DINAS DINLLE, GWYNEDD

Cloddio Gwerthuso Archeolegol: Adroddiad Terfynol / Archaeological Evaluation Excavation: Final Report

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Yr Amgylchedd Hanesyddol yn Cofnodi Prif Gyfeirnod /
Historic Environment Record Event Primary Reference Number: 45478

Prosiect Rhif / Project No. G2608

Adroddiad Rhif / Report No. 1582

Wedi'i baratoi ar gyfer y / Prepared for:
Comisiwn Brenhinol Henebion Cymru Prosiect NHTA Cymru-Iwerddon a ariennir gan yr UE /
Prepared for the Royal Commission on the Ancient and Historical Monuments of Wales EU-funded CHERISH Ireland-Wales Project

Mawrth 2021 / March 2021

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Published by Gwynedd Archaeological Trust
Gwynedd Archaeological Trust
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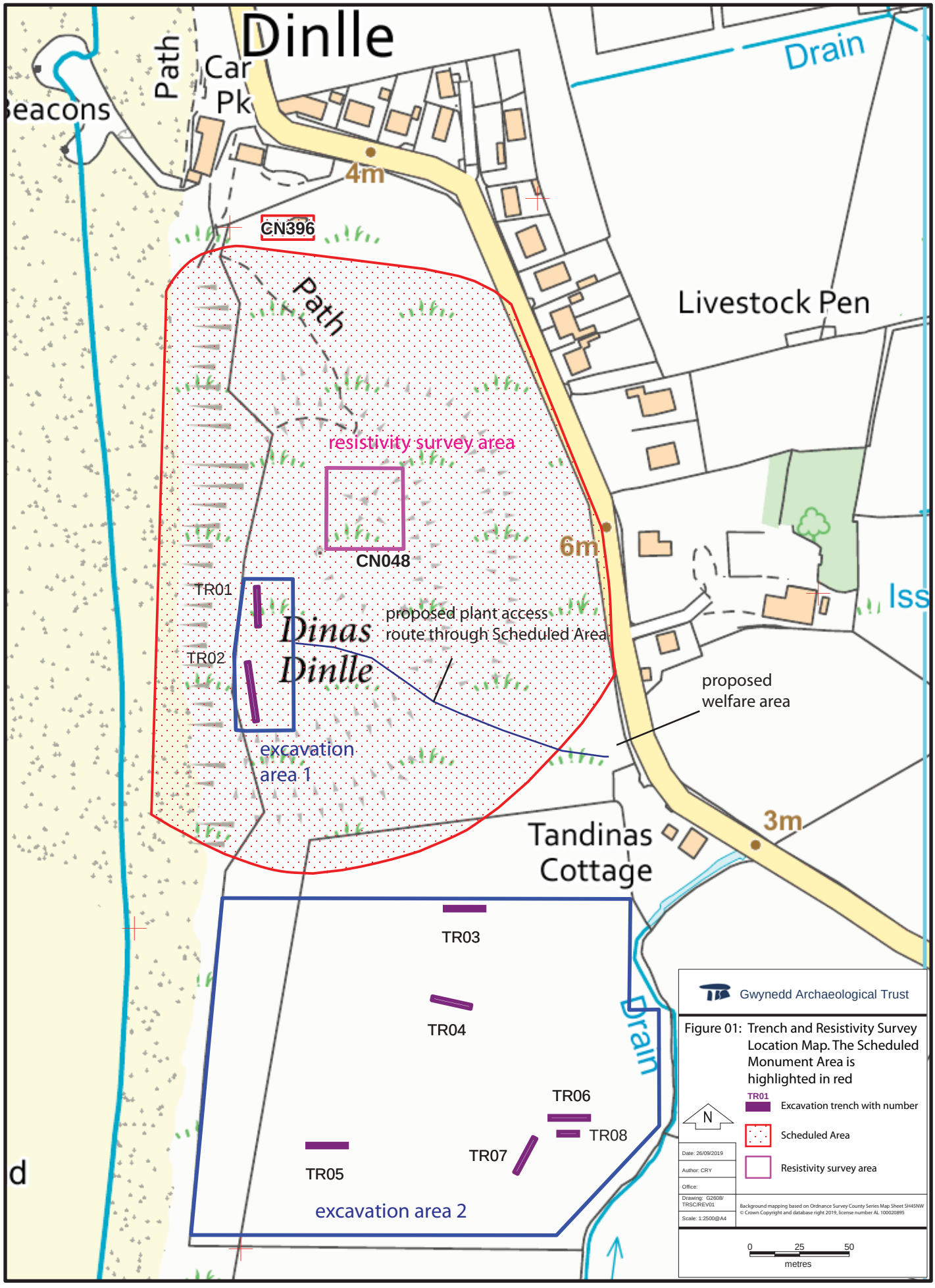
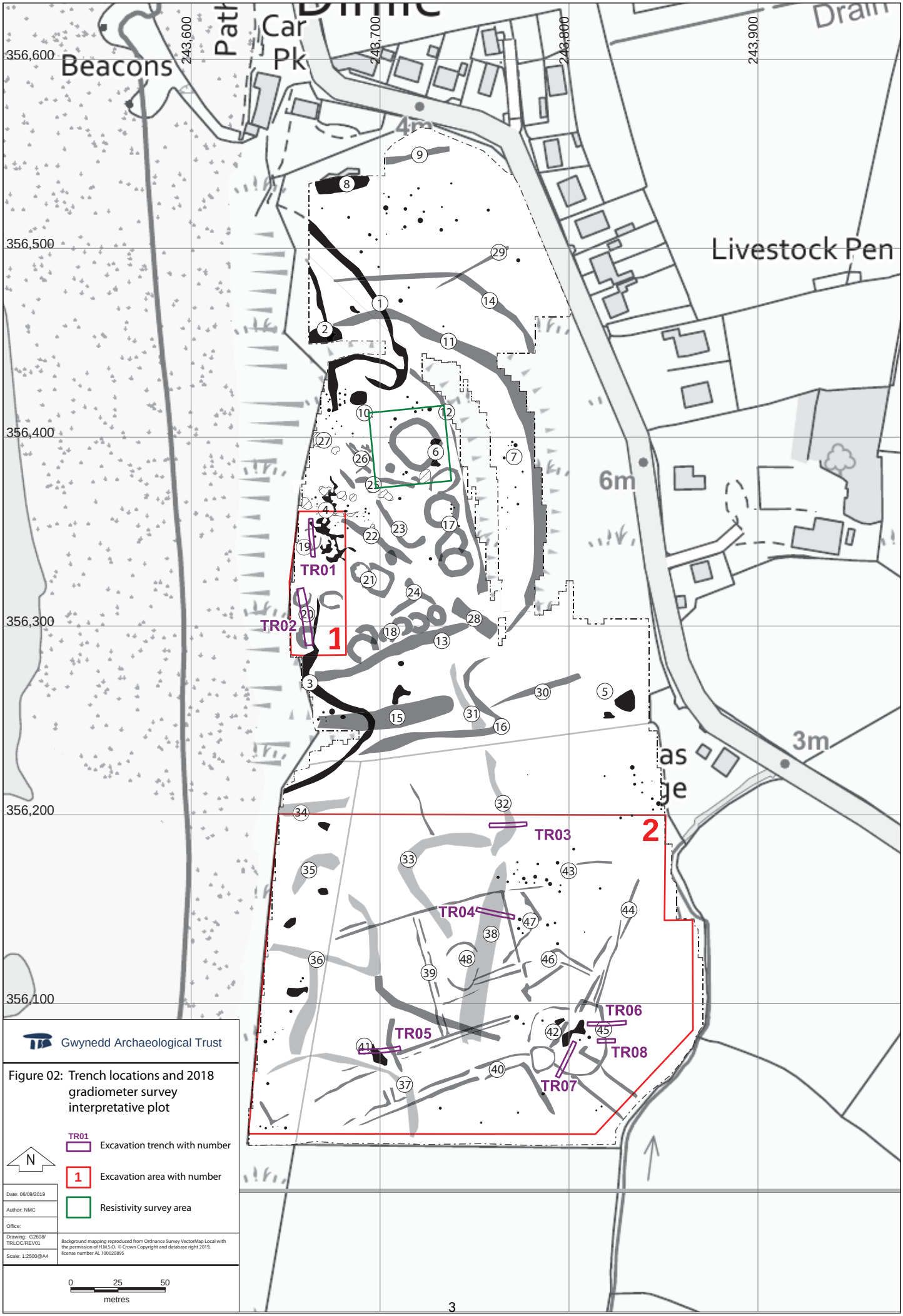
CRYNODEB ANNHECHNEGOL

