have confirmed Late Bronze Age activity and provided significant insight to land use and exploitation of food resources in such a small area that can potentially be compared to other dated sites in north-west Wales.

Significantly, the macroplant analysis and radiocarbon dates from pit [1107] has also provided dating material to contribute to the chronological issues pertaining the Early Bronze Age, as well as providing evidence for land use in the form of exploitation of wild nuts and for possible Early Bronze Age settlement and ritual activity which A Research Framework for the Archaeology of Wales highlights as sparce and problematic (Pannet et al. 2017).

Finally, a worthy note to make which is pointed out in The Research Framework for the Archaeology of Wales (Davies 2017) more environmental sampling is needed in general to answer questions on chronology and settlement pattern, especially in regard to the Late Roman Period. The ecofact and radiocarbon dating results were able to confirm not only the cultivated crops extracted from pit [1205] date to the Roman Period, but that their discovery can be used to contribute to our understanding of settlement and agricultural practices during this period.

6.2 Recommendations

The archaeological evaluation trenching has identified and confirmed the presence of quite widespread prehistoric activity in the form of burnt mound spreads and associated features in the northwest corner of the proposed residential development. These archaeological features are concentrated around a natural spring that would have provided a ready source of water for use in cooking at the burnt mounds. Iron working may also have been undertaken on site, as indicated by the strong magnetic response during the geophysical survey that corresponded with anomalies 23 and 38 and the moderately large retrieval of lumps of iron slag from the ditch [305] in Trench 03. The trial trenches did not identify a furnace during the archaeological evaluation that would have produced this iron slag. This may be uncovered during the next stage of site works or it may prove that the material was imported from somewhere nearby and repurposed for aggregate to aid the use of the ditch for drainage.

As was recommended, post-excavation assessment and analysis of recovered soil samples was completed to better understand the date and range of prehistoric activity within the development boundary. The results not only confirm a Late Bronze Age presence but that the area in question has a long history spanning from the Early Bronze Age to the Late Roman Period. It also suggests a range of prehistoric activity took place such as domestic and ritual activity.

The iron slag recovered from [305] remains to be examined by a specialist to determine if it is of prehistoric or more recent origin and possibly assist in determining if it was locally produced. This would help to determine if a furnace may exist within the grounds of the proposed site.

Based on these results it is recommended that a programme of archaeological mitigation be carried out if the residential development proceeds. This might take the form of a controlled strip of the topsoil/subsoil in the vicinity of the natural spring and the known location of the burnt mounds under archaeological supervision that will be directly disturbed by the development works.

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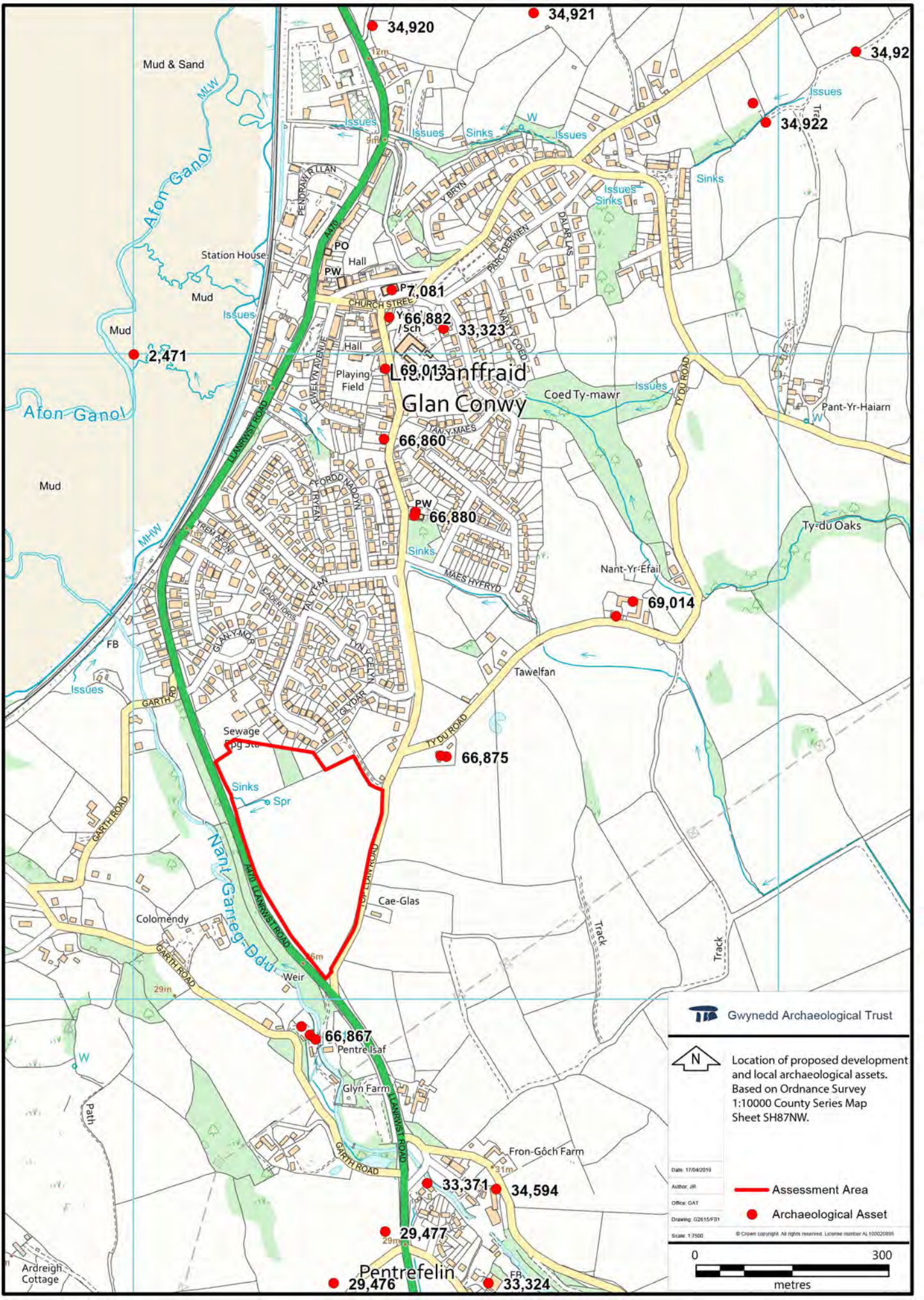
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MLW
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Issues
Sinks
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CHURCH STREET
66,882
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33,323
2,471
Llanfraid
Glan Conwy
69,013
Playing Field
Coed Ty-mawr
Pant-Yr-Haiarn
LLANRWST ROAD
TAN-Y-MAES
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PW
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MHW
Ty-du Oaks
Nant-Yr-Efail
MAES HYFRYD
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GARTH RD
TY DU ROAD
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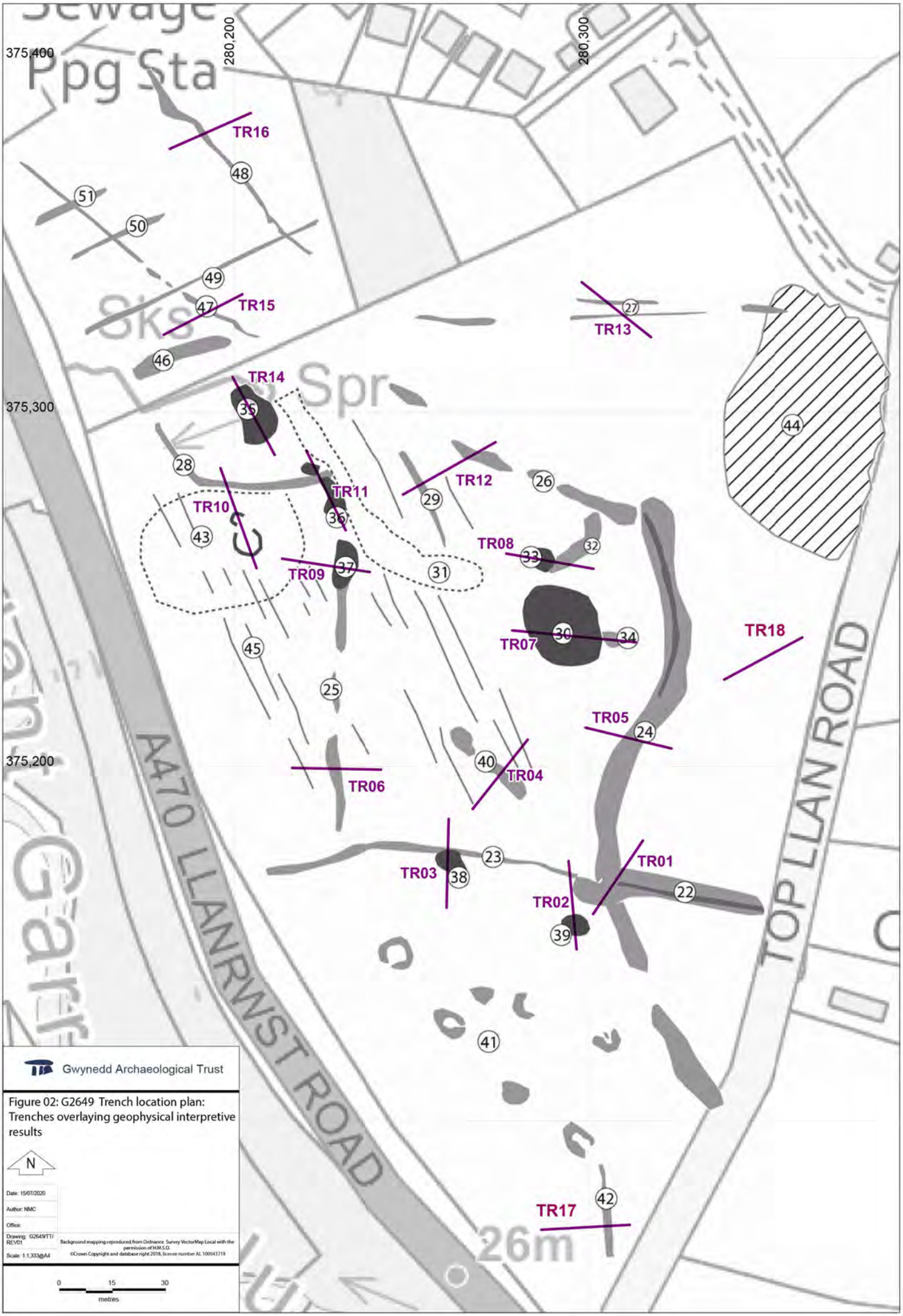
Spr
GARTH ROAD
A470 LLANRWST ROAD
TOP LLAN ROAD
Nant Garreg-Ddu
Cae-Glas
Track
Colomendy
Weir
66,867
Pentre Isaf
Glyn Farm
Path
Fron-Gôch Farm
33,371
34,594
29,477
Ardreigh Cottage
Pentrefelin
29,476
33,324
Gwynedd Archaeological Trust
N
Location of proposed development and local archaeological assets. Based on Ordnance Survey 1:10000 County Series Map Sheet SH87NW.
Date: 17/04/2019
Author: JR
Office: GAT
Drawing: G2615/FD1
Scale: 1:7500
Assessment Area
Archaeological Asset
© Crown copyright. All rights reserved. License number AL100020895
0
300
metres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TR06
TR05
TR04
TR03
TR02
TR01
TR18
TR17
A470 LLANRWST ROAD
TOP LLAN ROAD
26m
Gwynedd Archaeological Trust
Figure 02: G2649 Trench location plan: Trenches overlaying geophysical interpretive results
N
Date: 15/07/2020
Author: NMC
Office:
Drawing: G2649TT/REV01
Scale: 1:1,333@A4
Background mapping reproduced from Ordnance Survey VectorMap Local with the permission of H.M.S.O.
©Crown Copyright and database right 2018, license number AL 100043718
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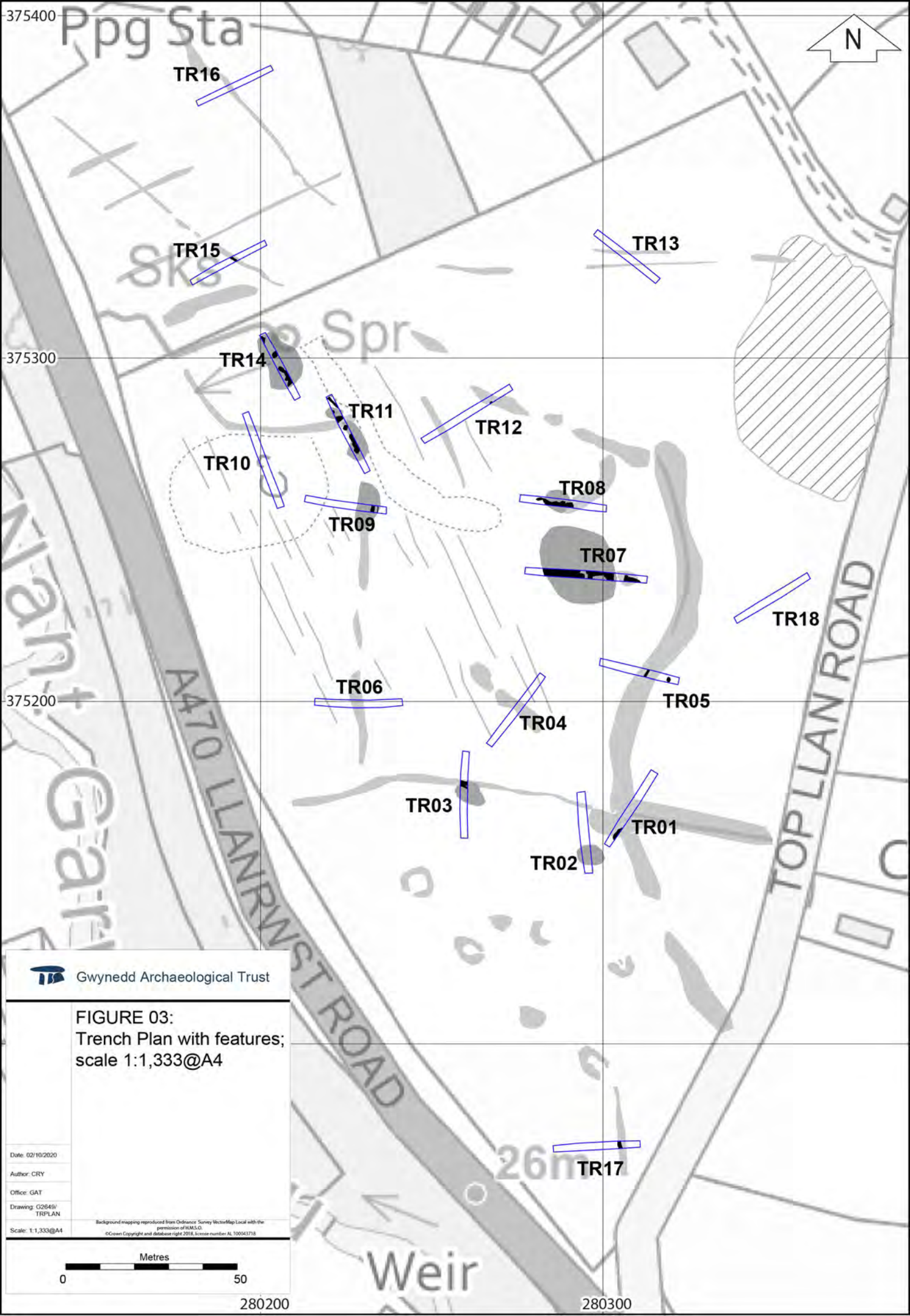
metres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TR06
TR05
TR04
TR03
TR01
TR02
TR17
A470 LLANRWST ROAD
TOP LLAN ROAD
26m
Weir
Gwynedd Archaeological Trust
FIGURE 03:
Trench Plan with features;
scale 1:1,333@A4
Date: 02/10/2020
Author: CRY
Office: GAT
Drawing: G2649/ TRPLAN
Scale: 1:1,333@A4
Background mapping reproduced from Ordnance Survey VectorMap Local with the permission of H.M.S.O.
©Crown Copyright and database right 2018, license number AL 100043718
Metres
0
50

N

104

0 3 6m

Gwynedd Archaeological Trust

FIGURE 04:
Trench 01 Plan

Date: 01/10/2020

Author: CRY

Office: GAT

Drawing: G2649/ TR01PLAN

Scale: 1:60@A3

Burnt Mound

Figure 05.1

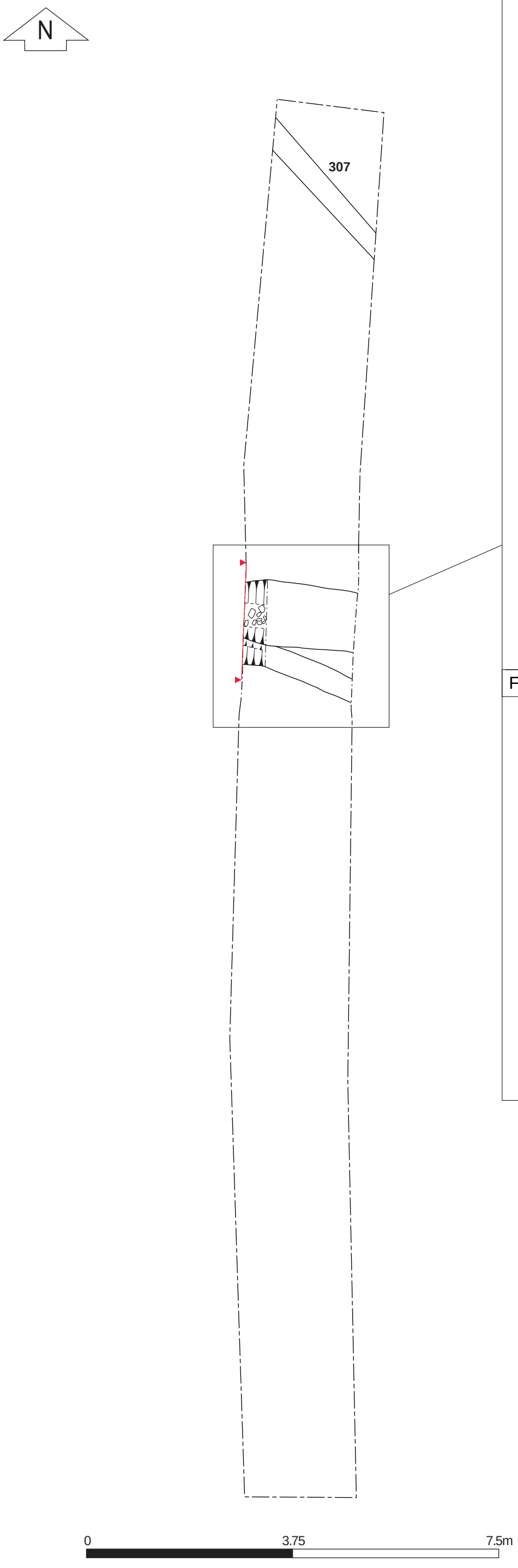


Figure 05.2

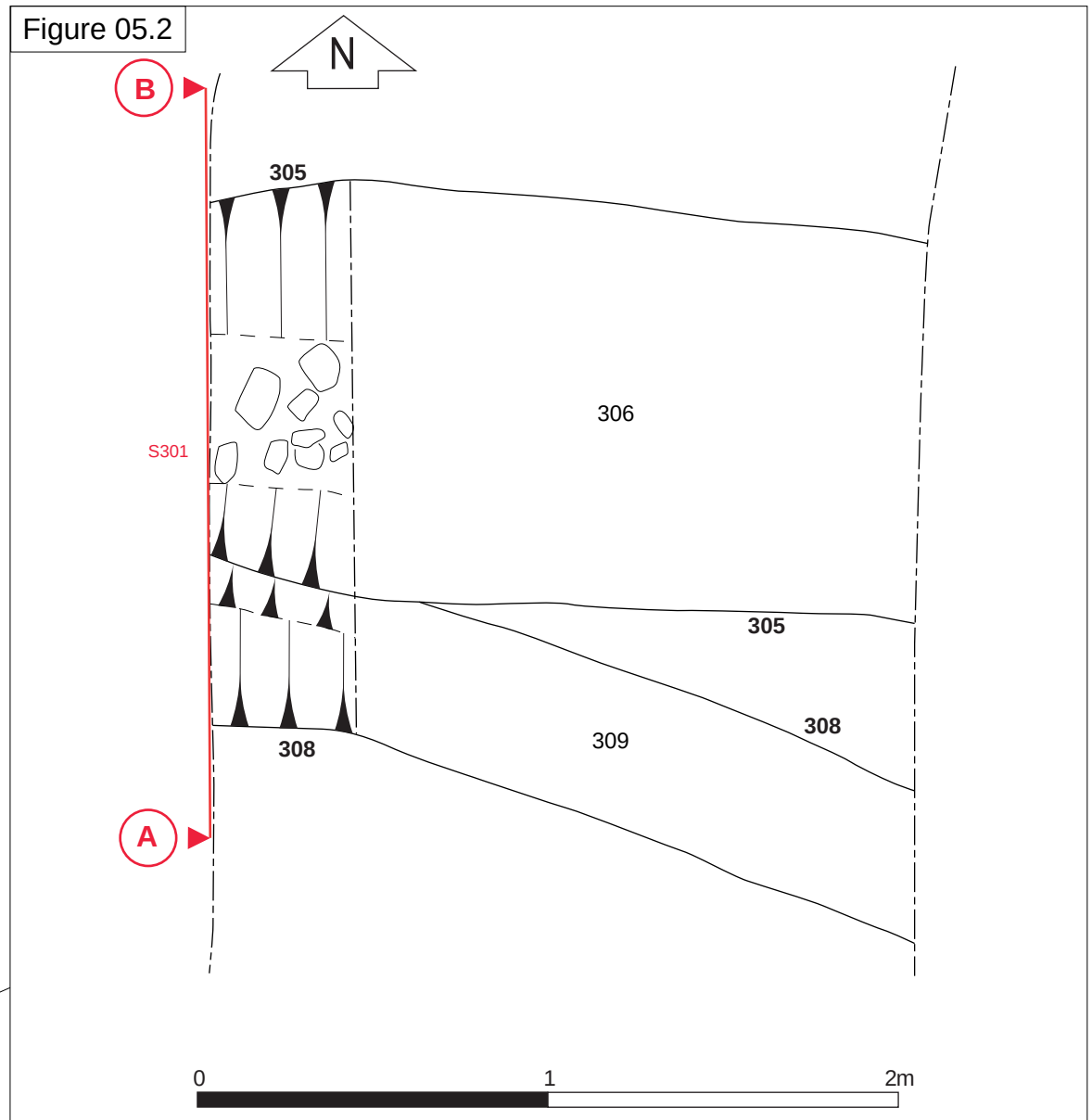
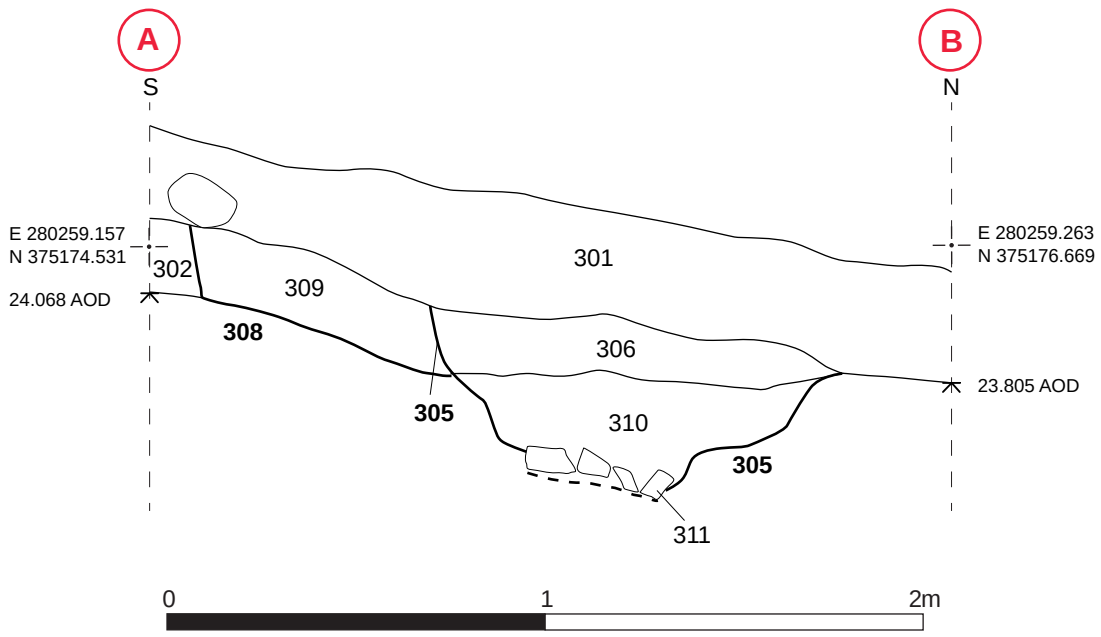