Comisiynwyd Ymddiriedolaeth Archeolegol Gwynedd gan y Comisiwn Brenhinol Henebion Cymru Prosiect CHERISH Iwerddon-Cymru a ariennir gan yr UE, i gynnal gwaith archeolegol gwerthuso / cloddio wedi'i dargedu ac arolwg geoffisegol wedi'i dargedu ym mryn bryn Dinas Dinlle, Gwynedd. Roedd dwy ffos wedi'u lleoli o fewn y bryn a chwech mewn ardal isel i'r de. Cadarnhaodd y ffosydd yn y fryngaer bresenoldeb tai crwn sylweddol ac awgrymodd yr arolwg geoffisegol weithgaredd strwythurol i'r dwyrain. Adenillwyd isffactau o'r Oes Haearn a Rhufeinig, ac ochr yn ochr â dyddiadau radiocarbon o ddyddodion dethol, awgrymwyd y dylid parhau i'w defnyddio a'u defnyddio tan y 4edd ganrif OC o leiaf. Nododd y ffosydd i'r de weithgaredd ar draws amserlen lawer ehangach, gan gynnwys pyllau Neolithig Cynnar, systemau caeau canoloesol a chrochenwaith a fferm ôl-ganoloesol segur yn adlewyrchu anheddiad mwy diweddar. Roedd pob ffos yn cynnwys dyddodion trwchus o dywod a chwythwyd gan y gwynt gan adlewyrchu effaith newid arfordirol.

NON-TECHNICAL SUMMARY

Gwynedd Archaeological Trust was commissioned by the Royal Commission on the Ancient and Historical Monuments of Wales' EU-funded CHERISH Ireland-Wales Project to undertake targeted evaluation/excavation archaeological works and a targeted geophysical survey at Dinas Dinlle hillfort, Gwynedd. Two trenches were located within the hillfort and six in a low-lying area to the south. The trenches within the hillfort confirmed the presence of substantial roundhouses and the geophyscial survey suggested structural activity to the east. Iron Age and Roman aretfacts were recovered, and in tandem with radiocarbon dates from selected deposits, suggested continued occupation and use until at least the 4th century AD. The trenches to the south identified activity across a much broader timeframe, including Early Neolithic pits, medieval field systems and pottery and an abandoned post-medieval farmstead reflecting more recent settlement. All trenches were contained thick deposits of windblown sand reflecting the impact of coastal change.


Dinlle
Path
Car Pk
Beacons
Drain
4m
CN396
Path
Livestock Pen
resistivity survey area
CN048
6m
TR01
TR02
Dinas Dinlle
proposed plant access route through Scheduled Area
proposed welfare area
excavation area 1
Tandinas Cottage
3m
TR03
TR04
TR06
TR08
TR07
TR05
Drain
excavation area 2
Gwynedd Archaeological Trust
Figure 01: Trench and Resistivity Survey Location Map. The Scheduled Monument Area is highlighted in red
TR01 Excavation trench with number
Scheduled Area
Resistivity survey area
N
Date: 26/09/2019
Author: CRY
Office:
Drawing: G2608/TRSC/REV01
Scale: 1:2500@A4
Background mapping based on Ordnance Survey County Series Map Sheet SH45NW © Crown Copyright and database right 2019, license number AL 100020895
0 25 50
metres


356,600
356,500
356,400
356,300
356,200
356,100
243,600
243,700
243,800
243,900
Beacons
Car Pk
Livestock Pen
6m
3m
TR01
TR02
TR03
TR04
TR05
TR06
TR07
TR08
1
2
Gwynedd Archaeological Trust
Figure 02: Trench locations and 2018 gradiometer survey interpretative plot
Excavation trench with number
Excavation area with number
Resistivity survey area
N
Date: 06/09/2019
Author: NMC
Office:
Drawing: G2608/TRLOC/REV01
Scale: 1:2500@A4
Background mapping reproduced from Ordnance Survey VectorMap Local with the permission of H.M.S.O. © Crown Copyright and database right 2019, license number AL 100020895
0 25 50
metres

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by the Royal Commission on the Ancient and Historical Monuments of Wales' (RCAHMW) EU-funded CHERISH Ireland-Wales Project to undertake targeted evaluation/excavation archaeological works and a resistivity geophysical survey at Dinas Dinlle hillfort, Gwynedd (GAT HER PRN 1570; Scheduled Monument CN048; NGR SH43705635; Figure 01). The works followed on from an earlier CHERISH commissioned magnetometer geophysical survey of the hillfort interior and a large open field to its south, conducted by GAT in 2017 (Hopewell 2018). The archaeological works were undertaken between the 5th and 23rd of August 2019 and included community and volunteer engagement.

The archaeological works were undertaken in accordance with the following guidelines:

- CHERISH, 2019, *CHERISH Excavation 2019 Specification*;
- English Heritage, 2015, *Management of Research Projects in the Historic Environment* (MoRPHE);
- English Heritage, 1991, *Management of Archaeological Projects*;
- English Heritage, 2011, *Environmental Archaeology: A guide to the theory and practise of methods, from sampling and recovery to post-excavation*;
- Chartered Institute for Archaeologists, 2014, *Standard and Guidance for Archaeological Excavation*;
- Chartered Institute for Archaeologists, 2020, *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*;
- Chartered Institute for Archaeologists, 2014, *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*;
- Royal Commission on Ancient and Historic Monuments of Wales, 2015, *Guidelines for digital archives*; and
- The Welsh Archaeological Trusts, 2018, *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1*.

The evaluation/excavation comprised eight trenches of varying size: two were sited within the hillfort interior (Excavation Area 1) targeting geophysical anomalies indicating possible roundhouses (Trenches 01 and 02), and six trenches in the field to the south (Excavation Area 2) targeting anomalies interpreted as potential enclosures, field systems and structures (Trenches 03 to 08). The resistivity geophysical survey as undertaken by Eden Mapping on behalf of GAT and targeted a mound within the northeast corner of the hillfort, in order to

attempt to identify any buried structural remains, further to the results of the 2017 geophysical survey (Hopewell 2018).

Trenches 01 and 02 within the hillfort identified the walls of two possible roundhouses; Roman period ceramic material (SF1002 – 1004; SF2003 – 2005; SF 2007 – 2008; SF 2013) was recovered from both trenches and metal objects, including a fragment of lead strip (SF2001), a possible lead weight (SF2006), iron hammer head (SF2009) and iron chisel (SF2010) were recovered from Trench 02. A flint flake (SF1001) was also recovered from a windblown sand deposit in Trench 01. Trenches 03 to 08 contained evidence of pits and ditches representing multi-period occupation and agricultural activity as well as field boundary ditches consistent with the 1849 Llandwrog Tithe Award Map; three sherds of medieval coarse ware (SF4005) were identified in a pit in Trench 04. Fifteen ecofact samples were recovered from archaeological deposits within the two excavation areas.

Based on these results, selected artefactual and ecofactual material were submitted for post excavation assessment and analysis. The post-excavation was undertaken in accordance with an approved project design (Appendix I) and the phased process specified in Management of Archaeological Projects – MAP2 (English Heritage, 1991), which comprised:

- MAP2 Phase 1: Project Planning
- MAP2 Phase 2: Fieldwork
- MAP2 Phase 3: Assessment of Potential for Analysis
- MAP2 Phase 4: Analysis and Report Preparation
- MAP2 Phase 5: Dissemination

The current report synthesises the results from MAP2 Phase 1 to 5 and includes information from MAP2 Phase 2 fieldwork report (GAT Report 1499)..

The project was monitored throughout by RCAMHW/CHERISH, Cadw and The National Trust. In line with the regional Historic Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising was 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 HER Event Primary Reference Number for this project is 46025.

Gwynedd Archaeological Trust is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/A/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists.

1.1 Aims and Objectives

The key aims and objectives of the evaluation/excavation and subsequent post-excavation programme were to:

- Date and characterise aspects of the monument and immediate environs, which includes features at risk from coastal and terrestrial erosion;
- Establish the date and nature of any archaeological remains identified and assess their implications for understanding the historical development of the area, in conjunction with the known archaeological record;
- Contextualise the Roman and Iron Age activity to understand the chronology, distribution and relationship between the known and suspected features. In addition, the pottery and flint fragments will be assessed for provisional dating and typology. One particular area of interest is the date range between the roundhouses originally identified in trench TR01 and TR02 in Excavation Area 01, alongside possible Roman (and earlier) settlement/agricultural activity in TR04 identified in Excavation Area 02.
- Contextualise the possible late prehistoric, Roman and medieval agricultural activity identified within TR03, TR04 and TR06 in Excavation Area 02.
- Contextualise the results of the remaining features on site. This will include the known post-medieval features, including the agricultural and boundary activity identified in TR04, TR05, TR06, TR07 and TR08 that appear to match on the Parish of Llandwrog in the County of Carnarvon 1849 Tithe Map (Figure 03).

Specific reference has been made to the *Research Framework for the Archaeology of Wales,* and the key areas of interest and research. These highlighted and discussed in para. 6.4.

1.2 Acknowledgements

GAT would like to thank everyone who was involved in the project, including the CHERISH team, the National Trust, Cadw, Aberystwyth University, the local community council, Tair Llan Historical Society, Caernarfon Civic Society, Gwynedd Council and the North Wales Police. Particular thanks are given to Eden Mapping, the GAT field team and outreach team (Dave Hopewell, Michael Lynes, Carolina Ferreira, Neil McGuinness, Robert Evans, Bethan Jones, Carol Ryan Young, Anne Marie Oattes, Dan Amor and Jade Owen) and the team of volunteers.

GAT would also like to thank the following specialists for their contribution to the post-excavation assessment and analysis:

- Oxford Archaeology Ecofact Assessment Report;
- Gill Dunn Roman Pottery Assessment Report;
- Julie Edwards Medieval Pottery Assessment Report;
- Dr. Patrick Sean Quinn Analysis of a Medieval Sherd;
- George Smith Lithic Assessment Report;
- Phil Parkes Metal Work X-Ray Report;
- Jörn Schuster Metal Work Assessment Report; and
- Hilary Cool Jet Bead Assessment Report.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

Dinas Dinlle hillfort (NGR SH43705635; GAT HER PRN 1570, Scheduled Monument CN048; RCAHMW NPRN 95309; NT ref.: 49800; Figure 01) is built on an isolated hill of glacial drift in an otherwise fairly low lying area of coastal plain. Originally, the fort would have been defended by two earth ramparts with a deep ditch in between; severe erosion has removed all traces on the seaward side but the defences are still visible from the south, east and north. As a result of the erosion, a section through the ramparts at the southern end of the fort is currently visible, revealing a series of possible ditch deposits. The entrance to the fort was through a gap in the south-eastern rampart and the interior contains the earthwork remains of circular huts. The site has never been formally excavated but casual digging has produced sherds of Roman pottery suggesting occupation (or re-occupation) in the 2nd and 3rd centuries AD.

As stated in *Summary of Previous Archaeological Works, Designations and Scheduling at Dinas Dinlle Prehistoric Coastal Fort, Gwynedd* (CHERISH, 2018), in the early 20th century the monument formed part of the Dinas Dinlle golf course; the golf course has been postulated to have run across the fort and into fields to the south. In addition a Second World War ‘seagull trench’ (CN 396; Figure 01) was located on the northern slopes of the fort that formed part of the defence for the nearby RAF Llandwrog, now Caernarfon Airport.

2.2 Site of Special Scientific Interest

As stated in *Summary of Previous Archaeological Works, Designations and Scheduling at Dinas Dinlle Prehistoric Coastal Fort, Gwynedd* (CHERISH, 2018), the underlying geology at the site is of national importance and is a designated Site of Special Scientific Interest (SSSI), due to its unique sequence of glacial deposits, readily visible in the western eroding cliff face. According to Natural Resources Wales' (NRW) statement on designation, the Dinas Dinlle SSSI has one 'special feature': *Pleistocene/Quaternary landform assemblage and associated subsurface*.

2.3 Geophysical Survey 2017

2.3.1 Introduction

GAT was commissioned by the CHERISH project in 2017 to undertake a magnetometer geophysical survey of the Dinas Dinlle fort interior, as well as an area to the south incorporating a large open field (Hopewell, 2018; Figure 02).

2.3.2 Excavation Area 1

The interior of the fort was interpreted as very magnetically variable compared to the surrounding land, at least in part a result of magnetic enhancement during occupation. Anomalies 17 and 18, marked by circular areas of enhancement were located around the inside of the rampart, whilst Anomaly 19 may suggested a house at the southwest of the fort interior. The central part of the interior contained multiple anomalies, some of which could be interpreted as stony banks and further roundhouses (Anomalies 21 to 27), although some of the anomalies are likely post-medieval or modern. The report stated that these cannot be differentiated from early anomalies by geophysical survey alone and that a bunker from the golf course could produce a similar anomaly to a roundhouse. It was recommended in the report that the results of the survey were examined in conjunction with other sources of information and the interpretation be amended as necessary, with the current evaluation/excavation providing an opportunity for these anomalies to be investigated further.

The defences of the fort, visible as earthworks, produced clear anomalies: a strong linear anomaly along the inner southern rampart (Anomaly 13) could indicate stone facing, whilst the area to the outside of the entrance at the south-east of the fort shows multi-period anomalies. There appeared to have been some modification associated with the golf course with a levelled area and earthwork (Anomaly 30) in front of a green (Anomaly 5). Two anomalies that were not visible as earthworks or LIDAR features were identified immediately to the south of the defences, comprising an early field boundary (Anomaly 31) and a zigzag path leading to the entrance (Anomaly 16). Anomaly 14, running almost parallel to the defences at the north of the fort, were interpreted as a possible outer ditch; this was also visible as a faint LIDAR feature that led to a short linear earthwork at the southern end, just outside the survey area and immediately to the east of the outer bank of the fort defences.