Figure 05.3



Gwynedd Archaeological Trust

FIGURE 05.1:
Trench 03 Plan;
scale 1:75@A3

FIGURE 05.2:
Plan of Linears [305]
and [308]; Scale 1:20@A3

FIGURE 05.3:
E Facing Section of [305]
and [308]; Scale 1:20@A3

Date: 01/10/2020
Author: CRY
Office: GAT
Drawing: G2649/ TR03
Scale: Various

Figure 06.1

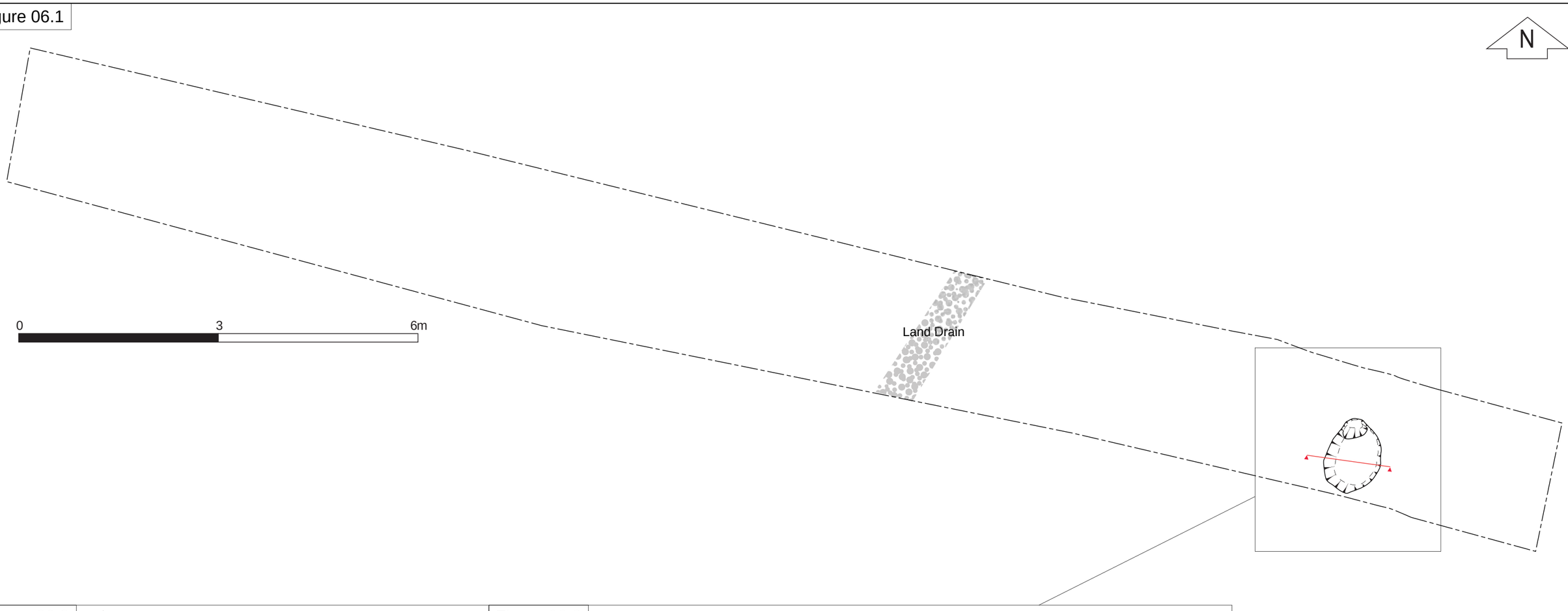


Figure 06.2

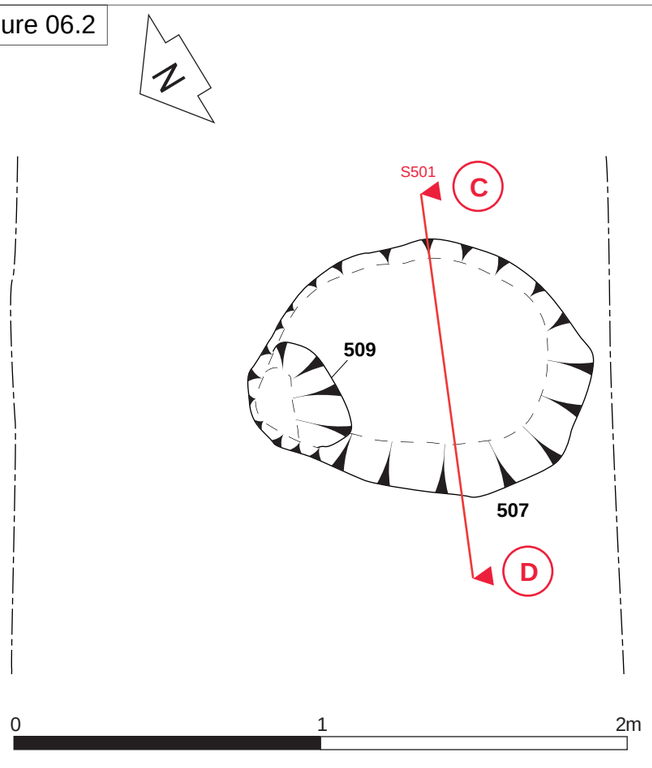
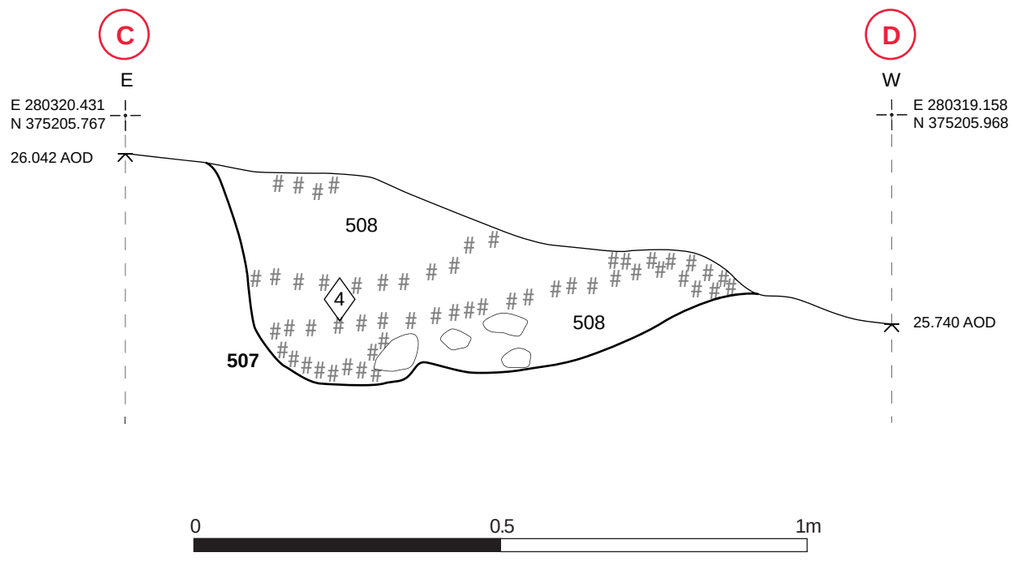


Figure 06.3



Gwynedd Archaeological Trust

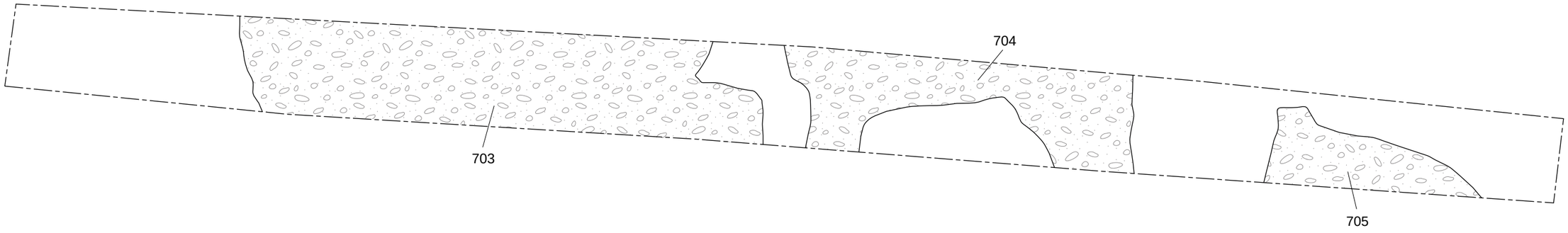
FIGURE 06.1:
Trench 05 Plan;
scale 1:60@A3

FIGURE 06.2:
Plan of Pit [507] and [509];
Scale 1:20@A3

FIGURE 06.3:
N Facing Section of Pit [507]; Scale 1:10@A3

Date: 01/10/2020
Author: CRY
Office: GAT
Drawing: G2649/ TR05
Scale: Various

N



0 5 10m

Gwynedd Archaeological Trust

FIGURE 07:
Trench 07 Plan

Date: 01/10/2020

Author: CRY

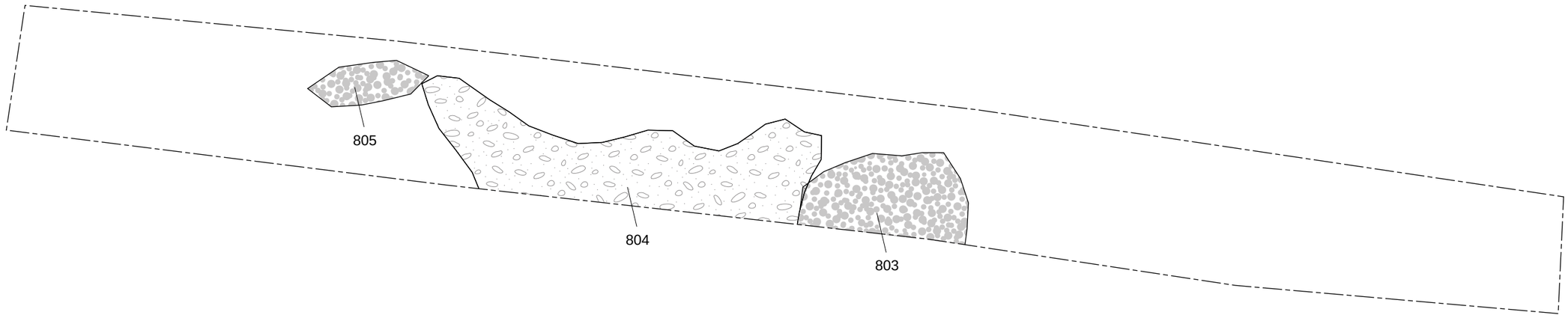
Office: GAT

Drawing: G2649/ TR07

Scale: 1:100@A3

Burnt Mound

N



0 3.75 7.5m

Gwynedd Archaeological Trust

FIGURE 08:
Trench 08 Plan

Larger Stone Deposit

Burnt Mound

Date: 01/10/2020

Author: CRY

Office: GAT

Drawing: G2649/ TR08

Scale: 1:75@A3

Figure 09.1

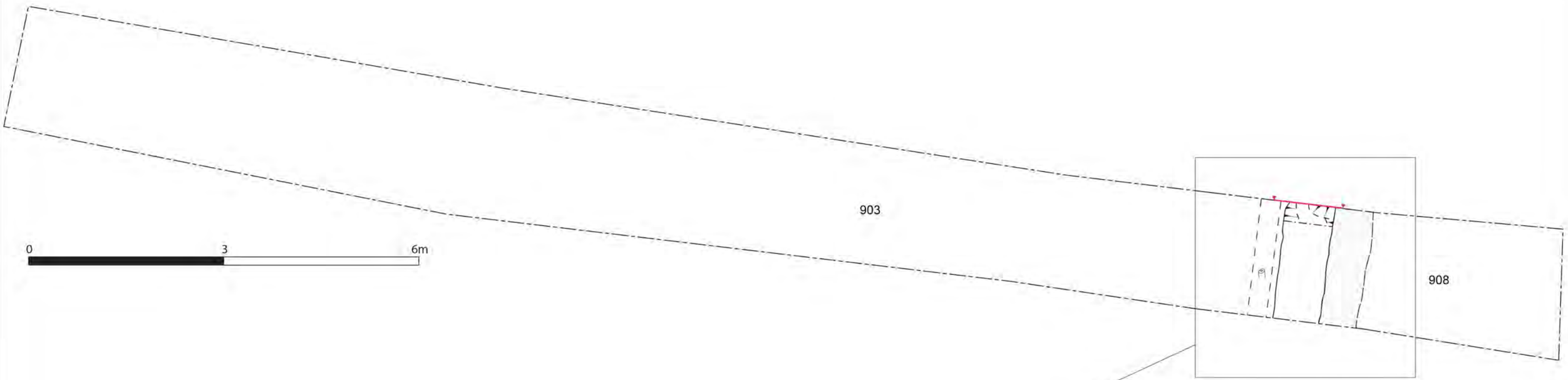


Figure 09.2

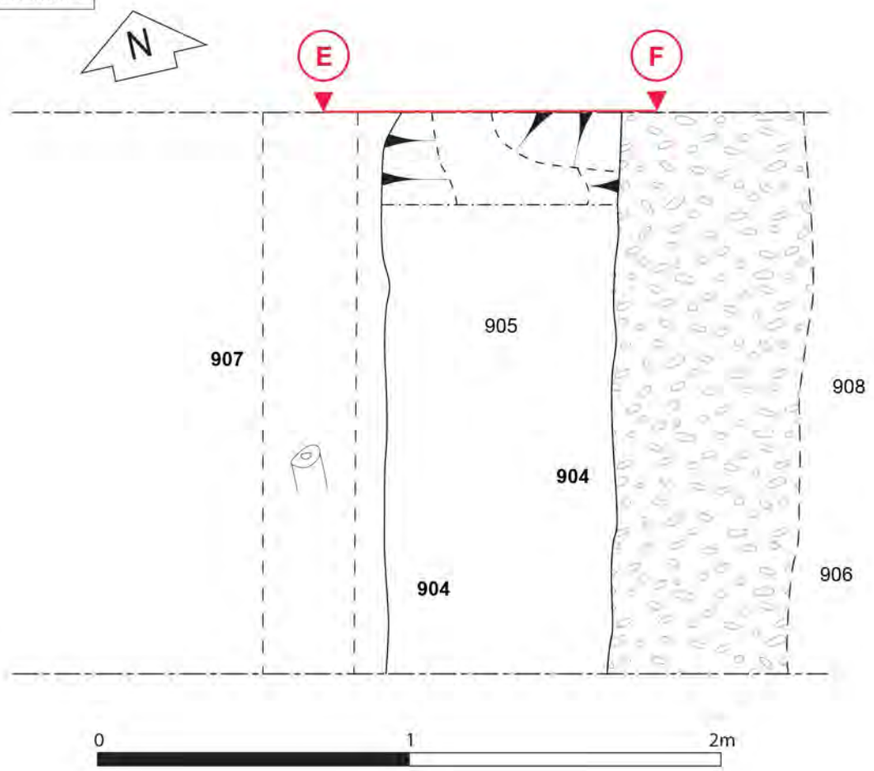
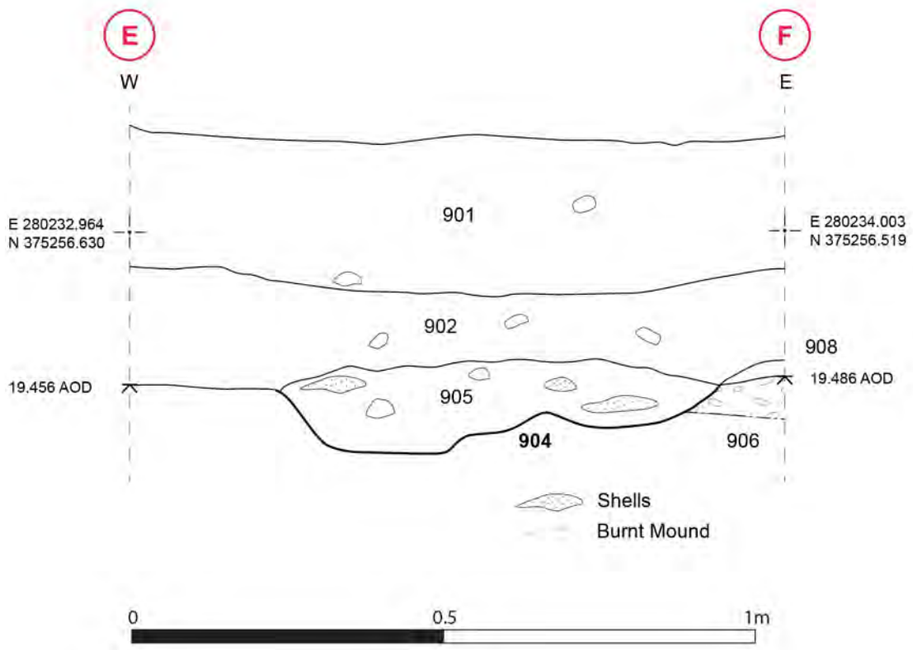


Figure 09.3



Gwynedd Archaeological Trust

FIGURE 09.1:
Trench 09 Plan;
scale 1:60@A3

FIGURE 09.2:
Plan of Linear [904];
Scale 1:20@A3

FIGURE 09.3:
S Facing Section of Linear [904]; Scale 1:10@A3

Date: 01/10/2020
Author: CRY
Office: GAT
Drawing: G2649/TR09
Scale: Various

Figure 10.1

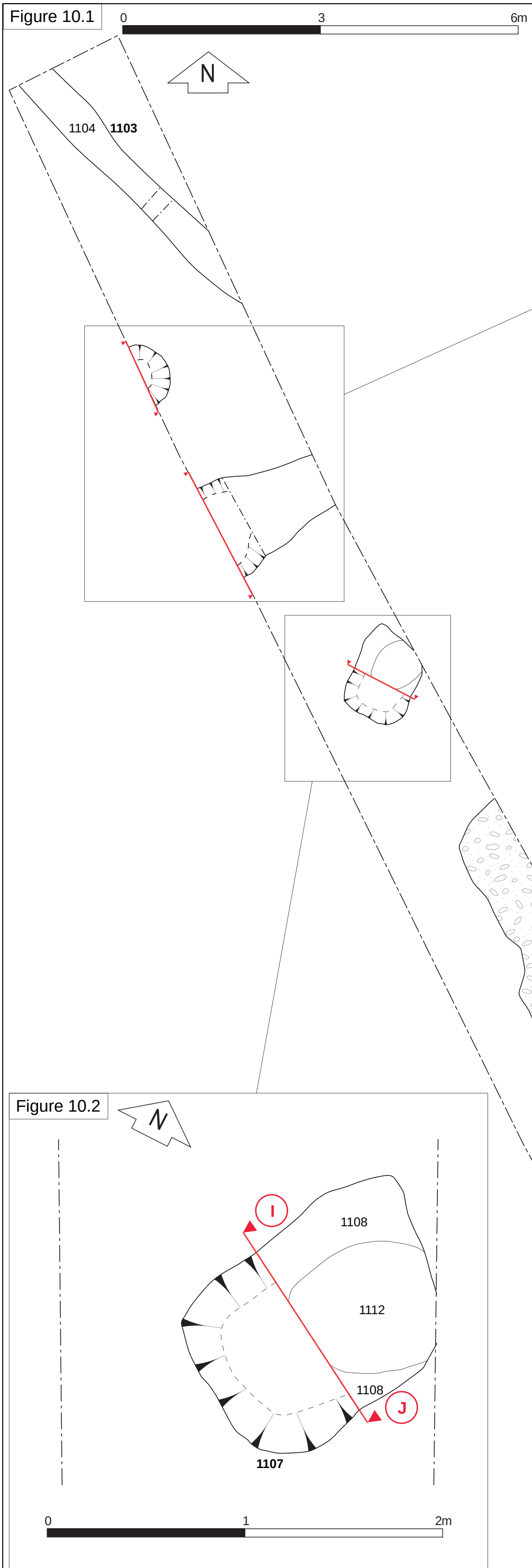
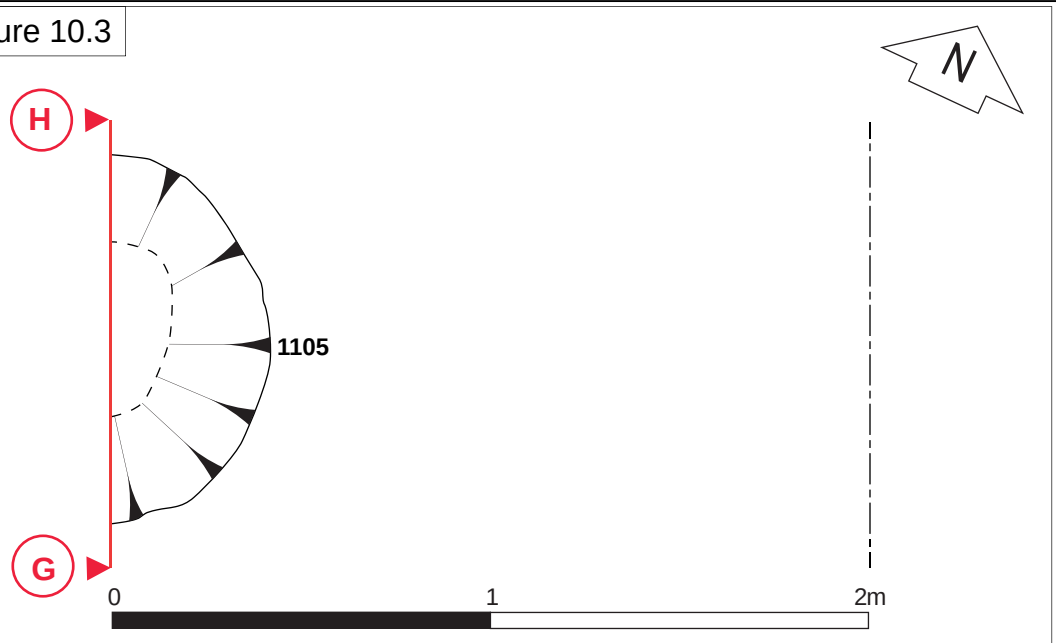