A more recent anomaly (9), visible both on the ground and on LIDAR, was a path leading to the WW2 seagull trench.

The report stated that it was clear there has been a considerable amount of additional ferrous contamination since the last survey was carried out in 2005 (Smith 2005, Figure 26),

including wire used in footpath construction, nails and staples from fencing and litter from visitors to the site. The line of the fence which produced a significant anomaly in 2005 has changed, although its remains were still visible on the 2017/18 survey. Contamination by ferrous material was highlighted in the report as a significant, but often overlooked, management issue on many archaeological sites (Hopewell 2010).

2.3.3 Excavation Area 2

In Excavation Area 2, a series of diffuse anomalies (31-38) were detected that could be interpreted as the ploughed-out remnants of Iron Age or Medieval field boundaries. This was deemed the most likely interpretation but a natural origin cannot be entirely ruled out. In contrast, a series of very clear anomalies (39-44) corresponded to the field boundaries and buildings of a homestead called Penllech shown on the 1849 Llandwrog tithe map. The buildings are also shown on the Robert Dawson 1815 Ordnance survey drawing (British OSD 306/25) but are not shown on the 1889 first edition Ordnance Survey 25" to 1-mile County Series map, suggesting they were removed in the mid to second half of the century when agricultural improvements created the large rectangular fields that make up the current landscape. The report stated that the match with the boundaries of Penllech to the local tithe map "is not particularly good but is close enough to estimate which correspond to the geophysical survey anomalies" (*ibid.*); these were parallel double anomalies probably indicating field boundaries comprising a wall or bank with ditches on both sides, whilst several anomalies were additional subdivisions of the fields shown on the tithe map, with others appearing to be earlier. The boundary at the east of Penllech (Anomaly 44) appeared to have been realigned several times, whilst a series of curvilinear boundaries at the southeast of the homestead (Anomaly 45) form a group of fields or paddocks around an area of noise (Anomaly 42) that probably corresponded to the scattered remains of one of the buildings. The character of these boundaries was different to those elsewhere in the homestead suggesting that it formed an earlier, but as yet undated, nucleus to the settlement.

3 FIELDWORK METHODOLOGY

3.1 Introduction

The evaluation/excavation comprised two targeted excavation areas and a targeted geophysical survey area.

The key deliverables were:

- completion of a targeted programme of archaeological evaluation within a three-week period;
- the organisation and management of a team of volunteers sourced from the local community;
- the provision of an Outreach programme that included an open day and regular social media postings; and
- the completion of an industry standard fieldwork report and subsequent post-excavation final report.

The excavation areas were run concurrently and were managed by GAT staff and supported by volunteers. The targeted geophysical survey area was managed by GAT staff and undertaken by a geophysical survey specialist team from *Eden Mapping*, with support from volunteers.

3.2 Excavation Area 1

Excavation Area 1 measured 2,155m^2 and was centred on NGR SH43665632 (Figure 02). The excavation area was located within proximity of known archaeological deposits adjacent to the eroding edge that were at risk of loss. The aim of the evaluation/excavation was to characterise archaeological deposits and features. The geophysical survey completed across the fort in 2017 (Hopewell, 2018), identified two key anomalies within this area: Anomalies 19 and 20 that were interpreted as possible roundhouses. The evaluation/excavation undertaken by GAT involved two trenches, one at each anomaly, with a c.20m long trench across anomaly 19 (Trench 01) and a c.30m long trench across anomaly 20 (Trench 02). The trenches were opened and closed by an 8-tonne rubber tracked excavator fitted with a toothless bucket. Both trenches were opened to an initial width of 2m, which was subsequently expanded to 4m to allow for safe working for GAT staff and volunteers. Full excavation of all features exposed was not attempted within the allotted timeframe, but sufficient work was carried out to allow the features to be adequately characterised. Prior to backfilling, the trenches were lined with a geotextile membrane.

All archaeological features encountered were recorded using GAT pro-formas and surveyed using a Trimble R6 GPS unit. A total of 88 photo graphic images were taken in RAW format (4608 x 3072 resolution) using a Nikon D3100 digital SLR camera; the images were then archived in TIFF format (archive reference: G2608_1001 to G2608_1088; Appendix II).

The trench locations in Excavation Area 1 were:

Trench	Size	Centreline Start (OSGB E/N)	Centreline End (OSGB E/N)
Trench 01	20x4m	243663.31 / 356356.81	243664.05 / 356336.80
Trench 02	30x4m	243658.73 / 356318.87	243663.05 / 356289.18

3.3 Excavation Area 2

This measured 36,203m^2 and was centred on NGR SH43745611 (Figure 02). Deposits here were less threatened by immediate erosion but retained considerable importance in terms of characterising the fort, its immediate environs and subsequent land-use extending into the post-medieval period. A targeted strategy was chosen to evaluate features revealed by the 2017 geophysical survey (Hopewell, 2018), and to characterise and date key structures and the relationships between interrelating features. GAT targeted five key geophysical anomalies identified during the geophysical survey that were investigated and recorded by GAT and CHERISH staff and volunteers:

- Anomaly 32: interpreted by the geophysical survey as either a natural feature or part of a field system. To understand this anomaly further, a 20m long x 2m wide trench (Trench 03) was excavated to investigate and characterise the anomaly.
- Anomaly 38: interpreted as part of a wide/diffuse linear anomaly. This was not visible on site as an earthwork and two possible interpretations were suggested (Hopewell, 2018): it may be a result of natural changes in the natural boulder clay either during its initial deposition of a result of dune formations and blow-outs, or it may be ploughed down remnants of a field system contemporary with the fort. To understand this anomaly further, a 20m long x 2m wide trench (Trench 04) was excavated to investigate and characterise the anomaly.
- Anomaly 41: interpreted by the geophysical survey as one of four buildings shown on the 1849 tithe map. To understand this anomaly further, a 20m long x 2m wide trench (Trench 05) was excavated to investigate and characterise the anomaly.
- Anomaly 45: interpreted by the geophysical survey as representing a curvilinear boundary around a building shown on the 1849 tithe map, suggesting an earlier phase of settlement predating that shown on the tithe map. To understand this anomaly further, two 20m long x 2m wide trenches (Trenches 06 and 07) were excavated at two locations across the anomaly to investigate and characterise the anomaly.
- These anomalies were also chosen to allow for a varied selection of potential archaeological features that would allow the volunteers an insight into the chronological variety and distribution of activity within the area. In addition to the original 5 trenches an additional trench was opened to the south of Trench 06 as part of the Young Archaeologists Club volunteer day. The trenches were opened and closed by an 8-tonne rubber tracked excavator fitted with a toothless bucket. Prior to backfilling, the trenches were lined with a geotextile membrane.

All archaeological features encountered were recorded using GAT pro-formas and surveyed using a Trimble R6 GPS unit. A total of 173 photographic images were taken in RAW format (4608 x 3072 resolution) using a Nikon D3100 digital SLR camera; the images were then archived in TIFF format (archive reference: G2608_2001 to G2608_2173; Appendix II).

The trench locations in Excavation Area 2 were:

Trench	Size	Centreline Start (OSGB E/N)	Centreline End (OSGB E/N)
Trench 03	20x2m	243757.77 / 356195.10	243777.77 / 356195.07
Trench 04	20x2m	243751.49 / 356150.07	243771.02 / 356145.73
Trench 05	20x2m	243688.70 / 356076.03	243708.70 / 356076.03
Trench 06	20x2m	243810.35 / 356089.96	243830.36 / 356089.96
Trench 07	20x2m	243793.52 / 356062.28	243803.04 / 356079.86
Trench 08	9mx2m	243819.74 / 356080.28 (centreline)	

3.4 Resistivity Area

To complement and build on the 2017 magnetometer survey, a resistivity survey was undertaken to identify buried structural remains, targeting a mound situated in the northeast corner of the hillfort's interior; the resistivity area measured 1,567m^2 and was centred on NGR SH43715639 (Figure 01). The resistivity survey was undertaken by a geophysical survey subcontractor, *Eden Mapping* and included volunteer engagement. A 20m measured grid was used as the control for the survey, which was predefined in AutoCAD prior to the commencement of the fieldwork. A Geoscan Research RM15 twin array resistance meter was used to undertake the survey, using a 0.5m electrode separation with 0.1ohm sensitivity. The data was collected over a pre-determined grid using trapeze ropes and measuring tapes, with readings taken at 0.5m increments spaced on 1m traverses using a parallel collection method. The survey data was imported into Terrasurveyor software for processing.

4 FIELDWORK RESULTS

Fieldwork for the project was undertaken by volunteers supervised by GAT and CHERISH staff between the 5th and 23rd of August 2019. Each individual archaeological context was given a unique identifying number. Context numbers within square brackets (e.g. [1001]) noted below represent cut features, such as the pits, ditches that were identified during the excavation, and also structural features such as walls. Context numbers within round brackets (e.g. (1008)) represent layers, deposits and fills. These are listed in full in Appendix III. Recovered ecofacts and artefacts were given individual identity numbers, and related to the contexts in which they were found; these are listed in full to Appendices IV and V.

4.1 Trench 01

4.1.1 Introduction

Trench 01 was located to investigate and characterise geophysical survey anomaly 19, which had been interpreted as a possible roundhouse. The trench was located c.10m from the cliff edge, at a height of between 24.00 to 25.00m AOD and orientated north-south (Figures 01 and 03).

4.1.2 Overview

Trench 01 contained 19 contexts (Appendix III), including deposits of windblown sand and settlement activity. The windblown sand deposits sealed a large stone-built roundhouse; the full width of the roundhouse was not identified within the confines of the trench and the roundhouse and associated features were not fully investigated. The glacial horizon was identified in a sondage at the southern end of the trench. The latest deposit within the trench consisted of a 0.19m deep yellowish light brown silty sand topsoil (1001) (Plate 01). This sealed a 0.58m thick mid orange yellow windblown sand (1002) that covered the full extent of the trench, followed by an earlier windblown deposit, characterised by a slightly darker sand (1003), 0.20m thick; beneath this deposit was the roundhouse. A 1m wide and x 1m long sondage (Figure 04) was excavated against the inner face of the southern end of the roundhouse (Plate 01); this sondage identified two occupation layers within the roundhouse interior (contexts (1016) and (1017)) and confirmed the roundhouse survived up to three courses high (Plate 02).

4.1.3 Archaeological features

4.1.3.1 Roundhouse wall – Northern Section

The northern and southern sections of the roundhouse were identified within the trench

The northern section of the roundhouse was situated 4.4m away from the northern edge of the trench (Plate 03). The wall consisted of an inner facing [1007] and an outer facing [1006] with an internal core (1011) constructed from earth mixed with small field and beach stones (Plate 04). The overall width of the wall was 2.35m, whilst the internal core measured 1.6m in width. The inner facing wall survived up to three courses in height and was drystone constructed from dressed field stones and beach stones (Plate 03). The stones varied in size, from 0.2m width x 0.05m height x 0.2m in depth to a maximum of 0.5m width x 0.3m height x 0.3m depth. The wall core was built from angular rough field stones and beach stones (Plate 04). The stones ranged from 0.1m to 0.55m in size and were mixed within a loose mid-brown yellow silty sand. The outer facing wall was visible to a height of two courses, with the remainder obscured by a deposit of dark silt-sand (context (1013)) that was not fully excavated. The exposed courses were similar to the inner facing wall and were drystone constructed from a mixture of dressed field stones and beach stones (Plate 05). In comparison to the inner facing wall, the stones used were slightly larger, with the average stone measuring at 0.5m in width x 0.3m in length. A pile of tumbled stones (1005) covered with a dark brown sandy silt deposit (1018) was identified within the interior (Plate 06) that matched the material used to build the wall faces and internal core, suggesting it was collapsed material from the upper courses of the roundhouse. Within this tumble a fragment of flint (Find No.1001) was recovered (Figure 03).

4.1.3.2 Roundhouse Wall – Southern Section

The southern section of the roundhouse was situated 2.3m away from the southern end of the trench. As with the northern section, it comprised an inner facing [1008] and outer facing wall [1009], with an internal core (1004) (Plate 07). The overall width of the wall was 2.6m with a core width of 2.05m. The inner facing wall [1008] survived up to three courses high and was drystone constructed, with a slight radial curve leading into the trench edge and a set of tumbled stones positioned in front (1014) (Plate 08; Figure 03). The wall was constructed from field stones, with the addition of small wedge stones to keep some stones in place. The size of stones used were noticeably larger to those found on the northern section, with sizes ranging from 0.3m width x 0.3m height x 0.2m depth to 0.65m width x 0.4m height x 0.4m depth. The wall core was built from angular rough field stones and beach stones (Plate 07. The stones ranged from 0.1m to 0.35m in size and where mixed within a

loose mid-brown yellow silty sand.The outer facing wall [1009] was visible to a height of two courses and was drystone constructed with a mixture of dressed field stones and beach stones. Like the inner facing stones [1008], larger stones were used within the walls construction. The size of stones used varied from 0.3m in width x 0.3 height x 0.2m in depth to 0.65m in width x 0.5 height x 0.5m in depth. The outer wall mirrored the radial curve of the inner wall and was cut into the glacial horizon.

4.1.3.3 Wall Channel

Situated at the southern end of the trench and 0.5m away from the outer wall was a line of squat stones [1010] placed up on end in a linear pattern running parallel with the outer wall (Plate 09). The wall was sealed by windblown sand (1003) and was orientated east to west and built from rough angular field stone. The stones used varied in size between 0.2m in width x 0.5m height x 0.26m in depth to 0.5m in width x 0.55m height x 0.15 in depth, and appeared to form a drainage channel along the southern side of the roundhouse. The channel was filled with tumbled stones (1020) from the upper courses of the roundhouse wall that sealed a grey-brown clay-sand-silt (1015) layer. Context (1015) contained a small fragment of Roman Samian ware (Find No.1002; Figure 03).

4.1.3.4 Roundhouse Interior

The interior of the roundhouse was not fully exposed or excavated within the allotted timeframe, but a $1m^2$ sondage was excavated against the southern section of the roundhouse wall (Plate 10; Figure 04). The sondage contained two deposits beneath the windblown sand: a 0.22m thick mid-grey brown sandy clayey silt (1016) that sealed a mid to dark-greyish brown soft sandy clay of similar depth (1017) that was characterised by gravel inclusions. No artefacts were recovered from either context, but an ecofact sample was taken from the earlier deposit (Sample No. 1002).