Figure 10.2

Figure 10.3



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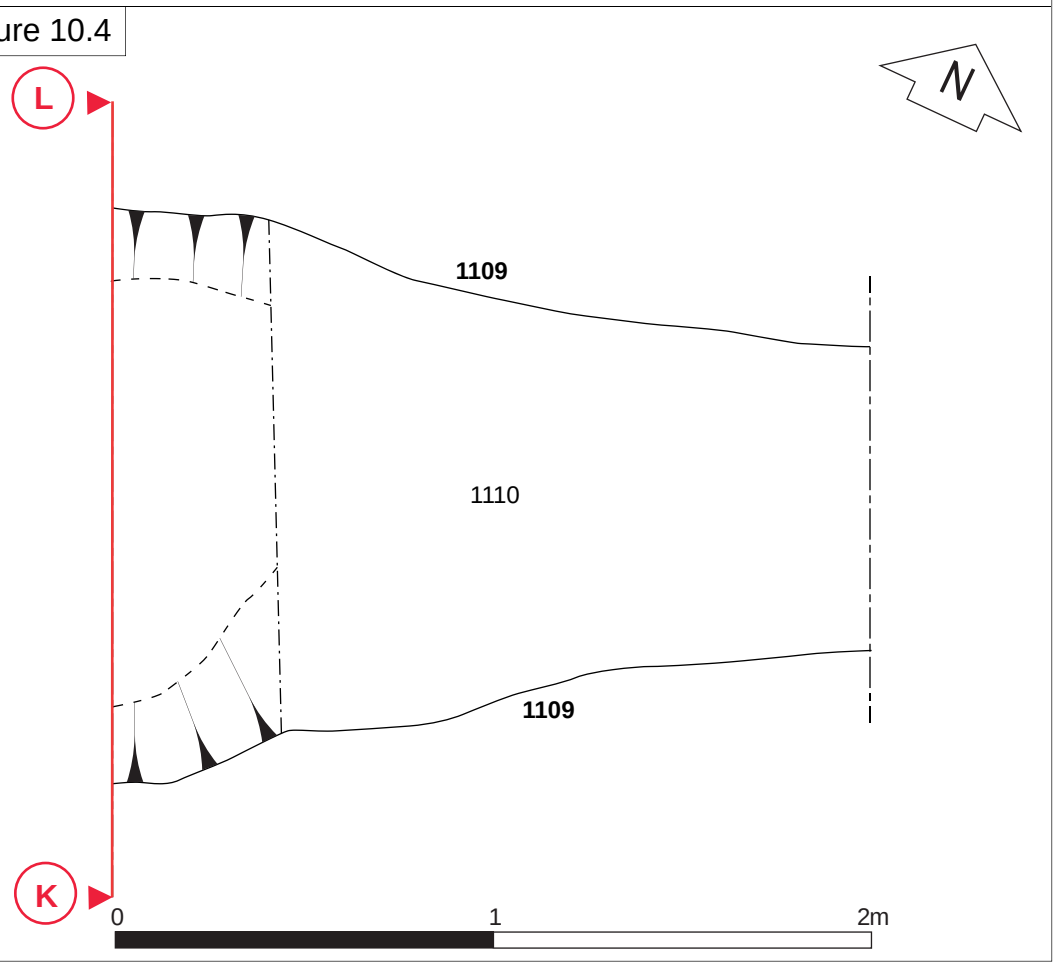

Gwynedd Archaeological Trust

FIGURE 10.1:
Trench 11 Plan;
scale 1:60@A3

FIGURE 10.3:
Plan of Burnt Pit [1105];
Scale 1:20@A3

FIGURE 10.4:
Plan of Linear [1109];
Scale 1:10@A3

FIGURE 10.2:
Plan of Burnt Pit [1107];
Scale 1:10@A3

Date: 01/10/2020
Author: CRY
Office: GAT
Drawing: G2649/ TR11
Scale: Various

Figure 11.2

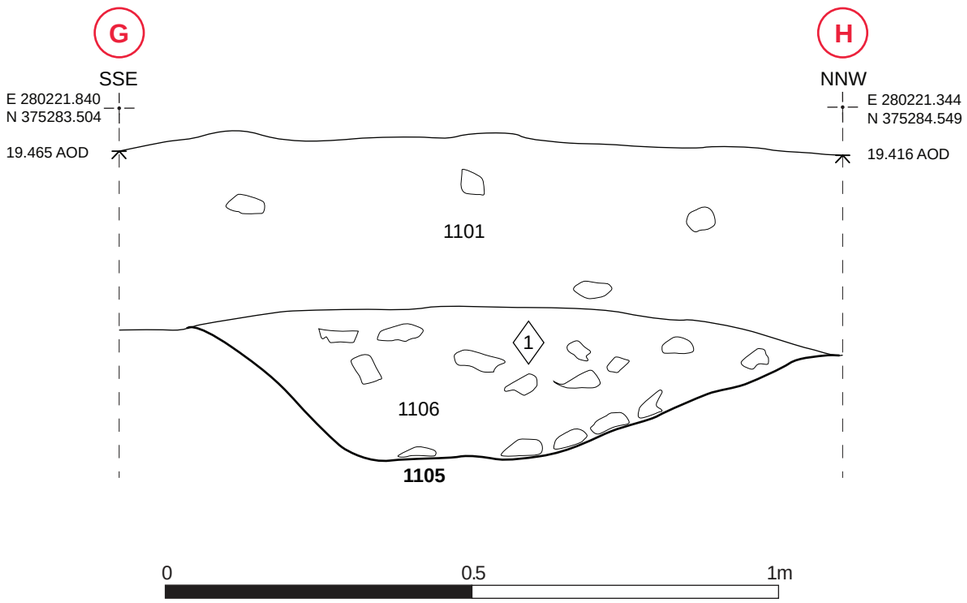

Figure 11.1

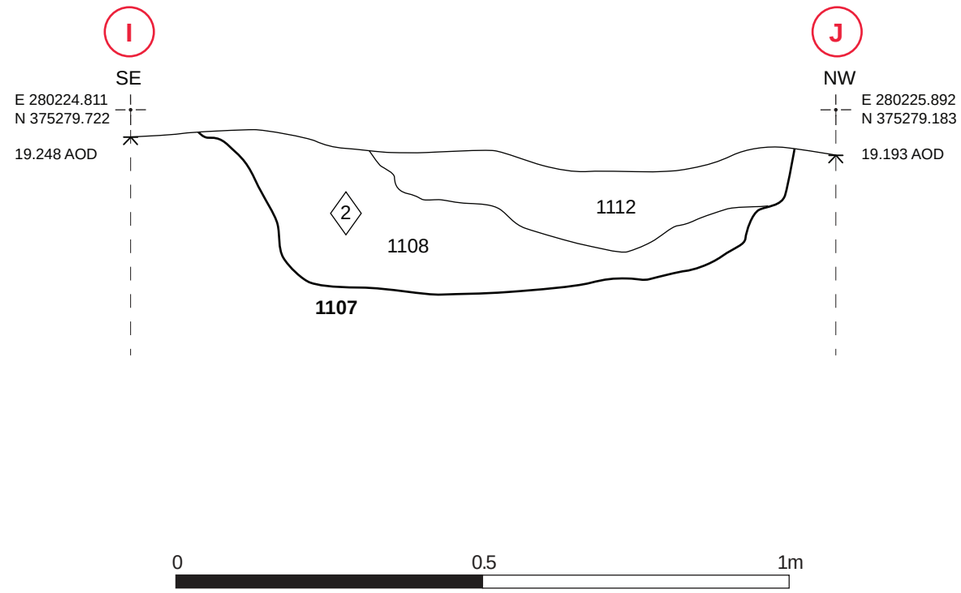

Figure 11.3

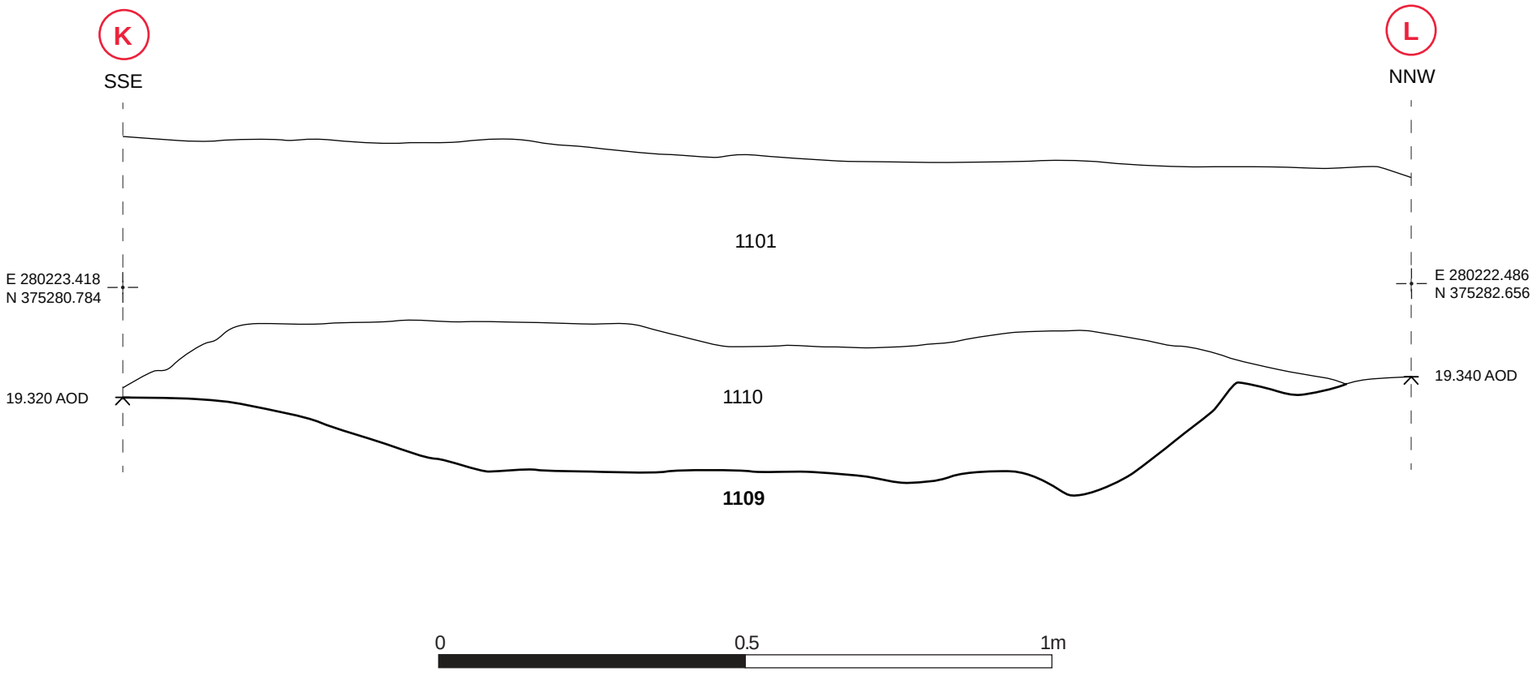

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FIGURE 11.2:
ENE Facing Section of Pit [1105]; scale 1:10@A3

FIGURE 11.1:
NE Facing Section of Pit [1107]; Scale 1:10@A3

FIGURE 11.3:
ENE Facing Section of Linear [1109]; Scale 1:10@A3

Date: 01/10/2020
Author: CRY
Office: GAT
Drawing: G2649/TR11SEC
Scale: Various

Gwynedd Archaeological Trust

FIGURE 12.1:
Trench 12 Plan;
Scale 1:75@A3

FIGURE 12.2:
Plan of Burnt Pit [1205];
Scale 1:20@A3

FIGURE 12.3:
NW Facing Section of
Burnt Pit [1205];
Scale 1:10@A3

Date: 02/10/2020

Author: CRY

Office: GAT

Drawing: G2649/ TR12

Scale: Various

Figure 12.1

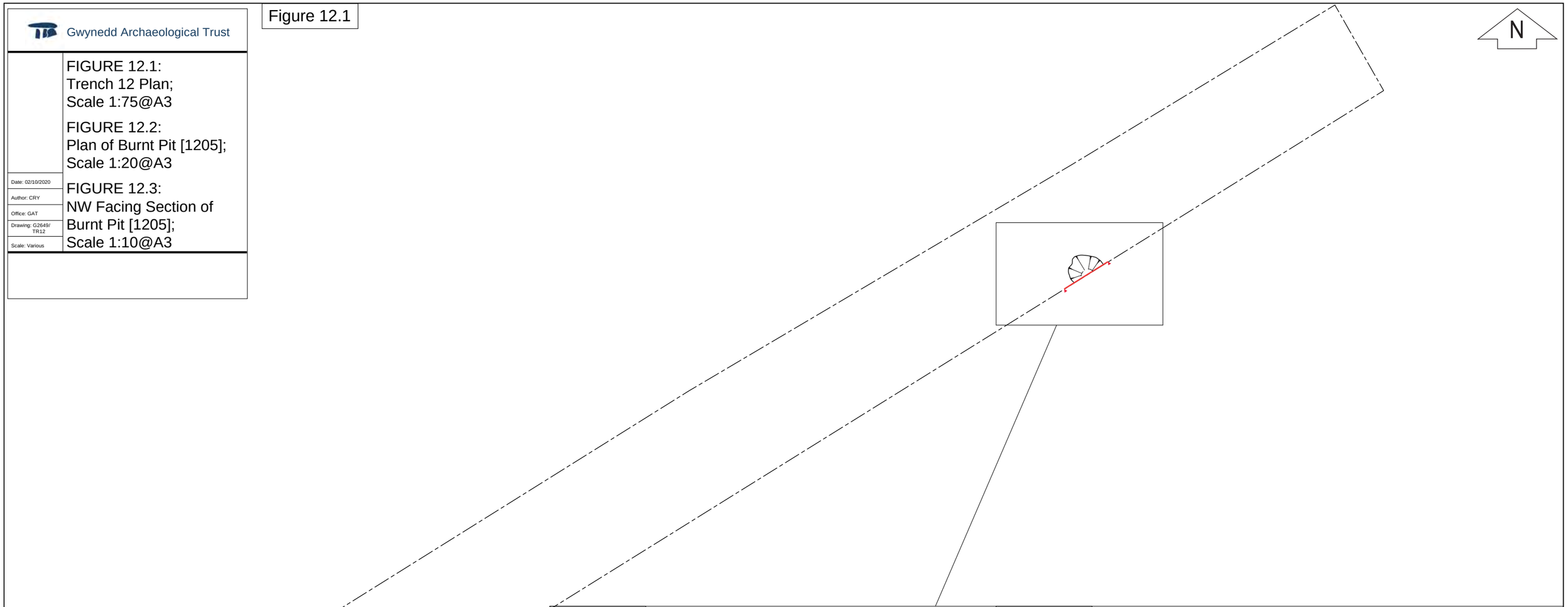


Figure 12.2

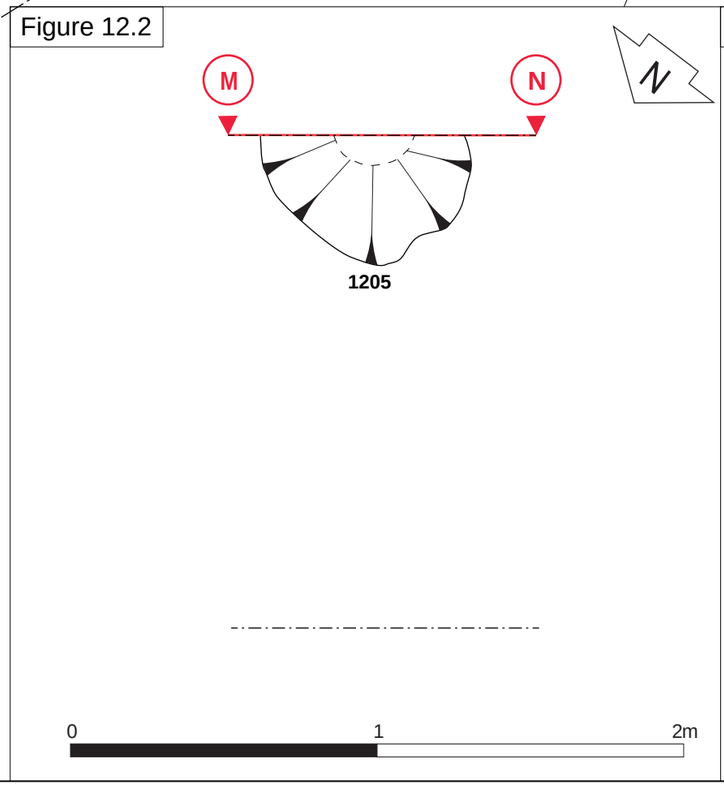


Figure 12.3

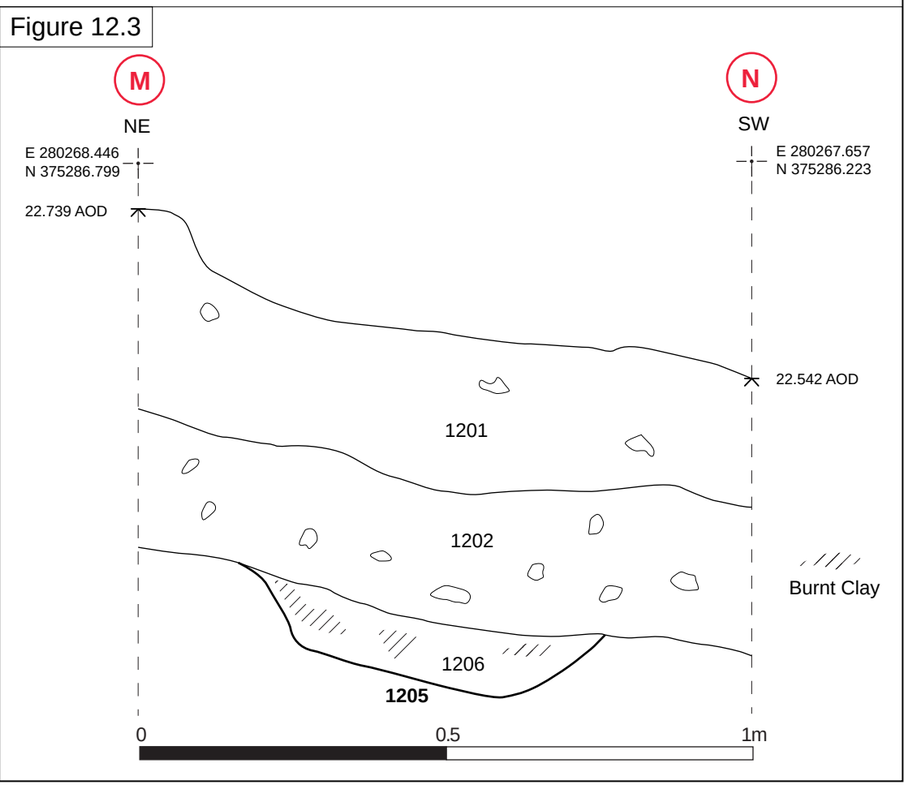


Figure 13.1

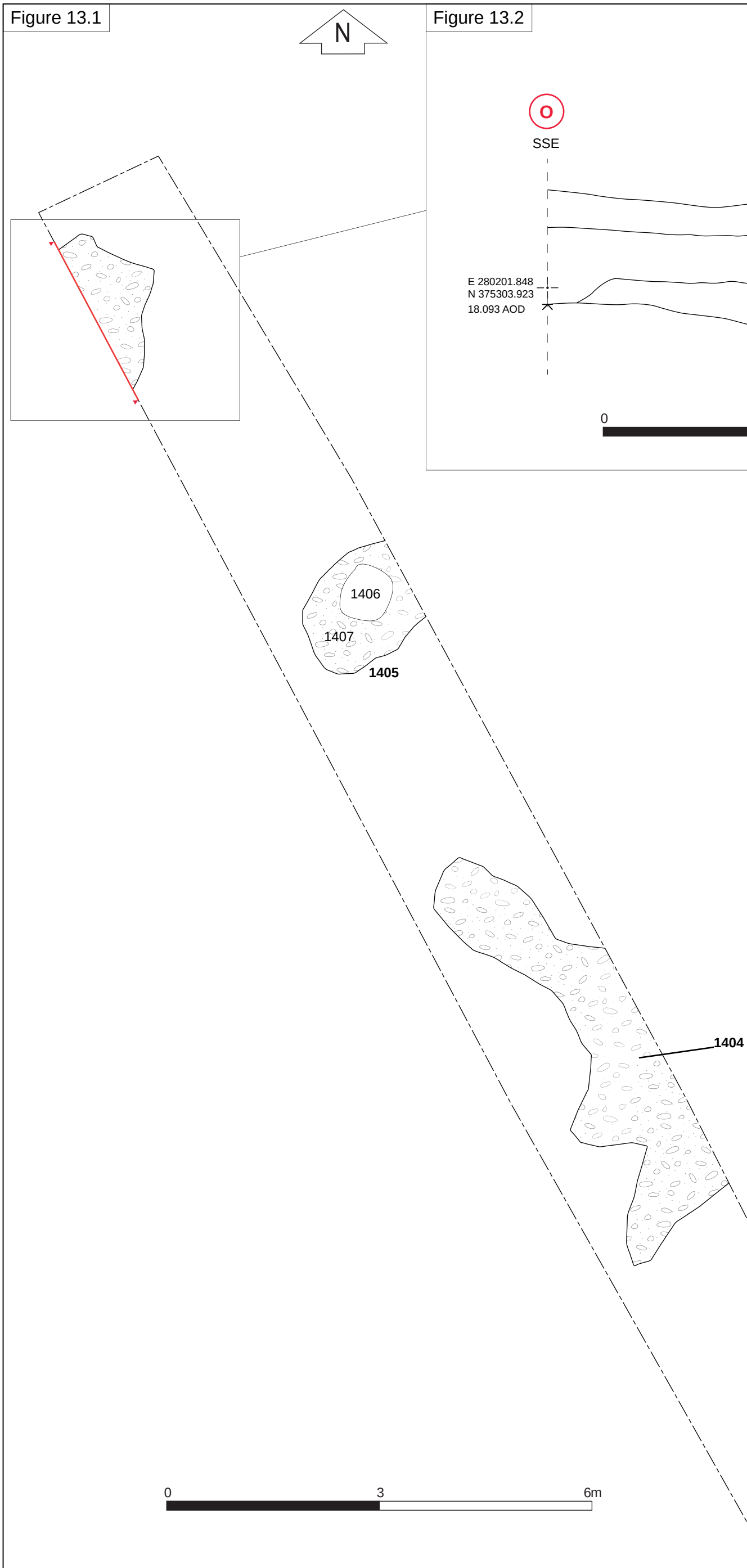
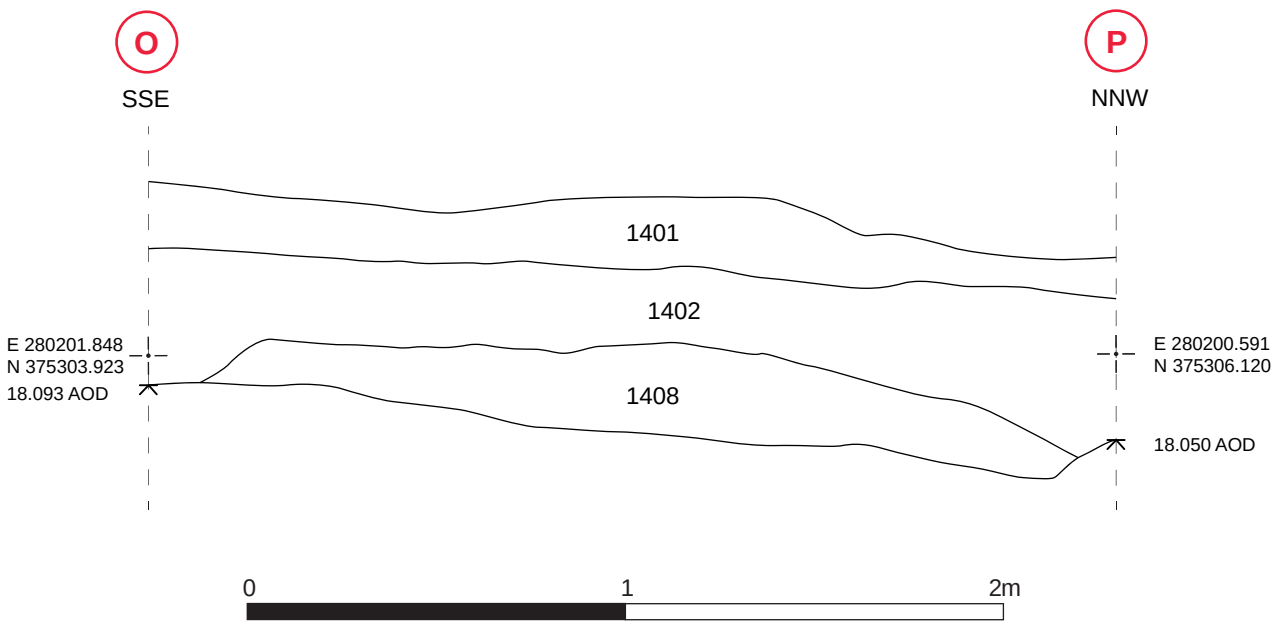