4.1.4 Discussion

Trench 01 succeeded in identifying and characterising geophysical survey anomaly 19, confirming the location of a large well-preserved roundhouse. The roundhouse measured up to 13.2m in diameter and the surviving walls were between 3 to 4 courses high and 2.3m to 2.4m wide. This suggests a roundhouse substantial in size, with walls thicker than average, as contemporary roundhouses of northwest Wales have a diameter of between c.7.5m to 9m (Waddington, 2013: 32), with a wall thickness on average of 2m (Waddington, 2013: 57). The roundhouse in Trench 01 could potentially be the central house of the hillfort, due to its size, as is seen with other sites, e.g., the Meilionydd Late Bronze Age to Early Iron Age

double ringwork enclosure in Aberdaron, Gwynedd, which contained a large stone built central roundhouse surrounded by smaller roundhouses (Karl, R. and Waddington, K. 2011). A comparable arrangement is also seen at the Dinas hillfort (Bryngaer Dinas) in Llanfairfechan, which is classed as a small hillfort containing a central roundhouse with associated smaller circular structures surrounding (Waddington, 2013: 130). The stone channel alongside the southern end of the roundhouse was interpreted as a drain for rainwater from the roof and the presence of the Samian ware suggests continued use of hillfort into the Roman period. Occupational use and phasing could not be fully determined within the current evaluation/excavation programme but observations were made on the form of construction and the sourcing of raw materials. The walls used locally sourced stone from the coastline and the local fields, with the latter dressed as facing stones. The two deposits within the roundhouse interior (contexts (1016) and (1017)) were interpreted as post-abandonment layers associated with natural silting rather than occupation layers, but an ecofact sample was recovered from the earlier deposit to assist with further interpretation.

What was clear from the excavation was that both walls collapsed to the south, with the southern wall collapsing into the drainage channel. Subsequently, these were sealed by deposits of windblown sand. Accounts of storms within the area, leading to extensive sand inundation, include the documented storm of 1331 at Newborough on the western side of Anglesey (Ranwell, D.S. 1958). More recent studies on the dune systems of Aberffraw and Newbrough suggest later inundations were also significant, with luminescence analysis from the dune systems at Aberfraw confirmed that some of the sand inundation had a later date of 1760 AD (Bailey, S.D etal 2001) and analysis of the sand coverage at Newborough have been dated to 1859 and 1886 (Bristow, C. 2003). It is likely that the hillfort at Dinas Dinlle was inundated with windblown sand at different stages including from major storm events. Considering the distance between Dinas Dinlle and the western end of Anglesey, the sand which covered Aberffraw and Newborough could have contributed to the coverage which is seen at the Dinas Dinlle hillfort. The forthcoming results of the optically stimulated luminescence (OSL) dating undertaken by Aberystwyth University/CHERISH at Dinas Dinlle will assist further with this interpretation.

Michael Sion Lynes


243,660
243,670
356,360
356,350
356,340
(1013)
[1007]
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[1006]
1001
(1012)
(1017)
S1001
(1014)
[1008]
(1004)
[1009]
1002
(1015)
[1010]
Gwynedd Archaeological Trust
Figure 03: Trench 01 feature plan
[1001] Archaeological feature context number
N
S1001 Section with drawing number
Limit of excavation
Probe results
0 0.5 1 2
metres

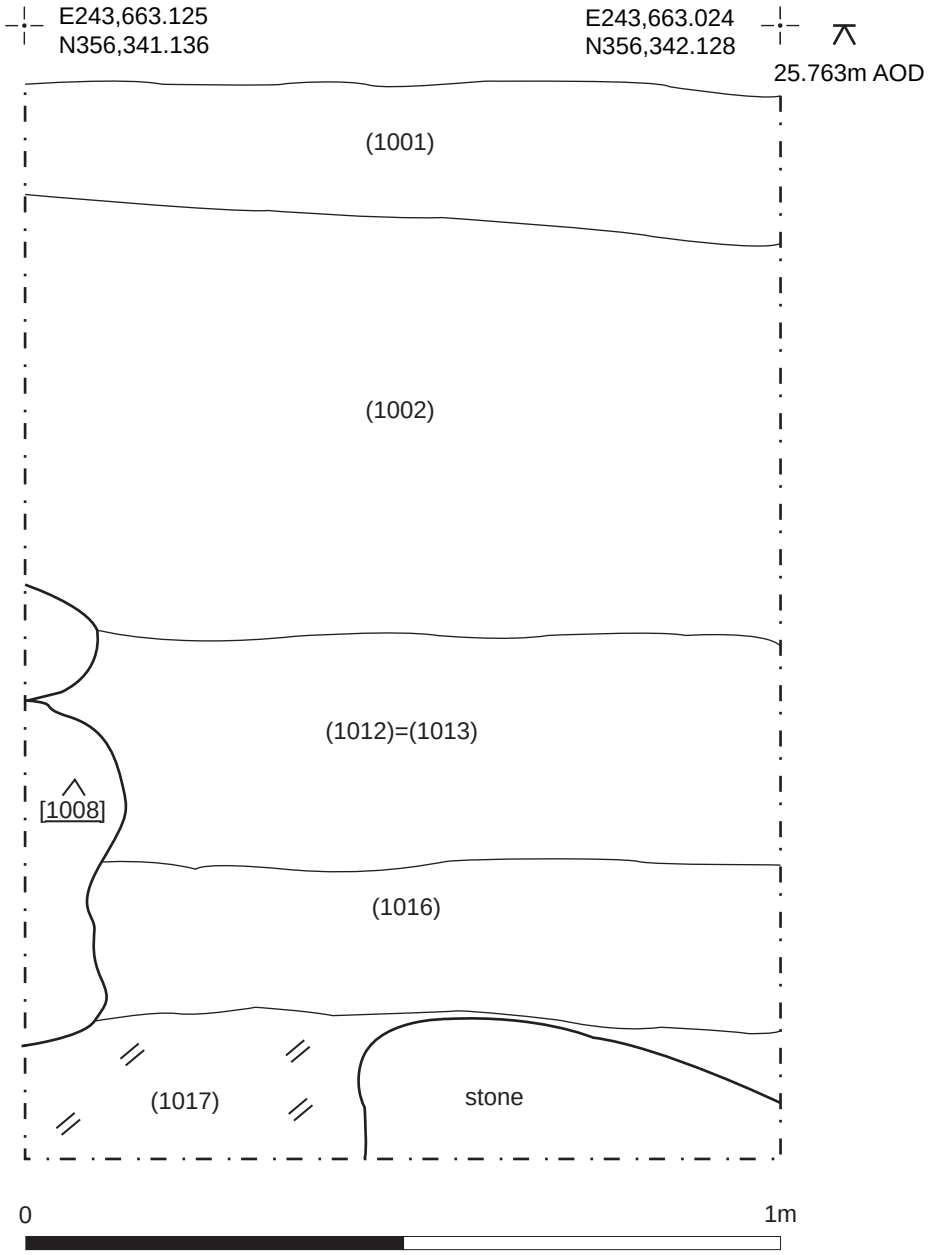

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Figure 04: East Facing Representative Section/Sondage of Trench 1

[1001] Archaeological context number

Stone

Clay

Limit of excavation

Date: 05/09/2019
Author: MSL
Office: GAT
Drawing: G2608/ SEC1001/REV01
Scale: 1:10@A4

Plate 01: Representative section of Trench 1; scale: 1x1m (archive reference: G2608_1073).

Plate 02: Inner face of southern wall of roundhouse; scale: 2x1m (archive reference: G2608_1080).