Figure 13.2



Gwynedd Archaeological Trust

FIGURE 13.1:
Trench 14 Plan;
scale 1:60@A3

FIGURE 13.2:
ENE Facing Section of Burnt Spread (1408);
Scale 1:20@A3

Date: 02/10/2020

Author: CRY

Office: GAT

Drawing: G2649/ TR14

Scale: Various

Figure 14.1

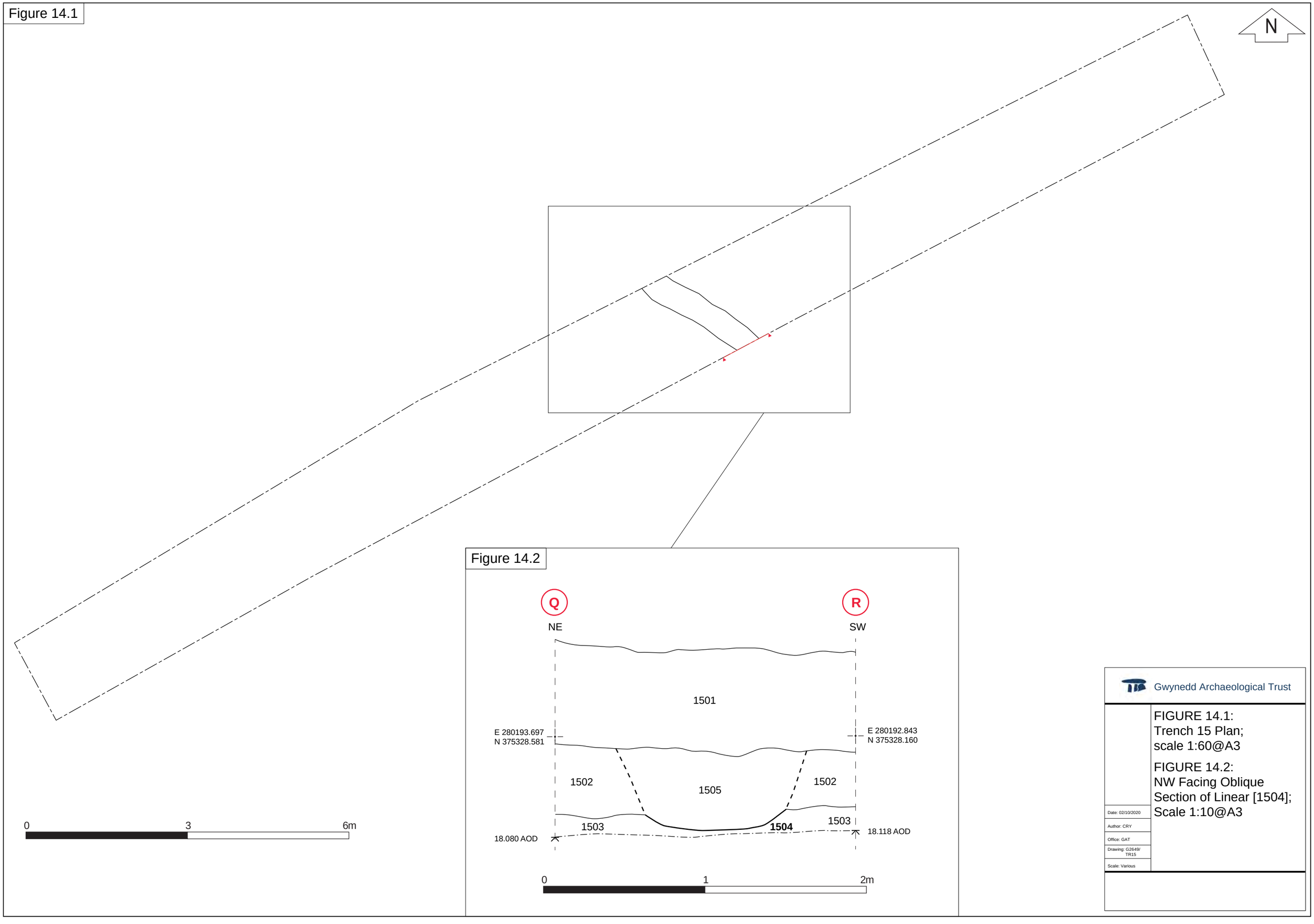


Figure 14.2

Gwynedd Archaeological Trust

FIGURE 14.1:
Trench 15 Plan;
scale 1:60@A3

FIGURE 14.2:
NW Facing Oblique Section of Linear [1504];
Scale 1:10@A3

Date: 02/10/2020
Author: CRY
Office: GAT
Drawing: G2649/TR15
Scale: Various

Figure 15.1

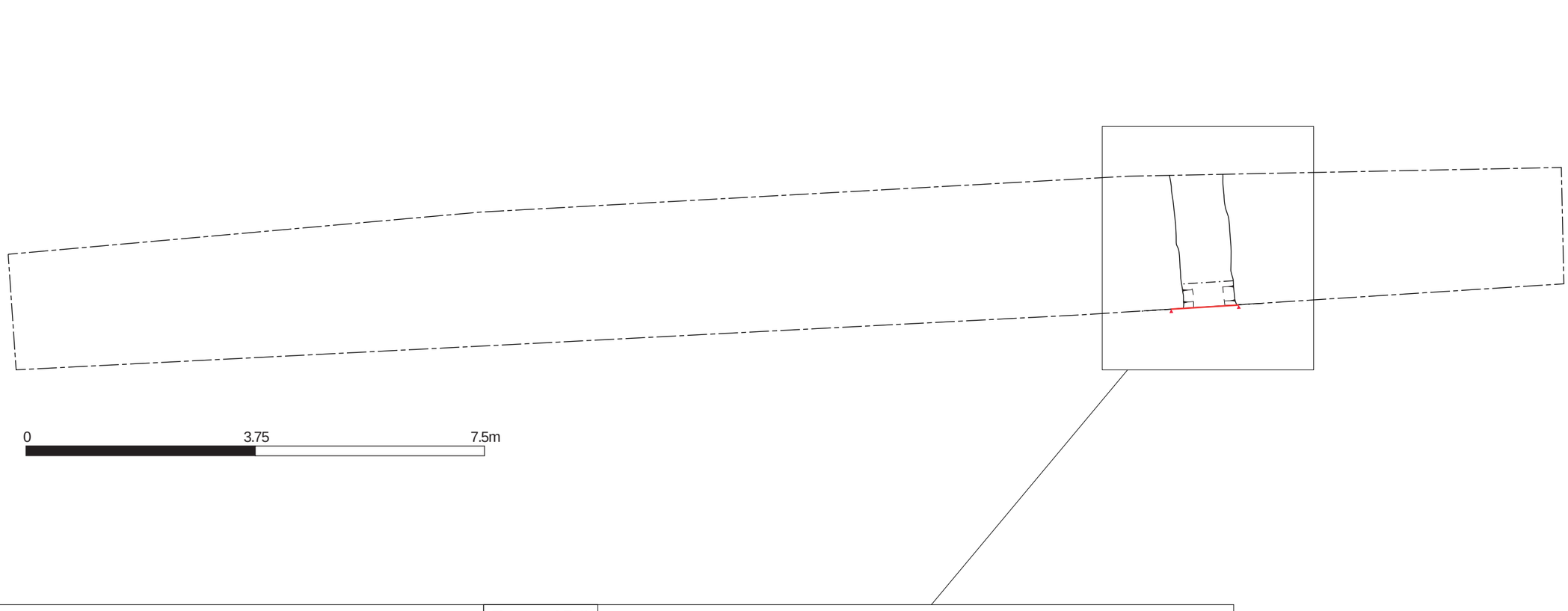


Figure 15.2

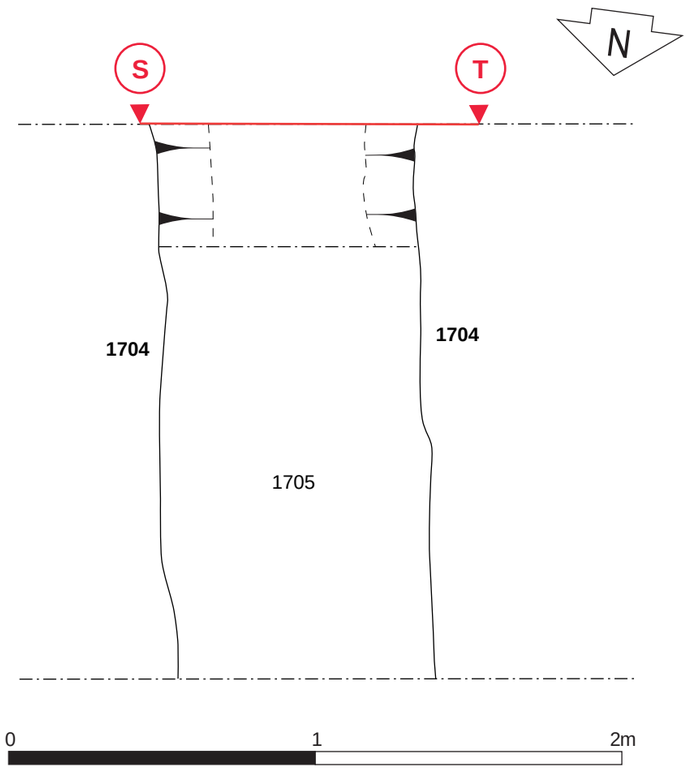
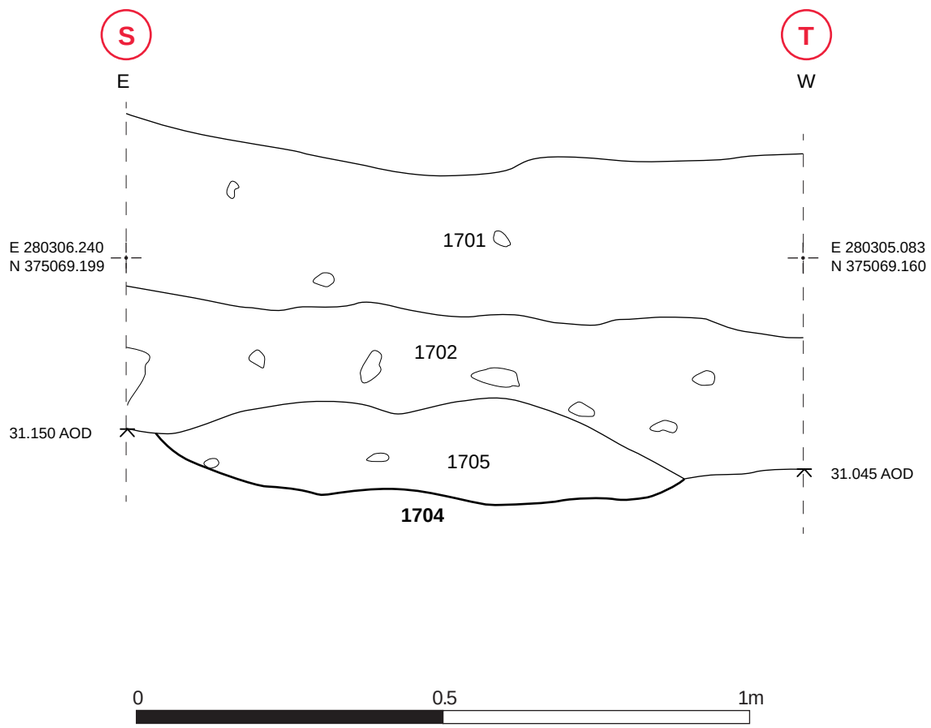


Figure 15.3



Gwynedd Archaeological Trust

FIGURE 15.1:
Trench 17 Plan;
scale 1:75@A3

FIGURE 15.2:
Plan of Linear [1704];
Scale 1:20@A3

FIGURE 15.3:
N Facing Section of Linear [1704]; Scale 1:10@A3

Date: 02/10/2020
Author: CRY
Office: GAT
Drawing: G2649/TR17
Scale: Various

Plate 1: Part of burnt mound material; scale 1x1m; view from NW (archive reference: G2649_109).

Plate 2: Pre-ex of linears ; scale 1x1m; view from N (archive reference: G2649_138).

Plate 3: Close-up of E facing section through [305] and [308]; scale 1x1m; view from E (archive reference: G2649_141).

Plate 4: View of land/field drain in Trench 05; scale 1x1m; view from SE (archive reference: G2649_103).

Plate 5: Pre-ex (location) of [507]; scale 1x1m; view from W (archive reference: G2649_130).

Plate 6: Post-ex of [507]; scale 1x1m; view from N (archive reference: G2649_135).

Plate 7: Close-up of N facing section through [507]; scale 1x1m; view from N (archive reference: G2649_133).

Plate 8: Trench 7 burnt mound (703); scale 1x1m; view from NE (archive reference: G2649_546).

Plate 9: Burnt mound (804); scale 1x1m; view from WSW (archive reference: G2649_543).

Plate 10: Field boundary [904], ceramic field drain [907] and burnt mound (906); scale 1x1m; view from W (archive reference: G2649_559).

Plate 11: Field boundary [904] plan shot; scale 1x1m; view from S (archive reference: G2649_561).

Plate 12: Trench 10 post-ex; scale 1x1m; view from NNW (archive reference: G2649_515).

Plate 13: SW facing half section through [1107]; scale 1x1m; view from SSW (archive reference: G2649_116).

Plate 14: Burnt pit [1105] plan shot; scale 1x1m; view from ENE (archive reference: G2649_527).

Plate 15: ENE facing section of [1109]; scale 1x1m; view from ENE (archive reference: G2649_120).

Plate 16: NW facing section of burnt pit [1205]; scale 1x1m; view from NW (archive reference: G2649_551).

Plate 17: Oblique view of section through (1408); scale 1x1m; view from E (archive reference: G2649_127).

Plate 18: Pre-ex view of [1405]; scale 1x1m; view from SSE (archive reference: G2649_129).

Plate 19: Field boundary [1504] oblique baulk section; scale 1x1m; view from NW (archive reference: G2649_567).

Plate 20: Field boundary [1704] N facing Section; scale 1x1m; view from N (archive reference: G2649_555).

APPENDIX I

Reproduction of approved Written Scheme of Investigation (WSI), Gwynedd Archaeological Trust, September 2020

MAES Y FELIN, GLAN CONWY (G2649)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION (TRIAL TRENCHING)

Prepared for Brenig Construction

September 2020

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Approvals Table				
	Role	**Printed Name**	**Signature**	**Date**
Originated by	Document Author	Michael S Lynes		15/09/20
Reviewed by	Document Reviewer	Stuart Reilly		15/09/20
Approved by	Principal Archaeologist	John Roberts		15/09/20

Revision History			
Rev No.	**Summary of Changes**	**Ref Section**	**Purpose of Issue**

All GAT staff should sign their copy to confirm the project specification is read and understood and retain a copy of the specification for the duration of their involvement with the project. On completion, the specification should be retained with the project archive:

Name	Signature	Date

MAES Y FELIN, GLAN CONWY (G2649)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION (TRIAL TRENCHING):

Prepared for *Brenig Construction*, September 2020

CONTENTS

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by Brenig Construction to prepare a written scheme of investigation for an archaeological evaluation (trial trenching) in support of a planning application for a proposed residential development at Maes y Felin, Glan Conwy (NGR SH8027075250; postcode: LL28 5NR; Figure 01).

The trial trenching is the second stage of archaeological evaluation following on from a geophysical survey undertaken in March 2020 (GAT Report 1550, Hopewell 2020). A total of 18 trenches have been placed to investigate anomalies discovered during the geophysical survey (Figure 02). The archaeological anomalies include, for example possible burnt mounds, round houses and field boundaries.

The evaluation will be undertaken in September 2020 and will conform to the following guidelines:

- *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* Version 1.1 (The Welsh Archaeological Trusts, 2018);
- *Guidelines for digital archives* (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
- *Management of Archaeological Projects* (English Heritage, 1991);
- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England, 2015); and
- *Standard and Guidance for Archaeological Field Evaluation* (Chartered Institute for Archaeologists, 2014).

GAT is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists and a member of the Federation of Archaeological Managers and Employers (FAME).

The project will be monitored by the Gwynedd Archaeological Planning Service (GAPS) on behalf of the Local Planning Authority.

1.1 Fieldwork aims and objectives

The key aims and objectives are to:

- to verify and determine the results of the geophysical survey report (GAT report 1550) that identified probable evidence for a burnt mound and associated features as well as a possible roundhouse (Hopewell, 2020, 16-17). As outlined in *The Research Framework for the Archaeology of Wales* a greater understanding of settlement chronology as well as settlement and land use is required for the Late Bronze Age and Iron Age in Wales. As such, where suitable materials survive radiocarbon dating should be undertaken (Gale 2010, 2-3);

- the probable preservation of relict field systems which predate historic mapping may be of medieval (1110 – 1539 AD) or post medieval (1539 – 1750 AD) origin and may contribute to settlement and land use development as outlined in Medieval (1110 – 1539 AD) and Post Medieval Wales (1539 – 1750 AD) by *A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document March 2017*; and

- If no additional archaeological activity is identified, establish why this may be the case.

1.2 Monitoring Arrangements

The archaeological evaluation will be monitored by the Gwynedd Archaeological Planning Service (GAPS). The content of this WSI and all subsequent reporting by GAT must be approved by GAPS prior to final issue. The GAPS Planning Archaeologist will be kept informed of the project timetable and of the subsequent progress and findings. This will allow time to arrange monitoring visits and attend site meetings (if required) and enable discussion about the need or otherwise for further works (if required) as features of potential archaeological significance are encountered. GAPS contact details are:

Jenny Emmett 07824481052

Tom Fildes 07920264232

1.3 Historic Environment Record

In line with the GAT Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). In line with this guidance, all submitted reporting will need to include a non-technical summary in Welsh and English at the front of the report combined with short bilingual summaries of the principal Historic Assets recorded during the event. These requirements are mandatory. The GAT HER enquiry number is GATHER1222 and the event primary reference number is PRN 45923.

The GAT HER will also be responsible for supplying Primary Reference Numbers (PRN) for new assets identified and recorded.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

GAT completed an archaeological assessment of the proposed development area in 2019 (GAT Report 1486). The regional Historic Environment Record (HER) did not show any known assets within the confines of the assessment plots and the local area was mostly characterised by post-medieval activity. No other archaeological project work was listed within the HER as having been completed within the proposed development area, but GAT completed an assessment along the A470 road to the immediate southwest for the proposed A470 Trunk Road Pentrefelin to Bodnant Improvement Scheme (Evans & Smith, 2008). The report characterised that local area as "representing a farming landscape with a field pattern little changed from the 18th century, but with some fragments of landscape and possible trackways surviving from earlier periods" (ibid, 04).

In total 23 assets were identified within a 1km radius of the centre point of the proposed development area, with two assets in close proximity: Hafod (PRN 66870) and the garage adjacent to Hafod (PRN 66875), both of which were Grade II listed buildings. A partial walkover survey was completed of the study area as part of the assessment as not all fields were accessible at the time of completion. This walkover survey did not identify any new archaeological assets although they may have been obscured by high grass and vegetation.

The geophysical survey conducted by GAT in March 2020 (GAT Report 1500), identified several possible archaeological anomalies, the largest of which appears to be a large burnt mound (anomaly 30) in the centre of the field. This is a prehistoric feature type, typically associated with the Bronze Age (2300 – 800 BC) and communal cooking. There were also possible associated features with the burnt mound, such as a possible hearth (anaomaly 34). In addition, there were several linear features registered, which aremost likely post-medieval field boundaries and plough marks; the latter archaeological anomalies are most likely modern, as they respect the modern boundaries of the field. Lastly there were a series of circular anomalies, the majority of which corresponded with the former locations of cattle feeders but there is a slight possibility that at least one of these anomalies (anomaly 43) may be the remains of a roundhouse (Hopewell, 2020, 16-17).

3 METHODOLOGY

3.1 Trial Trenching

The trial trenching programme aims to expose and characterise the possible archaeological anomalies identified during the geophysical survey and to test blank areas in the geophysical survey. Trial trenching will be completed at a sampling density of 2%, as agreed with GAPS, and forms part of a phased process, with the results informing subsequent strategies.

A total of 18 trial trenches will be excavated. Out of the 18 trenches, 15 will measure 25x2m, two will be 30x2m and the remaining trench will be 35x2m. The details of the individual trenches are shown below.

Trench no.	Size	Start (E/N)	End (E/N)	Rationale	Figure no.
01	25x2m	280,315.61/375,179.09	280,301.54/375,158.39	Targets junction of anomaly 22 field boundary shown on 1843 tithe map and anomaly 24 field boundary that predates 1843 tithe map	02
02	25x2m	280,294.48/375,173.25	280,296.72/375,148.34	Targets anomaly 39 possible burnt mound	02
03	25x2m	280,260.67/375,185.17	280,259.95/375,160.19	Targets anomaly 38 possible burnt mound and anomaly 23 field boundary shown on 1843 tithe map	02

Trench no.	Size	Start (E/N)	End (E/N)	Rationale	Figure no.
04	25x2m	280,267.37/375,187.93	280,283.06/375,207.46	Targets anomaly 40 linear anomaly of unknown origin	02
05	25x2m	280,299.28/375,210.96	280,323.66/375,205.13	Targets anomaly 24 field boundary that predates 1843 tithe map	02
06	25x2m	280,216.34/375,199.46	280,241.41/375,199.08	Targets anomaly 25 field boundary that predates 1843 tithe map	02
07	35x2	280,278.56/375,238.40	280,313.51/375,235.04	Targets anomaly 30 likely burnt mound and anomaly 34 possible hearth	02
08	25x2m	280,276.96/375,260.13	280,301.70/375,255.82	Targets anomaly 33 possible burnt mound and anomaly 32 possible source of spring	02
09	25x2m	280,213.54/375,258.59	280,238.37/375,254.94	Targets anomaly 37 possible burnt mound	02
10	30x2m	280,196.06/375,284.19	280,206.37/375,255.97	Targets anomaly 43 possible roundhouse	02

Trench no.	Size	Start (E/N)	End (E/N)	Rationale	Figure no.
11	25x2m	280,220.46/375,289.13	280,231.53/375,266.70	Targets anomaly 36 possible burnt mound	02
12	30x2m	280,273.93/375,291.55	280,247.71/375,276.78	Targets anomaly 29 field boundary shown on 1843 tithe map and anomaly 26 field boundary predating the 1842 tithe map	02
13	25x2m	280,298.11/375,336.73	280,317.83/375,321.24	Targets anomaly 27 fragmentary remains of field boundary shown on 1843 tithe map	02
14	25x2m	280,199.60/375,309.84	280,211.51/375,287.80	Targets anomaly 35 possible burnt mound	02
15	25x2m	280,202.49/375,333.24	280,180.22/375,321.77	Targets anomaly 47 field boundary predating the 1843 tithe map	02
16	25x2m	280,204.70/375,384.28	280,181.76/375,374.15	Targets anomaly 48 field boundary shown on 1843 tithe map	02

Trench no.	Size	Start (E/N)	End (E/N)	Rationale	Figure no.
17	25x2m	280331.96/375070.52	280286.9/375069.19	Targets anomaly 42 a short isolated linear anomaly interpreted as a field drain	02
18	25x2m	280360.67/375236.4	280338.64/375224.43	Targets "blank" area at the western end of the site	02

The trenches will be opened and closed by a 13-tonne tracked mechanical excavator supplied by the client Brenig Construction. The trenches will be carefully de-turfed by the mechanical excavator fitted with a toothless bucket; the turf will be stored close to the trench and re-laid following the backfilling process. All fieldwork will be completed in accordance with industry standards and the GAT Field Manual.

The trial trenching works are currently scheduled to begin in September 2020.

- The trial trenches will be surveyed in advance by GAT staff using a Trimble R8 GNSS/R6/5800 GPS receiver (<1cm accuracy). The Trimble R8 unit will also be used for all subsequent digital surveying. The site grid will be established relative to the OS National Grid;
- The location of the trial trenches will be scanned with a cable avoidance tool (CAT) by a suitably qualified and competent operative prior to opening to determine the presence or absence of any services. Existing service drawings have also been be consulted;
- The 18 trenches will be excavated by a machine fitted with a toothless bucket as far as the glacial horizon or an archaeological horizon, whichever is encountered first **under archaeological direction**;
- All 18 trenches and any identified archaeological features will be recorded using GAT pro-formas (Appendix I; Appendix II; Appendix III). The records will include topsoil and subsoil depths, as well as the composition of the glacial horizon. All encountered subsurface features will be recorded on GAT pro-formas with detailed notations and will be recorded photographically with an appropriate scale, located via GPS and a measured survey completed, either hand drawn or using a Trimble R8 GPS unit;

- Photographic images will be taken using a digital SLR (Nikon D3100) camera set to maximum resolution (4,608 × 3,072 14.2 effective megapixels) in RAW format; the photographic record will be digitised in *Microsoft Access* as part of the fieldwork archive and dissemination process. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from **G2649_001**. A photographic ID board will be used during the evaluation to record site code, image orientation and any relevant context numbers;
- Any archaeological features/deposits/structures encountered will be manually cleaned and examined to determine extent, function, date and relationship to adjacent activity. The following excavation strategy will generally apply: 50% sample of each sub-circular feature, 25% sample of each linear feature (terminal ends and intersection points with other features will be prioritised). However, if discrete features are identified, these will be 100% excavated. Any features that comprise a spread of material rather than a cut feature, will be completed in quadrants (if fully extant) or 100% excavated if present as a discrete spread;
- Any required plans or sections to be drawn at a minimum 1:10 scale using GAT A4, A3 or A2 pro-forma permatrace;
- A trench plan and long section of all trenches that contain archaeology will be hand drawn at 1:10 and 1:20 scale using GAT pro-forma permatrace.

Should dateable artefacts, human remains and/or ecofacts be recovered, an interim report will be submitted summarising the results of the mitigation, along with an assessment of potential for analysis post-excavation project design (in line with the MAP2 process). *Additional time, resourcing and costs will be required to undertake any post-excavation programme of works.*

3.2 Data processing and report compilation

Following completion of the stages outlined above, a report will be produced within one month (October 2020) incorporating the following:

1. Non-technical summary
2. Introduction
3. Aims and objectives
4. Background
5. Methodology
6. Results
7. Conclusions and further recommendations
8. List of sources consulted.
9. Appendix I – approved GAT project design
10. Appendix II – photographic metadata
11. Appendix III – context register
12. Appendix IV – ecofact register
13. Appendix V – artefact register

Should dateable artefacts and ecofacts be recovered, an **interim report** will be submitted summarising the results, along with an assessment of potential for analysis written scheme of investigation (in line with the MAP2 process).

Illustrations will include plans of the location, site plans and sections. Historical maps, when appropriate and if copyright permissions allow, will be included. A draft copy of the report will be sent to the GAPS Planning Archaeologist and to the client prior to production of the final report.

4.1 Human Remains

If any human remains are identified during the course of the evaluations, the GAPS Planning Archaeologist will be informed immediately. If the remains cannot be preserved in situ their recovery will take place under appropriate regulations, with due sensitivity and regard for health and safety issues as recommended in *Updated Guidelines to the Standards for Recording Human Remains* (Chartered Institute for Archaeologists, 2017). In order to excavate human remains, a Ministry of Justice licence is required under Section 25 of the Burials Act 1857 for the removal of anybody or remains of any body from any place of burial. In accordance with the Ministry of Justice licence, recovered remains will be reburied once the investigation and/or assessment/analysis are complete.

Non-fragmented skeletal remains will be excavated using wooden tools and collected and stored in polyethylene bags (with appropriate references for context, grave number, et al) and placed in a lidded cardboard archive box (note: separate boxes for each grave) and stored in a suitable manner within GAT premises. If significant quantities of human remains are encountered, a human osteologist will be contacted and appointed to advise the team during the fieldwork. The osteologist will be an external appointment: Dr. Genevieve Tellier | Tel: 01286 238827 | email: northwalesosteology@outlook.com who will assist in devising the excavation, recording and sampling strategy for features containing human remains. The osteologist should also help to ensure that adequate post-excavation processing of human remains is carried out so that the material is in a fit state for assessment during the post-excavation stage. For inhumations, this will involve washing, drying, marking and packing.

If human remains are recovered that are deemed suitable for further assessment/analysis, this will be completed in accordance with the osteologist's requirements and with *The Role of the Human Osteologist in an Archaeological Fieldwork Project* (Historic England, 2018).

4.2 Ecofacts

Should any archaeological features and/or sealed deposits be identified that are deemed suitable for dating, ecofact samples will be taken of not less than 40 litres for bulk samples (or 100% if the feature is smaller). The sampling strategy will be undertaken in accordance with the principles set out in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (Historic England, 2011). Recourse will be made to specialist contact will be Jackeline Robertson (AOC Archaeology | telephone: 0208 843 7380) for palaeoenvironmental analysis and dating. Any required specialists will be consulted during the evaluation to advise GAT on a sampling strategy. For any ecofact samples taken from human burials, this will be completed in accordance with Dr. Genevieve Tellier's guidance.

4.3 Artefacts

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19th and 20th century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained. Retained artefacts will be treated according to guidelines issued by the UK Institute of Conservation, in particular the advice provided within First Aid for Finds (Watkinson and Neal 2001).

Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and Historic England (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy via Jackeline Robertson (AOC Archaeology | telephone: 0208 843 7380).

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Conwy Archive Service, Old Board School, Lloyd Street, Llandudno, Conwy, LL30 2YG) where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown, on whose behalf the Portable Antiquities Scheme acts as advisor on technical matters, and may be the recipient body for the objects.

The Treasure Valuation Committee, based at the British Museum, and informed by the Portable Antiquities Scheme, will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Conwy Archive Service, Old Board School, Lloyd Street, Llandudno, Conwy, LL30 2YG). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts to be donated will then be transferred to Conwy Archive Service.

5 FIELDWORK ARCHIVING

Following the completion of the fieldwork, a programme of fieldwork archiving will be completed based on following task list:

1. Pro-formas: all cross referenced and complete;
2. Photographic Metadata: completed in *Microsoft Access* and cross-referenced with all pro-formas;
3. Sections: all cross referenced and complete;
4. Survey data: downloaded using a Computer Aided Design package;
5. Plans: all cross referenced and complete;
6. Artefacts (if relevant): quantified and identified; register completed;
7. Ecofacts (if relevant): quantified and register completed;
8. Context register (if relevant): quantified and register completed.

All data will be processed, final illustrations will be compiled and a report will be produced which will detail and synthesise the results. A full archive including plans, photographs, written material and any other material resulting from the project will also be prepared.

On completion, the following dissemination will apply:

- A paper report(s) plus digital report(s) will be provided to the client/consultant and the GAPS Planning Archaeologist (draft report then final report);
- A paper report plus a digital report will be provided to the Gwynedd HER within six months of project completion (final report only). If appropriate, digital information such as the project database, GIS table(s) and photographs, will also be submitted to the regional Gwynedd HER. All digital datasets submitted will conform to the required HER standards;
- A digital report and archive (including photographic and drawn) data will be provided to the Royal Commission on Ancient and Historic Monuments Wales (final report only). This will be in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. Digital information will include the photographic archive and associated metadata.

6 PERSONNEL

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section. The trial trenching will be completed by two Project Archaeologist who will have responsibility for conducting field work, preparing the site archive, liaising with GAPS and Brenig Construction and preparing the draft report and final report. The project manager will be responsible for reviewing and approving the report prior to submission.

Any hazards, risks and recommended risk mitigation will be identified prior to the start of work in a site specific risk assessment, copies of which will be supplied to the client and sub-contractor prior to the beginning of fieldwork. All GAT staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat. All GAT fieldwork is undertaken in accordance with the Trust's Health and Safety Manual, Policy and Handbook (prepared by Ellis Whittam) and both the Welsh Government's and GAT's guidelines on Covid-19.

7 SOCIAL MEDIA

One of the key aims in the GAT mission statement is to improve the understanding, conservation and promotion of the historic environment in our area and inform and educate the wider public. To help achieve this, GAT maintains an active social media presence and seeks all opportunities to promote our projects and results. With permission, GAT would like the opportunity to promote our work on this scheme through our social media platforms. This could include social media postings during our attendance on site as well as any postings to highlight results. In all instances, approval will be sought from client prior to any postings.

8 INSURANCE

1.1 Public/Products Liability

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability
INSURER Aviva Insurance Limited
POLICY TYPE Public Liability
POLICY NUMBER 24765101CHC/UN/000375
EXPIRY DATE 21/06/2021

1.2 Employers Liability

Limit of Indemnity- £10,000,000 any one occurrence.
The cover has been issued on the insurers standard policy form and is subject to their usual terms and conditions. A copy of the policy wording is available on request.
INSURER Aviva Insurance Limited
POLICY TYPE Employers Liability
POLICY NUMBER 24765101 CHC / UN/000375
EXPIRY DATE 21/06/2021

1.3 Professional Indemnity

Limit of Indemnity- £5,000,000 in respect of each and every claim
POLICY TYPE Professional Indemnity
POLICY NUMBER 9446015
EXPIRY DATE 22/07/2021

9 SOURCES CONSULTED

1) Brunning, R and Watson, J 2010, *Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation and Curation of Waterlogged Wood* (3rd edition);

2) Chartered Institute for Archaeologists, 2014, *Standard and Guidance for Archaeological Field Evaluation;*

3) Chartered Institute for Archaeologists, 2017, *Updated Guidelines to the Standards for Recording Human Remains;*

4) Davidson, A. et. al, 2017 *A Research Framework for the Archaeology of Wales: Medieval*, A Research Framework for the Archaeology of Wales;

5) English Heritage, 1991, *Management of Archaeological Projects*;

6) English Heritage, 2011, *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*;

7) Evans, R. & Smith, G., 2008, *A470 Cardiff to Glan Conwy Trunk Road: Pentrefelin to Bodnant, Conwy.* GAT Report 675;

8) Gale, Fiona, 2010, *Summary of comments on Late Bronze Age/Iron Age Research Agenda*, Review of the Research Framework for the Archaeology of Wales;

9) Gerrard, Chloe & Bailey, Janet, 2017, *Industrial Wales (1750 - 1899)*, A Research Framework for the Archaeology of Wales;

10) Hopewell, David, 2020, *Maes y Felin, Glan Conwy Geophysical Survey* Gwynedd Archaeological Trust Report 1500

11) *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1);

12) Historic England, 2012, *Waterlogged Organic Artefacts Guidelines on their Recovery, Analysis and Conservation;*

13) Historic England, 2015, *Management of Research Projects in the Historic Environment (MoRPHE);*

14) Historic England, 2018, *The Role of the Human Osteologist in an Archaeological Fieldwork Project*;

15) Royal Commission on Ancient and Historic Monuments of Wales, 2015, *Guidelines for digital archives;*

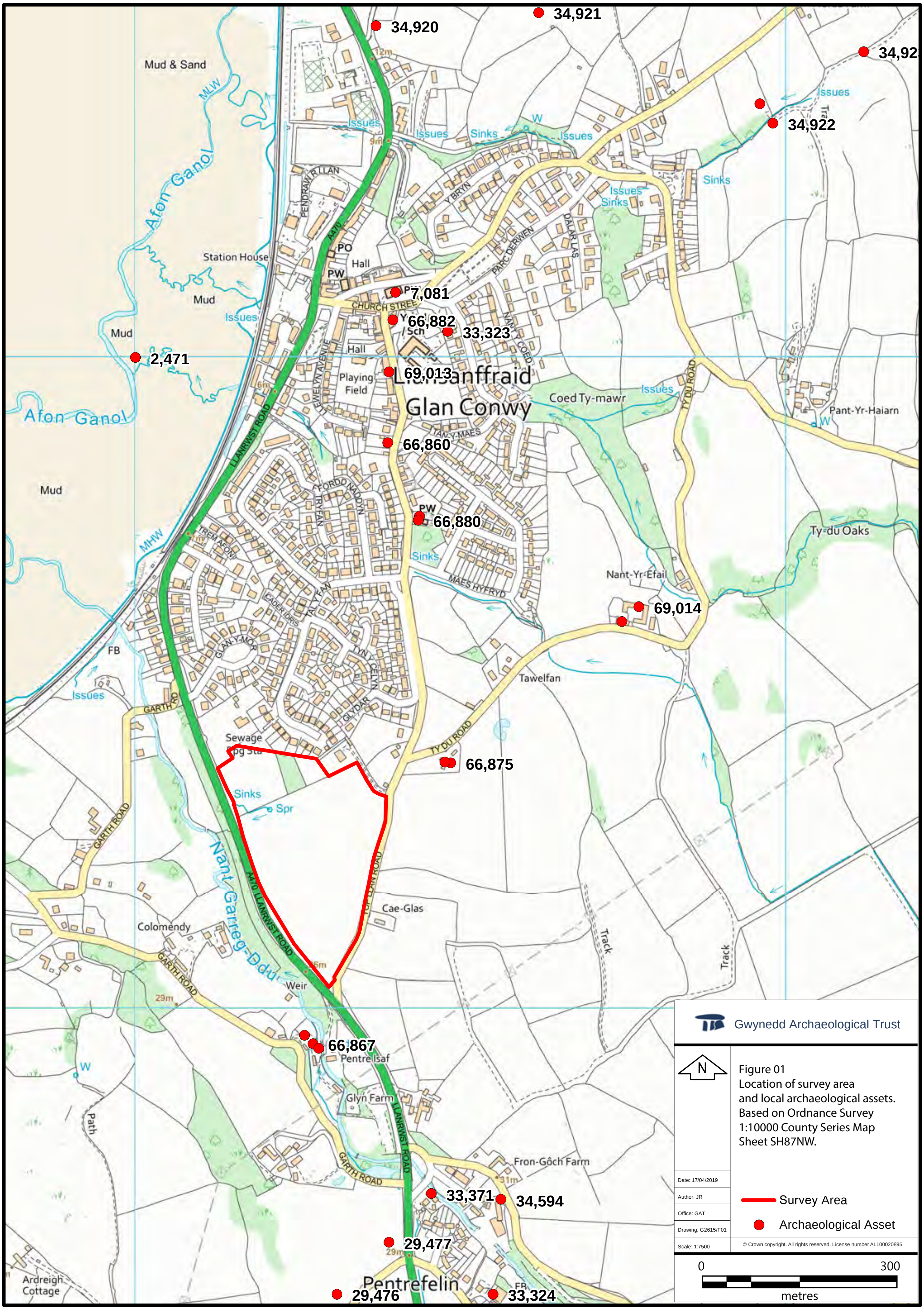
16) Ryan Young, C. 2019. *Maes y Felin, Glan Conwy Archaeological Assessment*. Gwynedd Archaeological Trust Report 1486

17) The Welsh Archaeological Trusts, 2018, *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1);

18) Watkinson, D and Neal, V, 2001, *First aid for finds* (3rd edition).

FIGURE 01

Location of evaluation area and local archaeological assets. Based on ordinance survey 1:10000 County series map sheet SH87NW



Gwynedd Archaeological Trust

Figure 01
Location of survey area and local archaeological assets. Based on Ordnance Survey 1:10000 County Series Map Sheet SH87NW.

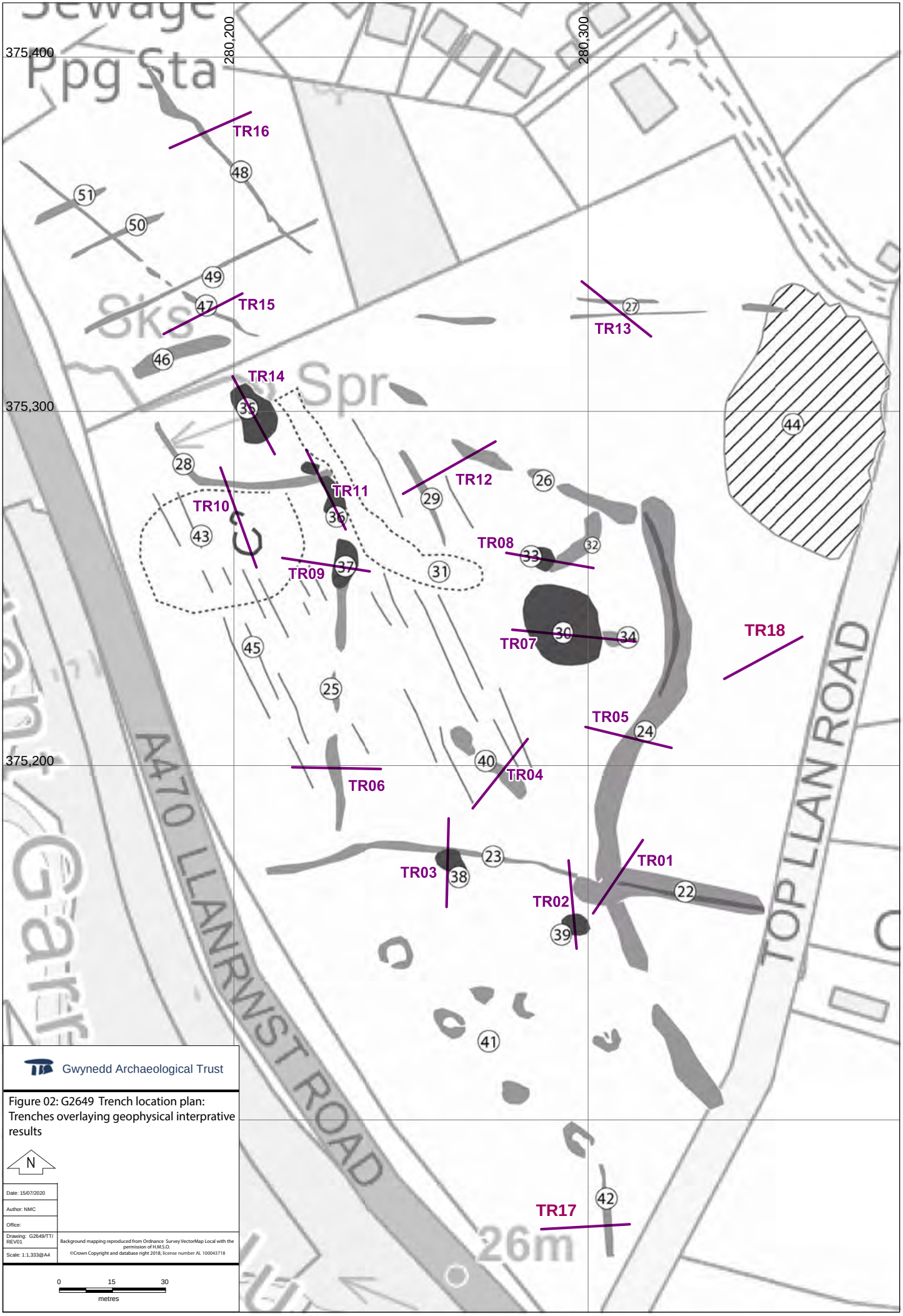
Date: 17/04/2019
Author: JR
Office: GAT
Drawing: G2615/F01
Scale: 1:7500

Survey Area
Archaeological Asset

0 300 metres

FIGURE 02

Trench location plan: Trenches overlaying geophysical interpretive results. Scale: 1:1,333@A4


375,400
375,300
375,200
280,200
280,300
TR16
TR15
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TR08
TR07
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A470 LLANRWST ROAD
TOP LLAN ROAD
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Gwynedd Archaeological Trust
Figure 02: G2649 Trench location plan: Trenches overlaying geophysical interpretive results
N
Date: 15/07/2020
Author: NMC
Office:
Drawing: G2649/TT/REV01
Scale: 1:1,333@A4
Background mapping reproduced from Ordnance Survey VectorMap Local with the permission of H.M.S.O.
©Crown Copyright and database right 2018, license number AL 100043718
0
15
30
metres

APPENDIX I

Gwynedd Archaeological Trust Trench Sheet pro-forma

TRENCH SHEET

Project Name and Number			**Trench number**	
Trench size		Plans		
Max. trench depth		Sections		
Orientation		Photos		
Date/Initials		Area/chainage		

List of layers and/or features in trench (continue on back of sheet if necessary)

Context No.	Depth below surface	Brief description

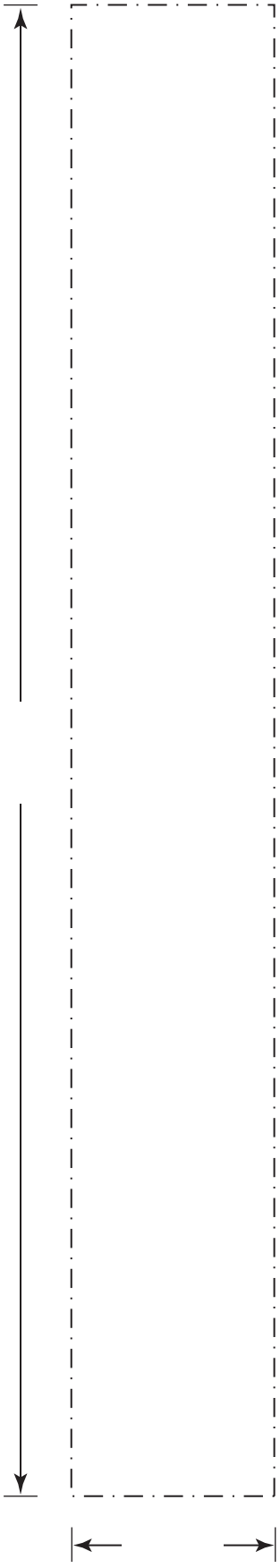
General summary

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Test Pit/Trial Trench Record

Sketch plan:

Add north arrow:



Sketch section:

Notes:

☐ Continuation sheet

APPENDIX II

Gwynedd Archaeological Trust Photographic Metadata pro-forma

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Digital Photographic Record

Include main context numbers for each shot, drawing numbers for sections and any other relevant numbers for cross referencing.
Delete any unwanted photos **immediately** from the camera. Regularly upload photographs to computer.