Plate 03: Northern round house wall; scale: 2x1m (archive reference: G2608_1077).

Plate 04: Northern round house wall; scale: 2x1m (archive reference: G2608_1045).

Plate 05: Outer face of northern round house wall; scale: 2x1m (archive reference: G2608_1043).

Plate 06: Inner face of northern round house wall; scale: 1x1m (archive reference: G2608_1047).

Plate 07: Southern roundhouse wall core; scale: 2x1m (archive reference: G2608_1054).

Plate 08: Inner face of southern round house wall; scale: 1x1m (archive reference: G2608_1050).

Plate 09: Drainage channel adjacent to southern roundhouse wall; scale: 2x1m (archive reference: G2608_1083).

Plate 10: Sondage against inner face of southern roundhouse wall; scale: 2x1m (archive reference: G2608_1081).

4.2 Trench 02

4.2.1 Introduction

Trench 02 was located to investigate and characterise geophysical survey anomaly 20, comprising two curvilinear anomalies interpreted as possible roundhouses. The trench was located between 10m and 15m from the cliff edge, at a height of between 24.00 to 25.00m AOD and orientated north-south (Plate 11; Figures 01, 02 and 05).

4.2.2 Overview

Trench 02 contained 25 contexts (Appendix III), including deposits of windblown sand and possible settlement activity. The topsoil (2001) consisted of 0.25m deep brown silty sand with rare well-rounded pebble inclusions and rooting throughout. Below this layer, two windblown sand deposits were present: the uppermost deposit (2002) was 0.3m deep, yellowish-brown in colour with rare pebble stone inclusions; the lower deposit (2005) was 0.35m deep, mid orange brown with a moderate amount of rounded and sub rounded pebble inclusions running throughout the layer. The windblown sand deposits (2002) and (2005) sealed a variety of archaeological deposits, including a possible roundhouse wall [2007] and associated deposits, wall tumble and various isolated features positioned to the exterior of the roundhouse wall; an isolated layer (2003) of gritty brownish silty sand, 0.27m thick, was also identified that sealed a 0.15m thick linear stone deposit (2004) [Plate 12]. Two sondages (ref.: 2.1 and 2.2) were placed either side of the possible roundhouse wall [2007], one on the northern side and one on the southern side, both against the eastern baulk. Both sondages were placed to identify depth and composition of deposits present on opposite sides of the roundhouse wall.

4.2.3 Archaeological features

4.2.3.1 Wall

A possible stone built wall (2004) ran east to west across the very southern end of the trench where the ground rose towards the rampart (Plate 12). The feature measured 1.9m wide and 0.15m deep and was sealed by a layer of gritty brown silty sand (2003). The feature comprised a mixture of beach and rough field stones that ranged between 0.15 to 0.35m in length. No artefacts were recovered and the feature was interpreted as modern as it was very high up within the sand matrix. Function was undetermined.

4.2.3.2 Roundhouse

A possible roundhouse wall [2007] was identified beneath a deposit of windblown sand. The wall was aligned east to west across the centre of the trench and measured 3.8m in length, with an estimated width of 1.0m (the actual width could not be established due to the presence of tumble). The wall was constructed from a mixture of sub-angular to well-rounded beach and rough field stones that measured between 0.10m and 0.53m in length. The wall included a rubble core of smaller stones and a facing wall of larger stones, with stones measuring between 0.30m to 0.53m in length. The tumble obscured the north-facing outer wall (Plate 13), whilst the facing stones on the south-facing inner wall included evidence of robbing, with empty pockets suggesting stones removed. Heat affected stones were also identified on the inner wall and tumble, suggesting localised burning post-demolition.

4.2.3.3 Depositional Activity

To the north of the roundhouse wall, the windblown sand (2005) sealed a diffuse layer (2010) of 0.33m thick brown silty sand that darkened with depth [Plate 14]. This layer contained sherds of possible Roman coarse ware [Find Nos. 2004, 2007, and 2008] and a single sherd of black burnished ware with evidence of lattice decoration [Find No. 2005]. A possible lead trade weight was also recovered [Find No. 2006]. Heat affected stones, similar to those on the roundhouse wall and tumble, were also identified. To the south of the stone built linear feature, the windblown sand sealed a layer of 0.24m thick dark brown silty sand (2009) that contained occasional small to medium sub-angular and well-rounded stones. Flecks of charcoal and burnt clay or daub were also identified, especially towards the base of the deposit.

4.2.3.4 Sondage 2.1

Sondage 2.1 was located towards the centre of the trench to investigate the deposits north of the roundhouse wall. A 0.36m thick deposit of dark brown sand (2006) was identified beneath the windblown sand, which contained frequent small to medium sized sub angular and rounded stones that were poorly sorted but were consistently found throughout the layer (Figure 06; Plate 15). Four sherds of possible Roman coarse ware were recovered [Find Nos. 2003 and 2013] and an ecofact sample was recovered for dating and interpretation [Sample No. 2001]. This deposit sealed a friable sand layer as well as three features: [2022], [2024] and [2018]. Context [2022] was a shallow linear ditch orientated east-northeast to west-southwest that measured 0.50m wide and 0.20m deep. The ditch contained a single fill of greyish brown silty sand with occasional sub-rounded stones (2023), which included a ferrous metal object shaped like a hammer head [Find No. 2009]; the fill was interpreted as natural silting; the ditch cut [2024]. Context [2018] was a possible pit located on the south end of the sondage; the pit measured 0.4m wide and 0.32m deep and had sharply sloping sides and a rounded base [Plate 16]. The pit contained two fills: a lower fill (2019) consisting of brownish grey clayey sand with occasional sub-rounded to well-rounded stones and small charcoal flecks; an upper fill (2020) of clean yellowish brown silty sand had the occasional small sub-rounded stones. The pit fills were interpreted as natural silting; no artefacts were recovered, but an ecofact sample was taken for possible dating (Sample No. 2002). The pit cut into a subsoil (2017) and the glacial horizon (2021). Context [2024] was a shallow pit, which was cut into by ditch [2022] and measured 0.2m wide and 0.15m deep, with gradually sloping concave sides and a flat base. The pit had a single fill of greyish brown silty sand (2025) indicative of natural silting. The pit cut into a subsoil (2017) and the glacial horizon (2021); no artefacts were recovered. Context (2017) was interpreted as a buried subsoil, 0.15m deep, which comprised yellowish brown sand and was cut by [2022] and [2024]. The layer was clean with occasional unsorted small sub rounded stones; no artefacts were recovered from this layer. This deposit sealed the glacial horizon, (2021), which was identified as yellowish brown sandy clay.