Project Name:			Project Number:				
Photo No.	**Sub - Division**	**Description**	**Contexts**	**Scales**	**View From**	**Initials**	**Date**

APPENDIX III

Gwynedd Archaeological Trust Context Sheet pro-forma

GWYNEDD ARCHAEOLOGICAL TRUST **CONTEXT RECORD FORM**

SITE CODE	**GRID SQUARE**	**SITE SUB-DIV**	**CONTEXT NUMBER**
CATEGORY/TYPE	**PROVISIONAL DATE/PERIOD/PHASE**		
LENGTH	**BREADTH**	**DIAMETER**	**DEPTH/HEIGHT**
DEPOSIT			**CUT**
1. Compaction			1. Shape in plan
2. Colour			2. Corners
3. Matrix Composition			3. Break of slope top
4. Inclusions			4. Sides
5. Clarity of Interface			5. Break of slope base
6. Other comments			6. Base
7. Methods & conditions			7. Orientation
			8. Truncated (if known)
			9. Other comments
			Draw sketches overleaf

FILLED BY	[ ] [ ] [ ] [ ] [ ] [ ] This [ ] context [ ] [ ] [ ] [ ] [ ] [ ]
FILL OF	**Stratigraphic matrix**

PLANS	**SECTIONS**
Sheet No.	Sheet No.
Drawing No.	Drawing No.

PHOTOGRAPHS - Film No./ Frame No.

SAMPLE Nos.	**FIND Nos.**

FEATURE No		**GROUP No**	**CONSISTS OF**
INTERPRETATION/DISCUSSION		**SAME AS**	

	CHECKED BY (initials/date)	**INITIALS/DATE**

SKETCH

DESCRIPTION/INTERPRETATION CONTINUED

APPENDIX II

Detail of Evaluation Trenches

Trench No.	01	**Maximum Depth (m)**	1.0
Length (m)	25	**Orientation**	NNE-SSW
OSGB centre point	E 280308.89 N 375168.33	**Photos**	105-109

Context	Depth	Description
101	0-0.3	Topsoil: 0.30m deposit of loose, fine mid-greyish brown clayey loam
102	0.3-0.7	Subsoil: cohesive mid-orange brown silty-clay; max. depth 0.70m
103	0.3-1.0	Natural: cohesive compact light yellowish greyish brown clay with frequent stones
104	0.9	Scattered remnants of burnt mound material along SE edge of Trench 01, within 3.0m of SW terminal; loose, fine dark brownish black silty clay mixed with moderate charcoal and heat fractured stone - mainly at north-eastern end of spread

Trench No.	02	**Maximum Depth (m)**	1.0
Length (m)	25	**Orientation**	N-S
OSGB centre point	E 280295.38 N375161.30	**Photos**	110-113

Context	**Depth**	**Description**
201	0-0.3	Topsoil: 0.30m deposit of loose, fine mid-brown loamy clay
202	0.3-0.6	Subsoil: more evident at southern end of trench; loose, mid-orange brown gravelly clay; the subsoil is more reminiscent of made ground, like an area backfilled after quarrying - similar to Trench 05 in particular. Sterile fill, probably deposited in one episode or quickly; or glacial
203	0.6-1.0	Natural: compact light greyish yellowish clay mixed with frequent small angular stones
204	1.0	Natural: at S end of trench; light greyish orange gravelly sand

Trench No.	03	**Maximum Depth (m)**	0.70
Length (m)	28	**Orientation**	N-S
OSGB centre point	E 280260.23 N 375172.36	**Photos**	136-142

Context	Depth	Description
301	0-0.3	Topsoil: loose mid greyish brown loamy clay with occasional small stones
302	0.3-0.7	Subsoil: cohesive mid-greyish brown silty-clay mixed with occasional stones
303	0.7+	Natural: compact yellow/light-grey boulder clay (N half of trench)
304	0.52+	Natural: loose range gravelly clay (S half of trench)
305	0.40	Possible linear cut
306	0.40	Cohesive grey silt-clay mixed with frequent sub-angular and angular stones including frequent heat fractured and moderate charcoal
307	0.3	Probable cut drain at N edge of trench; exposed length of 3.9m and width of 0.44m; distinct clean pipe - most likely modern
308	0.4	Linear drain to immediate S of [305]
309		Fill of [308]
310		Fill of [305]
311		Fill of [305]

Trench No.	04	**Maximum Depth (m)**	0.38
Length (m)	25	**Orientation**	NE-SW
OSGB centre point	E 280275.23 N 375197.06	**Photos**	510, 518-519

Context	**Depth**	**Description**
401	0-0.26	Topsoil: light brown silt-clay with moderate stone inclusions
402	0.26-0.38	Natural: yellow/orange/brown mottled sandy clay with pockets of brown/yellow sandier material, frequent stone inclusions

Trench No.	05	**Maximum Depth (m)**	0.85
Length (m)	25	**Orientation**	E-W
OSGB centre point	E 280311.29 N 375208.28	**Photos**	101-104, 130-135

Context	**Depth**	**Description**
501	0-0.25	Topsoil: mid greyish brown fine, cohesive loamy clay
502	0.25-0.4	Subsoil: compact cohesive light orangey brown silty clay
503	0.4+	Natural (A): compact cohesive light grey clay mixed with moderate small angular stones
504	0.85+	Natural (B): cohesive light orange clay
505	0.5	Land drain cut - 0.46m wide, 2.25m long; .13m east of western terminal
506		Fill of land drain with compact angular shale stones
507		Cut of pit: roughly circular in plan; c.2m from eastern terminal
508		Fill of pit: soft, cohesive mid-brown silty-clay with charcoal-rich deposit and possible heat fractured stone
509		Cut within N limit of [507]

Trench No.	06	**Maximum Depth (m)**	0.53
Length (m)	25	**Orientation**	E-W
OSGB centre point	E 280229.27 N 375199.10	**Photos**	508, 516-517

Context	**Depth**	**Description**
601	0-0.28	Topsoil: light brown silt-clay with moderate stone inclusions
602	0.28+	Natural: yellow/brown/grey sandy clay with moderate stone inclusions mottled with large patches/pockets of more brown sandy material; sondage to 0.53m

Trench No.	07	**Maximum Depth (m)**	0.38
Length (m)	35	**Orientation**	E-W
OSGB centre point	E 280295.70 N 375236.38	**Photos**	530, 536-540, 546

Context	**Depth**	**Description**
701	0-0.27	Topsoil: mid/dark brown silty clay with moderate stone inclusions
702	0.27+	Natural: yellow sandy clay with moderate inclusions
703	0.10+	Burnt mound: black silty clay charcoal rich matrix with frequent heat fractured stone inclusions
704	0.21+	Burnt mound: grey/black silty-clay with frequent heat affected stones
705	0.22+	Possible burnt mound material - grey sandy clay with heat affected stones; less stony than other patches but clay has clearly been stained grey by charcoal

Trench No.	08	**Maximum Depth (m)**	0.32
Length (m)	25	**Orientation**	ENE-WSW
OSGB centre point	E 280288.96 N 375257.42	**Photos**	531, 541-545

Context	**Depth**	**Description**
801	0-0.22	Topsoil: light brown sandy clay with moderate stone inclusions
802	0.22+	Natural: yellow/grey sandy clay with moderate stone inclusions
803	0.32+	Deposit of larger sub-rounded cobbles and small boulders adjacent to burnt mound (804)
804	0.26+	Burnt mound material - black charcoal rich silty-clay with frequent heat affected stone
805	0.30+	Deposit of larger stones similar to (803); adjacent to burnt mound (804)

Trench No.	09	**Maximum Depth (m)**	0.37
Length (m)	25	**Orientation**	E-W
OSGB centre point	E 280225.41 N 375257.00	**Photos**	557-561

Context	**Depth**	**Description**
901	0-0.18	Topsoil: light brown silt-clay with moderate stone inclusions
902	0.18-0.33	Subsoil: mid-brown silty clay with few stone inclusions
903	0.33+	Natural: yellow/grey sandy clay with frequent stone inclusions
904	0.50	Cut of field boundary
905	0.35	Fill of [904]
906	0.35+	Leached out burnt mound material - grey sandy clay with frequent heat affected stones
907	0.35+	Ceramic field drain (not excavated)
908	0.32-0.35	Alluvial layer sealing burnt mound

Trench No.	10	**Maximum Depth (m)**	0.48
Length (m)	30	**Orientation**	NNW-SSE
OSGB centre point	E 280201.44 N 375270.06	**Photos**	506, 514-515

Context	**Depth**	**Description**
1001	0-0.22	Topsoil: light brown silt-clay with moderate stone inclusions
1002	0.22-0.48	Subsoil: orange brown silty clay with moderate stone inclusions (only SSE end of trench)
1003	0.22+	Broken shale bedrock
1004	0.48+	Orange/yellow sandy clay with frequent stone inclusions

Trench No.	11	**Maximum Depth (m)**	0.43
Length (m)	25	**Orientation**	NNW-SSE
OSGB centre point	E 280226.19 N 375277.66	**Photos**	519-527

Context	**Depth**	**Description**
1101	0-0.28	Topsoil: light brown silt-clay with moderate stone inclusions
1102	0.28+	Natural: yellow/brown mottled sandy clay with moderate stone inclusions
1103	0.33	Cut of small linear - no sides or proper cut visible - must be cut from topsoil
1104	0.33	Fill of [1103]: mid/light brown silty-clay only very bottom of feature
1105	0.52	Burnt pit cut
1106	0.28	Fill of [1105]
1107		Burnt pit cut
1108		Fill of [1107]
1109		Cut of linear
1110		Fill of linear
1111		Fill of [1107]
1112		Secondary fill of [1107]

Trench No.	12	**Maximum Depth (m)**	0.52
Length (m)	30	**Orientation**	NE-SW
OSGB centre point	E 280260.89 N 375283.56	**Photos**	532, 547-551

Context	**Depth**	**Description**
1201	0-0.27	Topsoil: mid-brown silty clay with moderate stone inclusions
1202	0.27-0.4	Orange/mid-brown subsoil with moderate stone inclusions (only NE 66% of trench)
1203	0.4+	Orange gravelly sandy clay with frequent stone inclusions (only NE 66% of trench)
1204	0.32+	Yellow/grey sandy clay with frequent stone inclusions (SW 33% of trench)
1205		Cut of burnt pit
1206		Fill of burnt pit [1206]

Trench No.	13	**Maximum Depth (m)**	0.42
Length (m)	25	**Orientation**	NW-SE
OSGB centre point	E 280307.63 N 375329.52	**Photos**	533-535

Context	**Depth**	**Description**
1301	0-0.31	Topsoil: light-brown sandy clay with moderate stone inclusions
1302	0.31+	Natural: orange sandy clay with frequent gravel inclusions (SE end)
1303	0.18+	Natural: shale bedrock (NW end)

Trench No.	14	**Maximum Depth (m)**	0.55
Length (m)	22	**Orientation**	NW-SE
OSGB centre point	E 280206.25 N 375297.40	**Photos**	122-129

Context	**Depth**	**Description**
1401	0-0.2	Topsoil: loose mid greyish brown loamy clay
1402	0.2-0.55	Subsoil: cohesive mid-brownish orange silty clay with infrequent small sub-angular stones
1403	0.55+	Natural: yellow boulder clay with sporadic shale bedrock and concentrations of stone
1404		Possible charcoal rich small spread set within middle of trench among concentration of stone
1405		Probable pit - continues east beyond trench limit
1406		Loose, black gravelly silty clay mixed with frequent charcoal and angular stone; fill of [1405]
1407		Redeposited light-grey clay natural - overlaid (1406); fill of [1405]
1408		Burnt mound spread material - very frequent neat fractured stone and charcoal at NW terminal

Trench No.	15	**Maximum Depth (m)**	0.61
Length (m)	25	**Orientation**	SW-NE
OSGB centre point	E 280191.22 N 375327.76	**Photos**	564-567

Context	**Depth**	**Description**
1501	0-0.32	Topsoil: mid-brown silty clay with moderate stone inclusions
1502	0.32-0.54	Subsoil: mid-brown orange silty clay with moderate stone inclusions
1503	0.54+	Natural: orange sandy clay with frequent stone inclusions and areas of shale bedrock
1504	0.58	Cut of field boundary
1505	0.36	Fill of field boundary [1504]

Trench No.	16	**Maximum Depth (m)**	0.61
Length (m)	25	**Orientation**	NW-SE
OSGB centre point	E 280193.04 N 375379.48	**Photos**	562-563

Context	**Depth**	**Description**
1601	0-0.22	Topsoil: mid-brown silty-clay with moderate stone inclusions
1602	0.22-0.5	Subsoil: mid-brown/orange sandy clay with moderate stone inclusions
1603	0.5+	Natural: loose orange sandy clay with frequent stone inclusions and areas of broken shale bedrock

Trench No.	17	**Maximum Depth (m)**	0.53
Length (m)	25	**Orientation**	E-W
OSGB centre point	E 280298.81 N 375069.51	**Photos**	552-556

Context	**Depth**	**Description**
1701	0-0.23	Topsoil: mid-brown silty clay with moderate stone inclusions
1702	0.23-0.47	Subsoil: mid-brown/orange silty clay with moderate stone inclusions
1703	0.47+	Natural: orange gravelly sandy clay, loose consistency; moderate stone inclusions
1704	0.52	Cut of field boundary
1705	0.38-0.52	Fill of field boundary [1705]

Trench No.	18	**Maximum Depth (m)**	0.76
Length (m)	25	**Orientation**	SW-NE
OSGB centre point	E 280350.11 N 375299.72	**Photos**	528-529

Context	**Depth**	**Description**
1801	0-0.19	Topsoil: light brown sandy silt loan with moderate stone inclusions
1802	0.19-0.36	Subsoil: mid-brown with orange hue silty clay with moderate stones
1803	0.36+	Natural: brown/yellow clay with frequent stone inclusions

APPENDIX III

Photographic Metadata

APPENDIX IV

Site Registers

Context Register

Context No.	Site Sub Division	Type	Group	Description	Evaluation No	Initials	Date
101	A	topsoil	n/a	topsoil: 0.30m deposit of loose, fine mid-greyish brown clayey loam	Trench 01	SR	22/09/2020
102	A	subsoil	n/a	subsoil: cohesive mid-orange brown silty-clay; max. depth 0.70m (0.30m bgl)	Trench 01	SR	22/09/2020
103	A	natural	n/a	natural: cohesive compact light yellowish greyish brown clay with frequent stones (1.0m bgl)	Trench 01	SR	22/09/2020
104	A	deposit	n/a	scattered remnants of burnt mound material along SE edge of Trench 01, within 3.0m of SW terminal; loose, fine dark brownish black silty clay mixed with moderate charcoal and heat fractured stone - mainly at northeastern end of spread (0.90m bgl)	Trench 01	SR	22/09/2020
201	A	topsoil	n/a	topsoil: 0.30m deposit of loose, fine mid-brown loamy clay	Trench 02	SR	22/09/2020
202	A	subsoil	n/a	subsoil: more evident at southern end of trench; loose, mid-orange brown gravelly clay; the subsoil is more reminiscent of made ground, like an area backfilled after quarrying - similar to Trench 05 in particular. Sterile fill, probably deposited in one episode or quickly; or glacial (0.30m bgl)	Trench 02	SR	22/09/2020
203	A	natural	n/a	natural: compact light greyish yellowish clay mixed with frequent small angular stones (0.6m bgl)	Trench 02	SR	22/09/2020
204	A	natural	n/a	natural: at S end of trench; light greyish orange gravelly sand (1.0m bgl)	Trench 02	SR	22/09/2020

Context No.	Site Sub Division	Type	Group	Description	Evaluation No	Initials	Date
301	A	topsoil	n/a	topsoil: loose mid greyish brown loamy clay with occasional small stones	Trench 03	SR	28/09/2020
302	A	subsoil	n/a	subsoil: cohesive mid-greyish brown silty-clay mixed with occasional stones (0.30m bgl)	Trench 03	SR	28/09/2020
303	A	natural	n/a	natural: compact yellow/light-grey boulder clay (N half of trench)(0.70m bgl)	Trench 03	SR	28/09/2020
304	A	natural	n/a	natural: loose range gravelly clay (S half of trench)(0.52m bgl)	Trench 03	SR	28/09/2020
305	A	cut	n/a	possible linear cut (0.40m bgl)	Trench 03	SR	28/09/2020
306	A	deposit	n/a	cohesive grey silt-clay mixed with frequent sub-angular and angular stones including frequent heat fractured and moderate charcoal (0.40m bgl)	Trench 03	SR	28/09/2020
307	A	cut	n/a	probable cut drain at N edge of trench; exposed length of 3.9m and width of 0.44m; distinct clean pipe - most likely modern (0.30m bgl)	Trench 03	SR	28/09/2020
308	A	cut	n/a	linear drain to immediate S of [305] (0.40m bgl)	Trench 03	SR	28/09/2020
309	A	fill	308	fill of [308]	Trench 03	SR	28/09/2020
310	A	fill	305	fill of [305]	Trench 03	SR	28/09/2020
311	A	fill	305	fill of [305]	Trench 03	SR	28/09/2020
401	A	topsoil	n/a	topsoil: light brown silt-clay with moderate stone inclusions	Trench 04	CRY	22/09/2020
402	A	natural	n/a	natural: yellow/orange/brown mottled sandy clay with pockets of brown/yellow sandier material, frequent stone inclusions (0.38m bgl)	Trench 04	CRY	22/09/2020
501	A	topsoil	n/a	topsoil: mid greyish brown fine, cohesive loamy clay	Trench 05	SR	22/09/2020
502	A	subsoil	n/a	subsoil: compact cohesive light orangey brown silty clay (0.25m bgl)	Trench 05	SR	22/09/2020

Context No.	Site Sub Division	Type	Group	Description	Evaluation No	Initials	Date
503	A	natural	n/a	natural (A): compact cohesive light grey clay mixed with moderate small angular stones (0.40m bgl)	Trench 05	SR	22/09/2020
504	A	natural	n/a	natural (B): cohesive light orange clay (0.85m bgl)	Trench 05	SR	22/09/2020
505	A	cut	n/a	land drain cut - 0.46m wide, 2.25m long; .13m east of western terminal (0.50m bgl)	Trench 05	SR	22/09/2020
506	A	fill	n/a	fill of land drain with compact angular shale stones	Trench 05	SR	22/09/2020
507	A	cut	n/a	cut of pit: roughly circular in plan; c.2m from eastern terminal	Trench 05	SR	22/09/2020
508	A	fill	n/a	fill of pit: soft, cohesive mid-brown silty-clay with charcoal-rich deposit and possible heat fractured stone	Trench 05	SR	22/09/2020
509	A	cut	n/a	cut within N limit of [507]	Trench 05	SR	22/09/2020
601	A	topsoil	n/a	topsoil: light brown silt-clay with moderate stone inclusions	Trench 06	CRY	22/09/2020
602	A	natural	n/a	natural: yellow/brown/grey sandy clay with moderate stone inclusions mottled with large patches/pockets of more brown sandy material; 0.20m sondage (0.53m bgl)	Trench 06	CRY	22/09/2020
701	A	topsoil	n/a	topsoil: mid/dark brown silty clay with moderate stone inclusions	Trench 07	CRY	24/09/2020
702	A	natural	n/a	natural: yellow sandy clay with moderate inclusions (0.27m bgl)	Trench 07	CRY	24/09/2020
703	A	deposit	n/a	burnt mound: black silty clay charcoal rich matrix with frequent heat fractured stone inclusions (0.21m bgl)	Trench 07	CRY	24/09/2020
704	A	deposit	n/a	burnt mound: grey/black silty-clay with frequent heat affected stones (0.21m bgl)	Trench 07	CRY	24/09/2020

Context No.	Site Sub Division	Type	Group	Description	Evaluation No	Initials	Date
705	A	deposit	n/a	possible burnt mound material - grey sandy clay with heat affected stones; less stony than other patches but clay has clearly been stained grey by charcoal (0.22m bgl)	Trench 07	CRY	24/09/2020
801	A	topsoil	n/a	topsoil: light brown sandy clay with moderate stone inclusions	Trench 08	CRY	24/09/2020
802	A	subsoil	n/a	natural: yellow/grey sandy clay with moderate stone inclusions (0.22m bgl)	Trench 08	CRY	24/09/2020
803	A	natural	n/a	deposit of larger sub-rounded cobbles and small boulders adjacent to burnt mound (804) (0.32m bgl)	Trench 08	CRY	24/09/2020
804			n/a	burnt mound material - black charcoal rich silty-clay with frequent heat affected stone (0.26m bgl)	Trench 08	CRY	24/09/2020
805			n/a	deposit of larger stones similar to (803); adjacent to burnt mound (804) (0.30m bgl)	Trench 08	CRY	24/09/2020
901	A	topsoil	n/a	topsoil: light brown silt-clay with moderate stone inclusions	Trench 09	CRY	28/09/2020
902	A	subsoil	n/a	subsoil: mid-brown silty clay with few stone inclusions (0.33m bgl)	Trench 09	CRY	28/09/2020
903	A	natural	n/a	natural: yellow/grey sandy clay with frequent stone inclusions (0.33m bgl)	Trench 09	CRY	28/09/2020
904	A	cut	n/a	cut of field boundary (0.50m bgl)	Trench 09	CRY	28/09/2020
905	A	fill	904	fill of [904] (0.35m bgl)	Trench 09	CRY	28/09/2020
906	A	deposit	n/a	leached out burnt mound material - grey sandy clay with frequent heat affected stones (0.35m bgl)	Trench 09	CRY	28/09/2020
907	A	drain	n/a	ceramic field drain (not excavated) (0.35m bgl)	Trench 09	CRY	28/09/2020
908	A	deposit	n/a	alluvial layer sealing burnt mound (0.35m bgl)	Trench 09	CRY	28/09/2020
1001	A	topsoil	n/a	topsoil: light brown silt-clay with moderate stone inclusions	Trench 10	CRY	22/09/2020

Context No.	Site Sub Division	Type	Group	Description	Evaluation No	Initials	Date
1002	A	subsoil	n/a	subsoil: orange brown silty clay with moderate stone inclusions (on SSE end of trench) (0.48m bgl)	Trench 10	CRY	22/09/2020
1003	A	natural	n/a	broken shale bedrock (0.22m bgl)	Trench 10	CRY	22/09/2020
1004	A	deposit	n/a	orange/yellow sandy clay with frequent stone inclusions (0.48m bgl)	Trench 10	CRY	22/09/2020
1101	A	topsoil	n/a	topsoil: light brown silt-clay with moderate stone inclusions	Trench 11	CRY	22/09/2020
1102	A	natural	n/a	natural: yellow/brown mottled sandy clay with moderate stone inclusions (0.28m bgl)	Trench 11	CRY	22/09/2020
1103	A	cut	n/a	Cut of small linear - no sides or proper cut visible - must be cut from topsoil (0.33m bgl)	Trench 11	CRY	22/09/2020
1104	A	fill	1103	fill of [1103]: mid/light brown silty-clay only very bottom of feature (0.33m bgl)	Trench 11	CRY	22/09/2020
1105	A	cut	n/a	burnt pit cut (0.52m bgl)	Trench 11	CRY	22/09/2020
1106	A	fill	1105	fill of [1105]	Trench 11	CRY	22/09/2020
1107	A	cut		burnt pit cut	Trench 11	CRY	22/09/2020
1108	A	fill	1107	fill of [1107] (0.28m bgl)	Trench 11	CRY	22/09/2020
1109	A	cut	n/a	cut of linear	Trench 11	CRY	22/09/2020
1110	A	fill	n/a	fill of linear	Trench 11	CRY	22/09/2020
1111	A	fill	1107	fill of [1107]	Trench 11	CRY	22/09/2020
1112	A	fill	1107	secondary fill of [1107]	Trench 11	CRY	22/09/2020
1201	A	topsoil	n/a	topsoil: mid-brown silty clay with moderate stone inclusions	Trench 12	CRY	24/09/2020
1202	A	subsoil	n/a	orange/mid-brown subsoil with moderate stone inclusions (only NE 66% of trench) (0.40m bgl)	Trench 12	CRY	24/09/2020
1203	A	deposit	n/a	orange gravelly sandy clay with frequent stone inclusions (only NE 66% of trench) (0.40m bgl)	Trench 12	CRY	24/09/2020
1204	A	deposit	n/a	yellow/grey sandy clay with frequent stone inclusions (SW 33% of trench) (0.32m bgl)	Trench 12	CRY	24/09/2020

Context No.	Site Sub Division	Type	Group	Description	Evaluation No	Initials	Date
1205	A	cut	n/a	cut of burnt pit	Trench 12	CRY	24/09/2020
1206	A	fill	1206	fill of burnt pit [1206]	Trench 12	CRY	24/09/2020
1301	A	topsoil	n/a	topsoil: light-brown sandy clay with moderate stone inclusions	Trench 13	CRY	23/09/2020
1302	A	natural	n/a	natural: orange sandy clay with frequent gravel inclusions (SE end) (0.42m bgl)	Trench 13	CRY	23/09/2020
1303	A	natural	n/a	natural: shale bedrock (NW end) (0.18m bgl)	Trench 13	CRY	23/09/2020
1401	A	topsoil	n/a	topsoil: loose mid greyish brown loamy clay	Trench 14	SR	24/09/2020
1402	A	subsoil	n/a	subsoil: cohesive mid-brownish orange silty clay with infrequent small sub-angular stones (0.20m bgl)	Trench 14	SR	24/09/2020
1403	A	natural	n/a	natural: yellow boulder clay with sporadic shale bedrock and concentrations of stone	Trench 14	SR	24/09/2020
1404	A	deposit	n/a	possible charcoal rich small spread set within middle of trench among concentration of stone	Trench 14	SR	24/09/2020
1405	A	cut	n/a	probable pit - continues east beyond trench limit	Trench 14	SR	24/09/2020
1406	A	fill	1405	loose, black gravelly silty clay mixed with frequent charcoal and angular stone; fill of [1405]	Trench 14	SR	24/09/2020
1407	A	fill	1405	redeposited light-grey clay natural - overlaid (1406); fill of [1405]	Trench 14	SR	24/09/2020
1408	A	deposit	n/a	burnt mound spread material - very frequent neat fractured stone and charcoal at NW terminal	Trench 14	SR	24/09/2020
1501	B	topsoil	n/a	topsoil: mid-brown silty clay with moderate stone inclusions	Trench 15	CRY	28/09/2020
1502	B	subsoil	n/a	subsoil: mid-brown orange silty clay with moderate stone inclusions (0.54m bgl)	Trench 15	CRY	28/09/2020
1503	B	natural	n/a	natural: orange sandy clay with frequent stone inclusions and areas of shale bedrock (0.54m bgl)	Trench 15	CRY	28/09/2020

Context No.	Site Sub Division	Type	Group	Description	Evaluation No	Initials	Date
1504	B	cut	n/a	cut of field boundary (0.50m bgl)	Trench 15	CRY	28/09/2020
1505	B	fill	1504	fill of field boundary [1504] (0.36m bgl)	Trench 15	CRY	28/09/2020
1601	B	topsoil	n/a	topsoil: mid-brown silty-clay with moderate stone inclusions	Trench 16	CRY	28/09/2020
1602	B	subsoil	n/a	subsoil: mid-brown/orange sandy clay with moderate stone inclusions	Trench 16	CRY	28/09/2020
1603	B	natural	n/a	natural: loose orange sandy clay with frequent stone inclusions and areas of broken shale bedrock (0.50m bgl)	Trench 16	CRY	28/09/2020
1701	A	topsoil	n/a	topsoil: mid-brown silty clay with moderate stone inclusions	Trench 17	CRY	25/09/2020
1702	A	subsoil	n/a	subsoil: mid-brown/orange silty clay with moderate stone inclusions (0.47m bgl)	Trench 17	CRY	25/09/2020
1703	A	natural	n/a	natural: orange gravelly sandy clay, loose consistency; moderate stone inclusions (0.47m bgl)	Trench 17	CRY	25/09/2020
1704	A	cut	n/a	cut of field boundary (0.52m bgl)	Trench 17	CRY	25/09/2020
1705	A	fill	1705	fill of field boundary [1705] (0.52m bgl)	Trench 17	CRY	25/09/2020
1801	A	topsoil	n/a	topsoil: light brown sandy silt loan with moderate stone inclusions	Trench 18	CRY	23/09/2020
1802	A	subsoil	n/a	subsoil: mid-brown with orange hue silty clay with moderate stones (0.36m bgl)	Trench 18	CRY	23/09/2020
1803	A	natural	n/a	natural: brown/yellow clay with frequent stone inclusions (0.36m bgl)	Trench 18	CRY	23/09/2020

Sample Register

Sample No.	Context No.	Context Type	Purpose of Sample	No. of tubs	% of deposit sampled	Drawing No.
1	1106	fill of [1105]	macrobotancial and charcoal ID; C14 dating	1	40	1101
2	1108	fill of [1107] (0.28m bgl)	macrobotancial and charcoal ID; C14 dating	1	n/a	
3	1206	fill of burnt pit [1206]	macrobotancial and charcoal ID; C14 dating	1	70	1201
4	508	fill of pit: soft, cohesive mid-brown silty-clay with charcoal-rich deposit and possible heat fractured stone	macrobotancial and charcoal ID; C14 dating	1	n/a	

Artefact Register

Find No.	Sub-Area	Context No.	Context Description	Material	Description
1	A	306	cohesive grey silt-clay mixed with frequent sub-angular and angular stones including frequent heat fractured and moderate charcoal (0.40m bgl)	Slag	Slag

Drawing Register

DWG No.	Sheet No.	Size	Scale	Sub-Division	Description
301	301	A4	01:20	Zone A	E Facing Section through [305] and [308]
302	301	A4	01:20	Zone A	Plan of [305] and [308]
501	501	A4	01:10	Zone A	N facing section through [507]
502	501	A4	01:20	Zone A	Plan of [507]
901	901	A4	01:10	Zone A	S facing section of field boundary [904]
902	901	A4	01:20	Zone A	Plan of [904]
1101	1101	A4	01:10	Zone A	ENE facing section of burnt pit [1105]
1102	1101	A4	01:20	Zone A	Plan of [1105]
1103	1102	A4	01:10	Zone A	SW facing section of [1107]
1104	1102	A4	01:20	Zone A	Plan of [1107]
1105	1103	A4	01:10	Zone A	ENE facing section through [1109]
1106	1103	A4	01:20	Zone A	Plan of [1109]
1201	1201	A4	01:10	Zone A	NW facing section of pit [1205]
1202	1201	A4	01:20	Zone A	Plan of [1205]
1401	1401	A4	01:20	Zone A	ENE facing section of spread (1408)
1501	1501	A4	01:10	Zone B	NW facing oblique section of field boundary [1504]
1502	1501	A4	01:20	Zone B	Plan of field boundary [1504]
1701	1701	A4	01:10	Zone A	N facing section of field boundary [1704]
1702	1701	A4	01:20	Zone A	Plan of [1704]

APPENDIX V

Reproduction of AOC Archaeology Group Report 25576

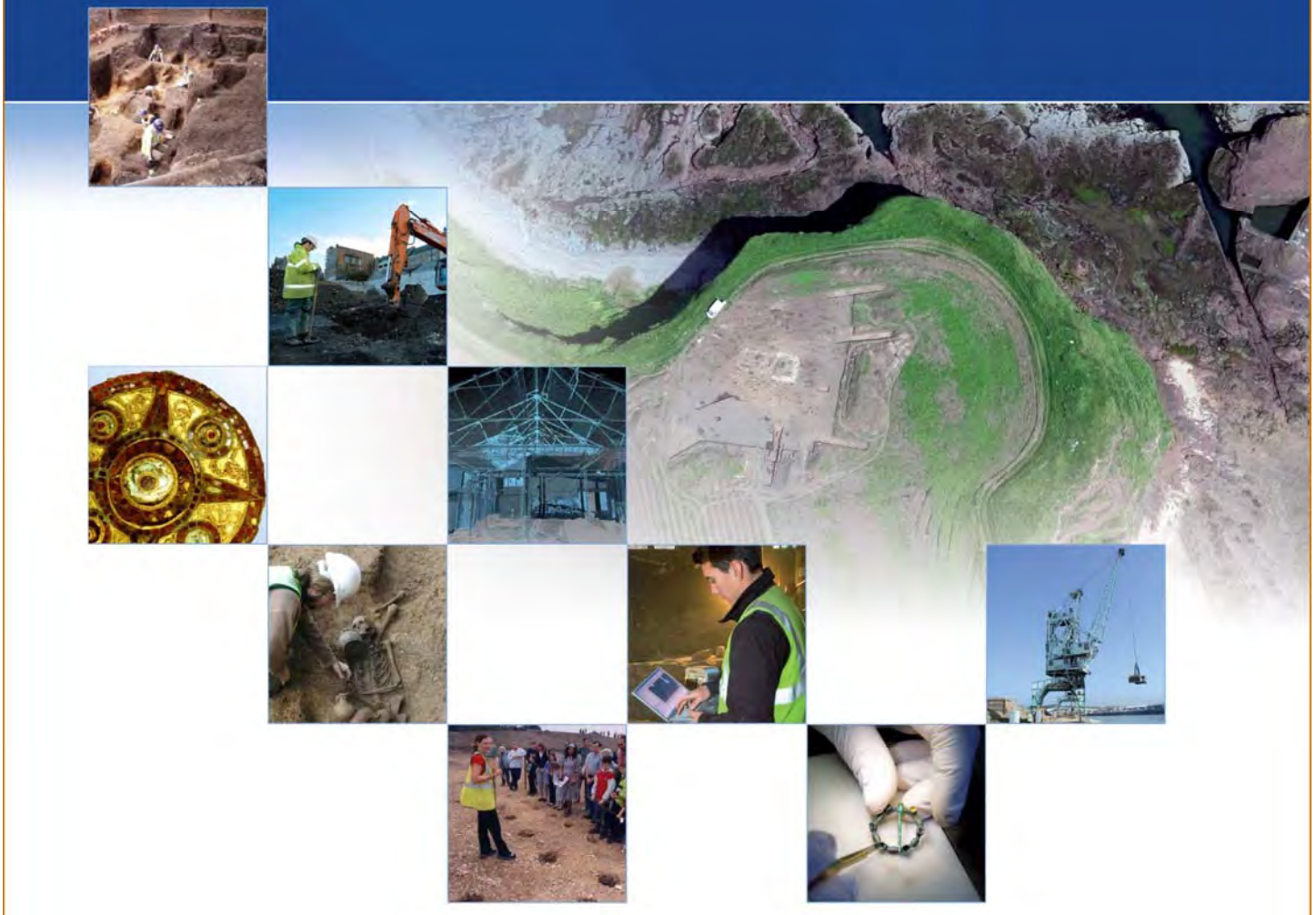
Maes y Felin, Glan Conwy:

Environmental Assessment

AOC Project no: 25576

Site Code: G2649

Date: December 2020



AOC Archaeology Group

ARCHAEOLOGY | HERITAGE | CONSERVATION

Maes y Felin, Glan Conwy:

Environmental Assessment

On Behalf of: Gwynedd Archaeological Trust (GAT)

National Grid Reference (NGR):

AOC Project No:	**25576**
Prepared by:	**Jackaline Robertson**
Illustration by:	**N/A**
Date of Fieldwork:	**21st to 29th September 2020**
Date of Report:	**10/12/2020**

This document has been prepared in accordance with AOC standard operating procedures.

Author: Jackaline Robertson **Date: 10/12/2020**
Approved by: Ciara Clarke **Date: 14/12/2020**

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Introduction

A total of four flot samples were submitted for environmental assessment from the trial trenching undertaken at Maes y Felin, Glan Conwy. The samples were collected from a series of pits associated with a burnt mound believed to be prehistoric in date. A large assemblage of charcoal fragments was recovered alongside a much smaller number of carbonised plant remains. The main objective of this assessment was to identify the ecofacts to species, consider their suitability for radiocarbon dating and their potential for further analysis.

Methods

The flots were collected from bulk samples which were processed using standard flotation procedures. The flots were dry-sieved using 4mm, 2mm, 1mm and 0.3mm sieves and scanned using a stereomicroscope at x10-40 magnification.

The plant macrofossils were examined at magnifications of x10 and up to x450, where necessary to aid identification. The macroplants were identified to species using modern reference material and seed atlases stored at AOC Edinburgh (Cappers *et al.* 2006; Jacomet 2006). Taxonomy and nomenclature for plants follows Stace (2010).

A minimum of ten charcoal fragments larger than 4mm were selected for assessment from each context. The number of fragments was increased to 20 in two contexts to confirm that only one wood species was present. Species identification were confirmed using keys and texts stored at AOC Edinburgh (Hather 2000; Schweingruber 1990). The following criteria were used as a guideline for interpreting feature usage. Those samples which contained two or more species were typically designated as fuel waste, whereas larger concentrations of a single species where viewed as more likely to represent burning of a structural element or artefact.

Results

The results are recorded in table 1 the carbonised macroplant and table 2 the charcoal.

Macroplant

A small assemblage of macroplant totalling 162 items was recovered from two pits [1205] and [507]. These finds were focussed within pit [507] which had 161 plant remains compared to one weed seed in pit [1205]. Preservation of these finds ranged from adequate to excellent, but most were recorded as good. The plant assemblage was formed of three categories; cultivated crops, wild nuts and weed plants.

The crops

There were nine cereal caryopses recovered from pit [1205]. These were identified as one emmer/spelt (*Triticum dicoccum*/*spelta* L), three bread/club wheat (*Triticum aestivum*/*compactum* L), four wheat (*Triticum* sp) and one cereal caryopsis. The cereal is domestic food refuse.

The wild nuts

A total of 130 fragments of hazelnut (*Corylus avellana* L) shell were recorded in pit [1205]. These shells are domestic food and cooking refuse.

The weed species

A single vetch seed was noted in pit [1205]. The remaining 22 weed species were localised within pit [507]. The species were six fat hen (*Chenopodium album* L), three goosefoot (*Chenopodium* sp), one amphibious bistort (*Persicaria amphibia* L), two pale persicaria (*Persiciara lapathifolia* L), one knotweed (*Persicaria* sp), two plantains (*Plantago* sp), two knotgrass (*Polygonum aviculare* L), two dock (*Rumex* sp) and two vetch (*Vicia* sp). The remaining seed could not be identified further. These species grow in a variety of habitats including agricultural fields, waste ground and damp landscapes.

Charcoal

The charcoal assemblage was large (149.8g) and 60 fragments were identified to species. The species were hazel (*Coryus avellana* L), rowan (cf *Sorbus* sp), oak (*Quercus* sp) and elm (*Ulmus* sp). The dominant species was hazel (50%) followed by elm (34%), oak (13%) and rowan (3%). Roundwood fragments composed of elm (34%) and hazel (12%) were recorded within the assemblage. Preservation of the charcoal was generally good, but it was noted that the elm from pit [1205] was noticeably friable and that live nematode worms had burrowed into a small number of the fragments. The presence of the nematode worms should not interfere with radiocarbon dating.

The charcoal fragments from pits [1107] and [507] was composed of mixed species and these have probably accrued from fuel debris. The charcoal in pits [1105] and [1205] was formed of single species which are more typical of *in situ* burning of small discrete structural elements such as posts or stakes.

Other finds

One fragment of burnt bone was recovered from pit [507]. This find was added to the rest of the burnt bone and should be analysed by the appropriate specialist.

The results are summarised below by feature

Burnt pit [1105] Context (1106)

Macroplant: There was no macroplant recovered from this pit.

Charcoal: The charcoal (40.3g) was formed of hazel.

Synthesis: This pit was believed to be contemporary with the burnt mound. This large accumulation of hazel charcoal is probably representative of a small structural element such as a post or stake burnt *in situ*.

Pit [1107] context (1108)

Macroplant: No macroplant was recovered from this pit.

Charcoal: The charcoal (52.3g) was a mix of hazel (50%), oak (30%) and rowan (20%).

Synthesis: This feature was interpreted as being broadly contemporary with the activities taking place in the adjacent burnt mound spreads. The presence of fire cracked stones along with mixed charcoal species reminiscent of fuel debris suggest this was a fire pit.

Pit [1205] context (1206)

Macroplant: A single vetch seed was recovered from this pit.

Charcoal: The charcoal (40.7g) was composed entirely of elm.

Synthesis: This pit during excavation was interpreted as a possible hearth given the presence of both burnt clay and charcoal. However, the absence of any domestic food remains suggests that this feature was not used for either cooking or for the disposal of food and fuel waste. The large concentration of elm is more typical of the destruction of a small structural element such as a post or stake. Given the presence of burnt clay it is possible this structural component was destroyed *in situ*. The single vetch seed is likely intrusive from a plant that grew nearby that was accidently charred.

Pit [507] context (508)

Macroplant: The macroplant was concentrated within this pit and a total of 161 plant remains were recovered. These were composed of cultivated crops, wild nuts and weed species. The largest component of the assemblage were 130 fragments of hazelnut shell. Other evidence of food was one emmer/spelt, three bread/club wheat, four wheat and one cereal caryopsis. There were 22 weeds identified as a mix of fat hen, goosefoot, one amphibious bistort, pale persicaria, knotweeds, plantains, knotgrass, dock and vetch.

Charcoal: The charcoal (16.5g) was hazel (50%) and oak (50%). Haze roundwood formed 20% of the identified assemblage.

Synthesis: This pit during excavation was interpreted as containing a small accumulation of domestic food and fuel debris. The ecofacts recovered support this interpretation of the pit being used to prepare then dispose of a meal. Both cereal and hazelnuts were cooked in this location, with a mix of hazel and oak charcoal indicating the use of these species as fuel. Some of the weed species such as fat hen, pale persicaria, knotgrass, dock and vetch are edible and could have been deliberately collected for food. Equally these species grow in a variety of habitats and could have been accidently charred and then deposited when the pit was later backfilled or cut by posthole [509].

Recommendations

Both the macroplant and charcoal assemblages have been assessed in full and no further species identifications are required. If material is needed for radiocarbon dating then the hazel, rowan and elm charcoal are all suitable as are the cereal caryopses and hazelnut shells. Where possible oak should be avoided for dating as it is a long-lived wood species and is not always reliable.

The charcoal assemblage is quite substantial and has potential to provide some information about exploitation of woodland resources in the Welsh prehistoric. The macroplant assemblage is much smaller and the species identified are all typical finds from the British prehistoric period. However, analysis of both the macroplant and charcoal assemblages in conjunction with each other will allow for a deeper understanding of how the prehistoric occupants of this site interacted and used the plant resources within this landscape. Once the chronology of the burnt mound and the associated pits have been established it is recommended a short interpretative report focusing on the role of woodland, cultivated crops and wild pant resources is produced. Such a report would draw on comparisons with other contemporary sites.

References

Cappers, R. T. J., Bekker, R. M. and Jans, J. E. A. 2006. *Digital seed atlas of the Netherlands*. Barkhius Publishing. Groningen.

Jacomet, S. 2006. *Identification of cereal remains from archaeological sites: 2nd edition*. Archaeobotany Lab, IPAS, Basel University. Basel.

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Schweingruber, F. H. 1990. *Microscopic Wood Anatomy: Structural Variability of Stems and Twigs in Recent and Subfossil Woods from Central Europe 3rd edition*. Swiss Federal Institute for Forest, Snow and Landscape Research. Geneva.

Stace, C. 2010. *New Flora of the British Isles.* Cambridge University Press. Cambridge.

Table 1 Carbonised macroplant

Sample			1	2	3	4
Feature			Pit 1105	Pit 1107	Pit 1205	Pit 507
Context			1106	1108	1206	508
Flot Vol (ml)			350	380	580	100
% Analysed			100	100	100	100
Species	**Name**	**Part**				
T. dicoccum/spelta L.	Emmer/spelt	Caryopsis/es				1
T. aestivum/compactum L.	Bread/club wheat	Caryopsis/es				3
Triticum sp.	Wheat	Caryopsis/es				4
Cerealia sp.	Cereal	Caryopsis/es				1
Wild food						
Corylus avellana L.	Hazelnut	Shell frag(s)				130
Weed taxa						
Chenopodium album L.	Fat hen	Seed(s)				6
Chenopodium sp.	Goosefoot	Seed(s)				3
Persicaria amphibia L.	Amphibious bistort	Achene(s)				1
Persiciara lapathifolia L.	Pale persicaria	Achene(s)				2
Persicaria sp.	Knotweeds	Achene(s)				1
Plantago sp.	Plantains	Seed(s)				2
Polygonum aviculare L.	Knotgrass	Achene(s)				2
Rumex sp.	Dock	Achene(s)				2
Vicia sp.	Vetch	Seed(s)			1	2
Unknown	Indet	Achene/Seed(s)				1
Other						
Burnt bone						1

Table 2 Charcoal species

Sample	**Feature**	**Context**	**Species**	**Name**	**Frag**	**RW**	**Weight(g)**
1	Pit 1105	1106	*Corylus avellana* L.	Hazel	15	5	40.3
2	Pit 1107	1108	*Corylus avellana* L.	Hazel	5		
2	Pit 1107	1108	cf *Sorbus* sp.	Rowan	2		
2	Pit 1107	1108	*Quercus* sp.	Oak	3		52.3
3	Pit 1205	1206	*Ulmus* sp.	Elm		20	40.7
4	Pit 507	508	*Corylus avellana* L.	Hazel	3	2	
4	Pit 507	508	*Quercus* sp.	Oak	5		16.5









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APPENDIX VI

Reproduction of Scottish University Environmental Research Centre Radiocarbon Dating certificates

Scottish Universities Environmental Research Centre
Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

11 February 2021

Laboratory Code	SUERC-96446 (GU57076)
Submitter	Stuart Reilly Gwynedd Archaeological Trust Craig Bueno Garth Road Bangor, Gwynedd LL57 2RT
Site Reference	G2649_Maes_y_Felin
Context Reference	1108
Sample Reference	2
Material	Charcoal : Hazelnut
$\delta^{13}C$ relative to VPDB	-27.1 ‰
Radiocarbon Age BP	3773 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

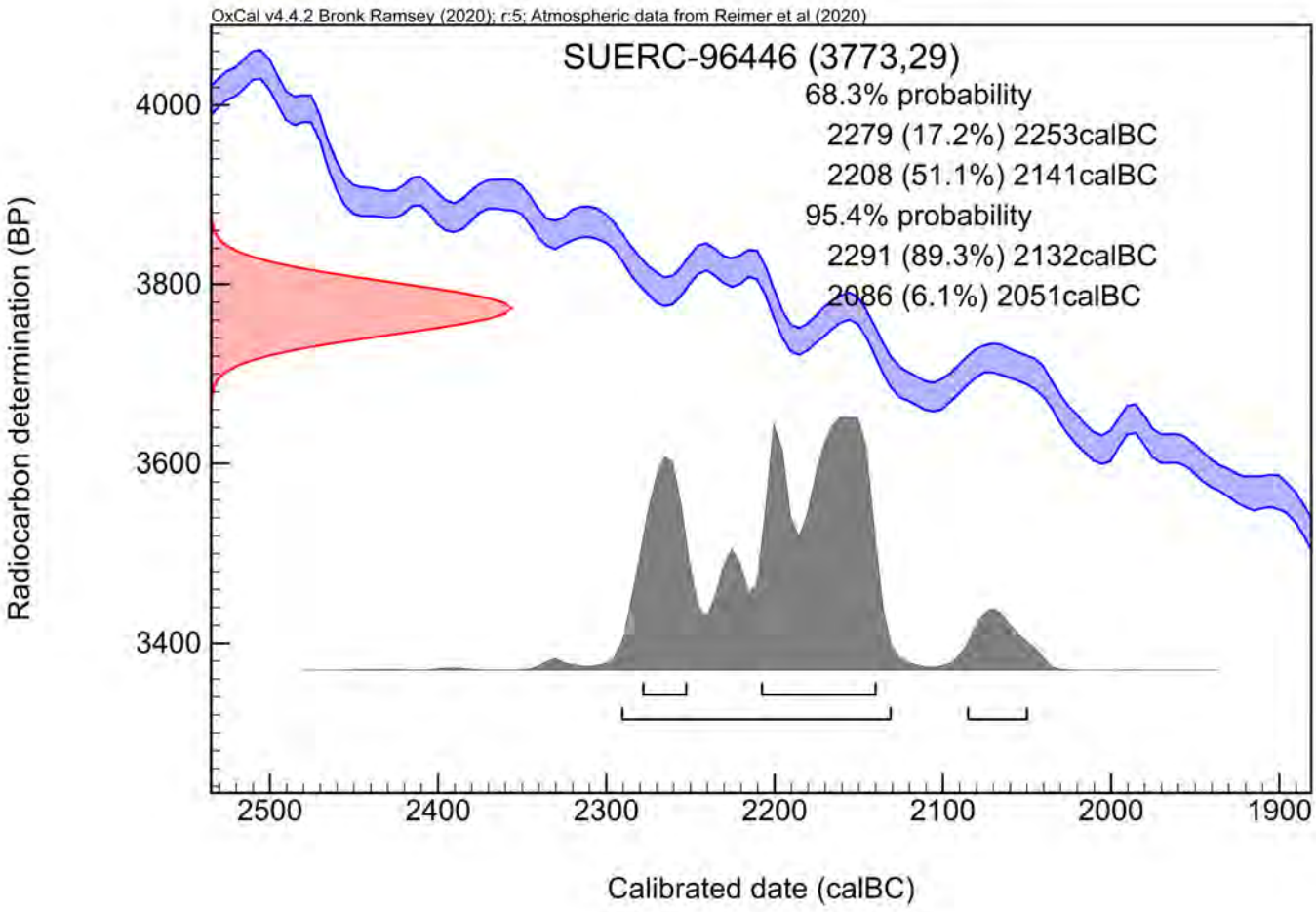
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*
† Reimer et al. (2020) *Radiocarbon 62(4) pp.725-57*

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RADIOCARBON DATING CERTIFICATE

11 February 2021

Laboratory Code	SUERC-96447 (GU57077)
Submitter	Stuart Reilly Gwynedd Archaeological Trust Craig Bueno Garth Road Bangor, Gwynedd LL57 2RT
Site Reference	G2649_Maes_y_Felin
Context Reference	1108
Sample Reference	2
Material	Charcoal : Rowan
$\delta^{13}C$ relative to VPDB	-25.7 ‰
Radiocarbon Age BP	3700 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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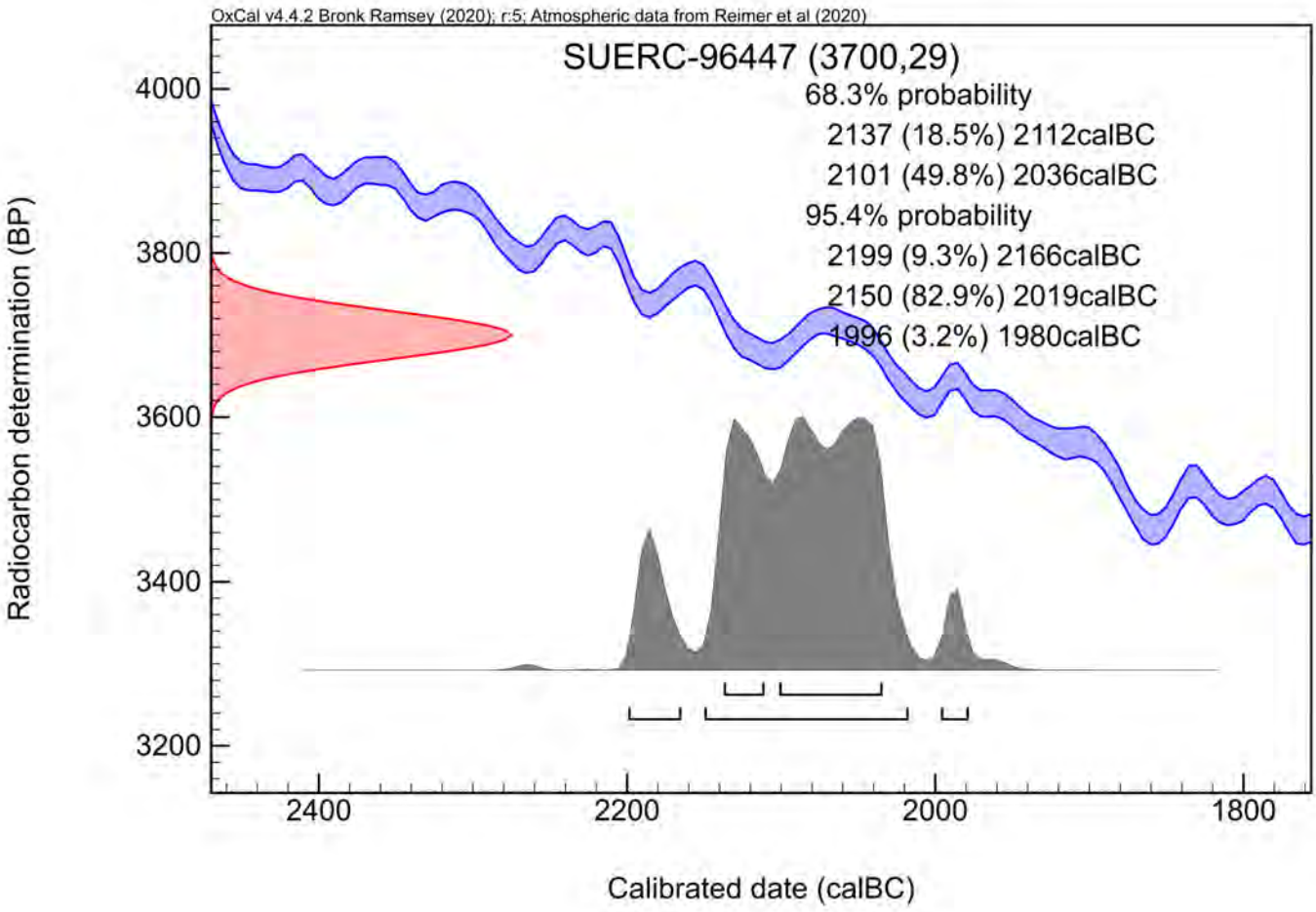

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

11 February 2021

Laboratory Code	SUERC-96448 (GU57078)
Submitter	Stuart Reilly Gwynedd Archaeological Trust Craig Bueno Garth Road Bangor, Gwynedd LL57 2RT
Site Reference	G2649_Maes_y_Felin
Context Reference	1206
Sample Reference	3
Material	Charcoal : Elm
$\delta^{13}C$ relative to VPDB	-24.0 ‰
Radiocarbon Age BP	1763 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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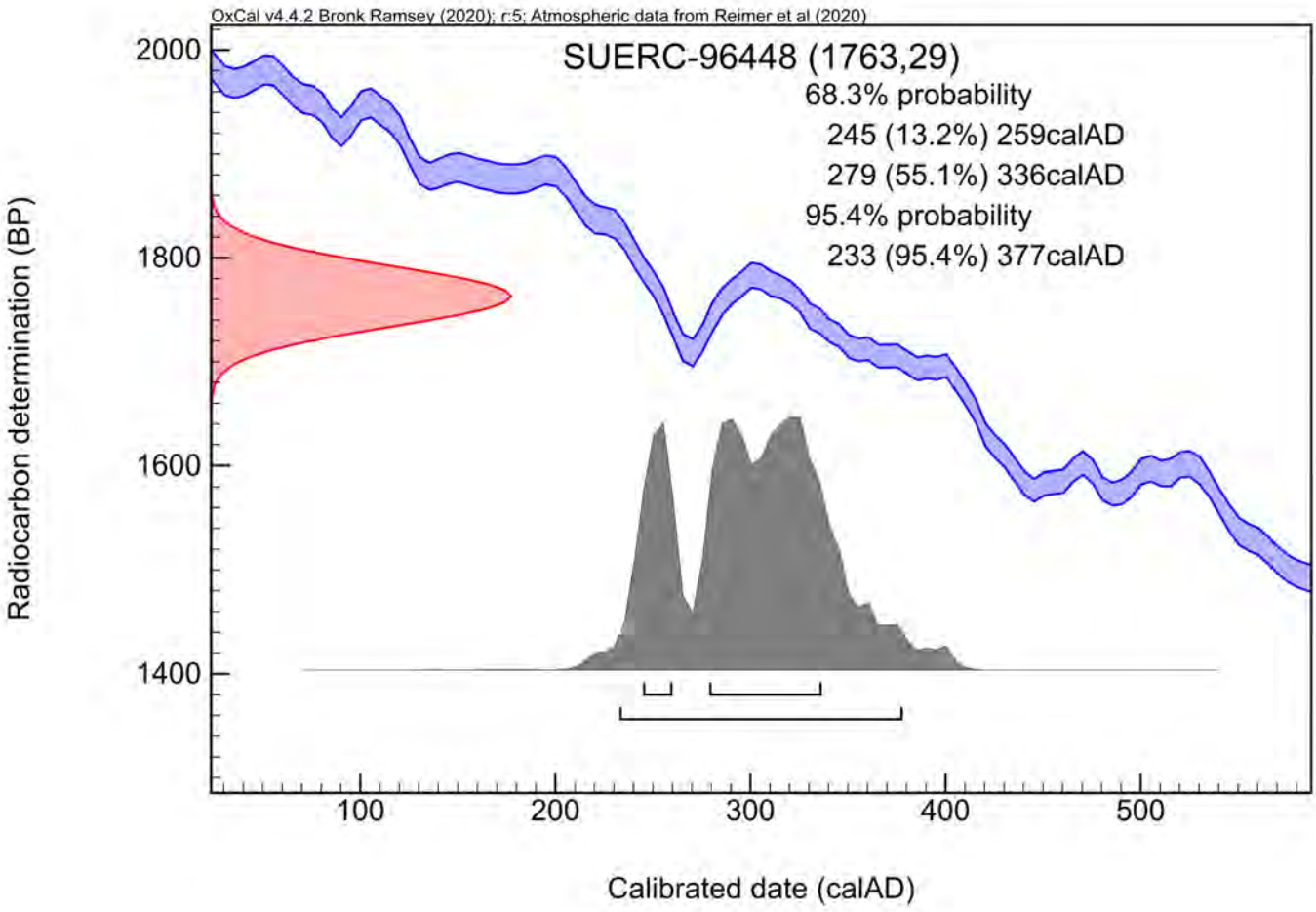

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

11 February 2021

Laboratory Code	SUERC-96449 (GU57079)
Submitter	Stuart Reilly Gwynedd Archaeological Trust Craig Bueno Garth Road Bangor, Gwynedd LL57 2RT
Site Reference	G2649_Maes_y_Felin
Context Reference	508
Sample Reference	4
Material	Charcoal : Hazelnut
$\delta^{13}C$ relative to VPDB	-25.6 ‰
Radiocarbon Age BP	2761 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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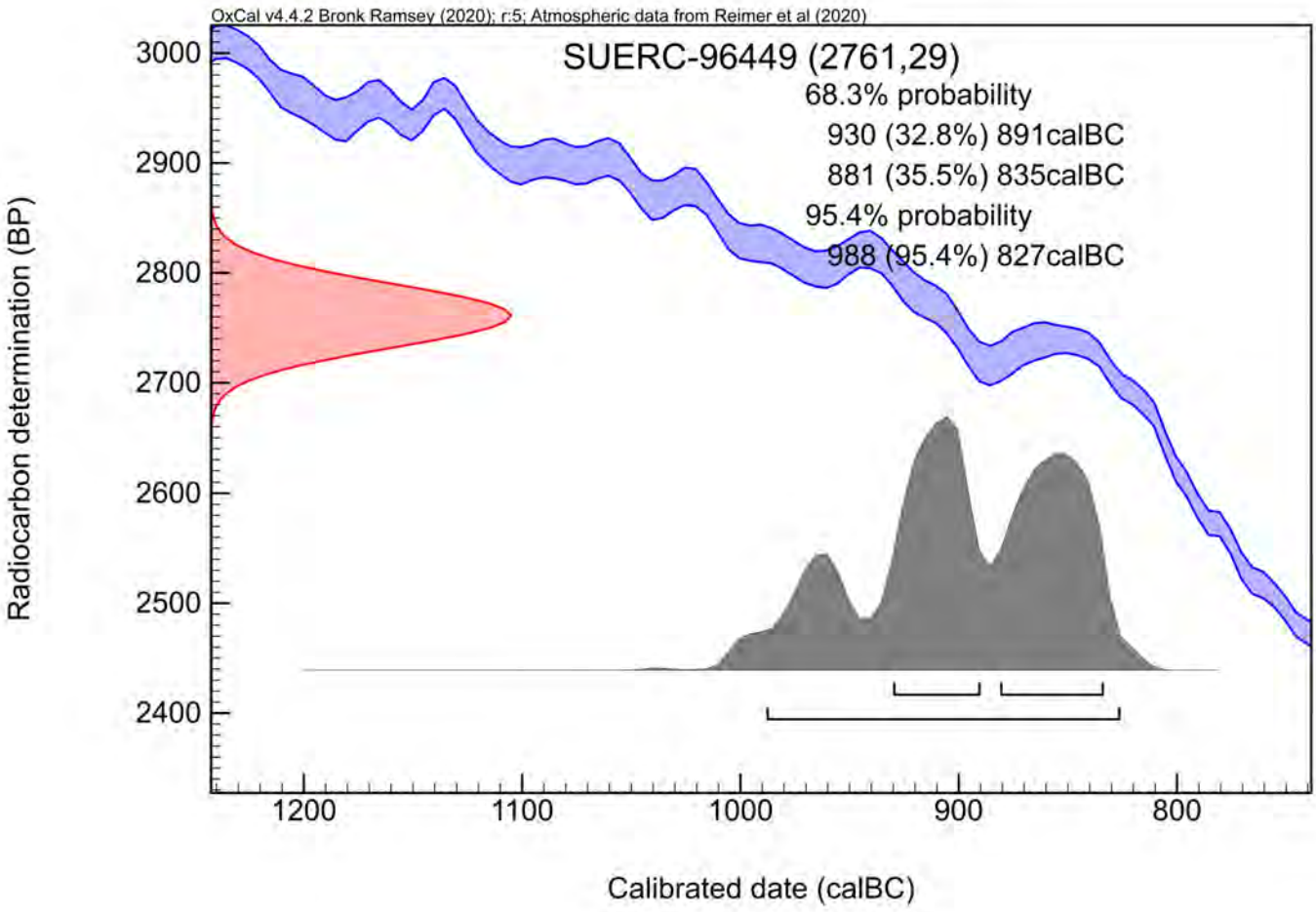

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

11 February 2021

Laboratory Code	SUERC-96453 (GU57080)
Submitter	Stuart Reilly Gwynedd Archaeological Trust Craig Bueno Garth Road Bangor, Gwynedd LL57 2RT
Site Reference	G2649_Maes_y_Felin
Context Reference	508
Sample Reference	4
Material	Macroplant : Wheat Grain
$\delta^{13}C$ relative to VPDB	-23.5 ‰
Radiocarbon Age BP	2723 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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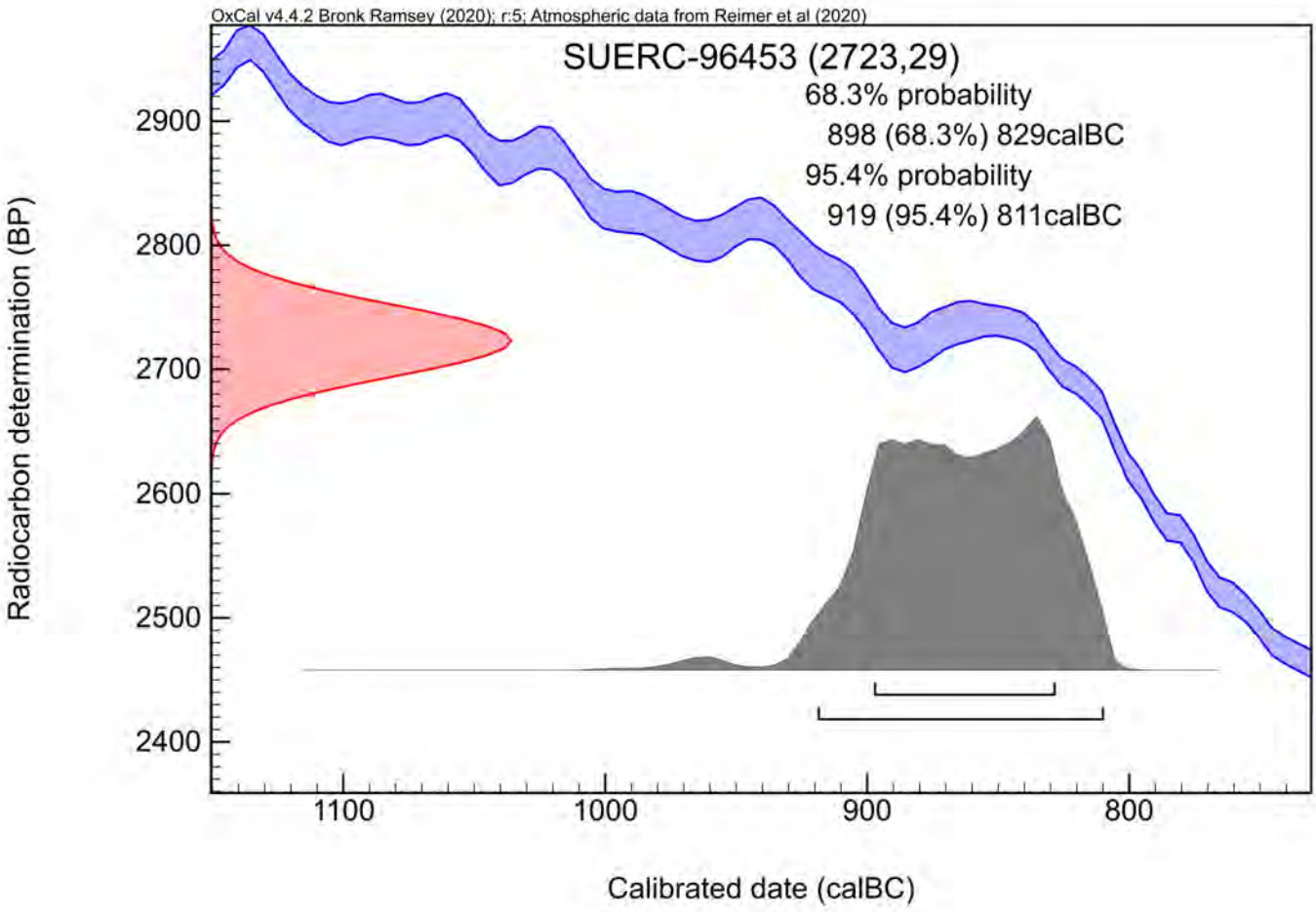

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The above date ranges have been calibrated using the IntCal20 atmospheric calibration curve†

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