4.2.3.5 Sondage 2.2

Sondage 2.2 was located at the southern end of the trench, to the immediate south of the roundhouse wall [2007]. A 0.24m thick mid to dark brown sand deposit (2012) was identified beneath the windblown sand, which had few inclusions with occasional small pebbles (Figure 07). The layer darkened with depth and had a diffuse interface that sealed a deposit of brown sand/dispersed stones up to 0.20m in length, context (2013); the stones were a mixture of unsorted sub angular with some rounded and occasional angular stones. Further

investigation is required to determine the exact relationship between (2013) and (2012) and [2007]; the initial interpretation was that these deposits abutted the linear feature and were later activity. Context (2013) sealed a cut feature [2014] that continued beneath the roundhouse wall. Context [2014] was a possible pit that measured 0.90m wide and 0.30m deep and contained an upper lens of gravel (2011) [Plate 17] and a lower fill (2015) of dark brown sand mixed with a dense amount of rounded and angular stones up to 0.30m in length. The stones showed signs of being heat fractured and flecks of burnt clay or daub were occasionally observed within the matrix, but not in the same quantity and density as seen in the occupation layer (2016). Large flat pieces of slate and other large stones appeared to be intentionally laid out at the base of the cut [Plate 18]. The pit cut into a buried soil (2016) and also continued beneath the stone built linear feature. It was likely that the pit was intentionally backfilled, prior to the construction of the roundhouse wall. Context (2016) was a deposit of dark sand with occasional angular stones and a high density of fine charcoal and flecks of burnt clay. The deposit was interpreted as an occupation layer (Plate 18) that sealed an earlier subsoil (2026) and was covered by (2013). It is suggested that this is likely to be an occupation layer. The full depth and extent of the deposit was not determined within the confines of the sondage; an ecofact sample was recovered for dating and interpretation (Sample No. 2003).

4.2.4 Discussion

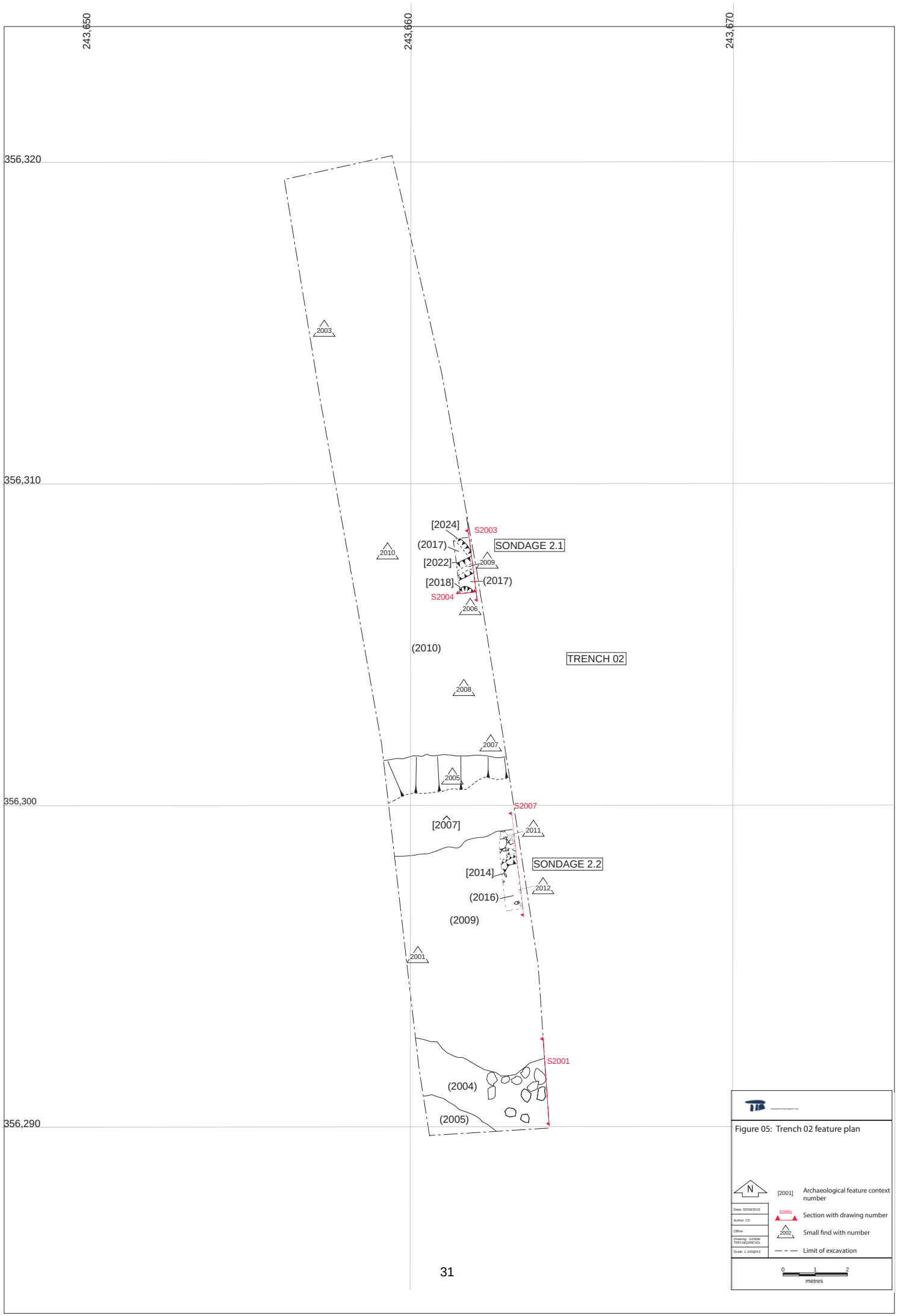
Trench 02 succeeded in characterising the southern part of geophysical anomaly 20; the northern curvilinear geophysical anomaly, which may represent a continuation of the roundhouse wall, was not identified but may exist at a greater depth than excavated.The stone linear identified as (2004) appears likely to be a more recent, modern event as a possible result of landscaping for the golf course established on the hillfort in the 20th century, or it may also have been a sheepfold. Whilst the main structure in Trench 02 was not fully excavated, the composition and appearance of wall [2007] was highly indicative of a roundhouse, due to the presence of large facing stones and a rubble core, which was similar to both the activity in Trench 01 to the north, as well as roundhouse walls at other sites (Waddington 2013), including Cefn Du, Ynys Môn (Cuttler et al. 2012, 11).The deposits in sondage 2.2, particularly context (2016), which contained fine charcoal and burnt clay, are consistent with occupation layers found elsewhere (Ibid.) and indicative of Iron Age occupation. The appearance of context (2016) as well as the subsequent deposits (2013) and (2015) could indicate that the roundhouse had a terraced interior; this is further substantiated by the south facing side being stepped and at a higher ground (2009) compared to the north facing side of the roundhouse wall where the side gradually gives way to a lower lying surface (2010). A pit found within the roundhouse interior [2014] may be

interpreted as belonging to the same construction phase as the roundhouse wall. This was suggested by the appearance of burnt clay and charcoal flecks within the fill and also by the presence of large stones, including a piece of slate discovered at the base of the pit, which could be interpreted as a post pad for the structural support (Waddington 2013, 57-58). The north side of the roundhouse [2007], where the tumble slopes down gradually onto lower ground (2010), is likely to be the exterior of the roundhouse and pits [2024], [2018] and shallow ditch [2022], all sealed by a layer of buried soil (2006), are likely be contemporary with the occupation of the roundhouse. This is further suggested by the presence of the possible hammer head that was recovered from the ditch [2022].

It appears that after a period of disuse and abandonment, the roundhouse partially collapsed and was sealed over an extensive period by layers of windblown sand, as represented by (2002) and (2005).

Whilst Trench 02 partially identified a roundhouse and associated features, it was not possible to establish a full stratigraphic sequence for the deposits and features, or the full extent and construction of the southern roundhouse wall [2007]. Further excavation will be required to fully establish a sequence as well as the extent of the roundhouse.

Carolina Ferreira


243,650
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356,300
356,290
2003
2010
[2024]
S2003
(2017)
SONDAGE 2.1
2009
[2022]
[2018]
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S2004
2006
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TRENCH 02
2008
2007
2005
S2007
[2007]
2011
SONDAGE 2.2
[2014]
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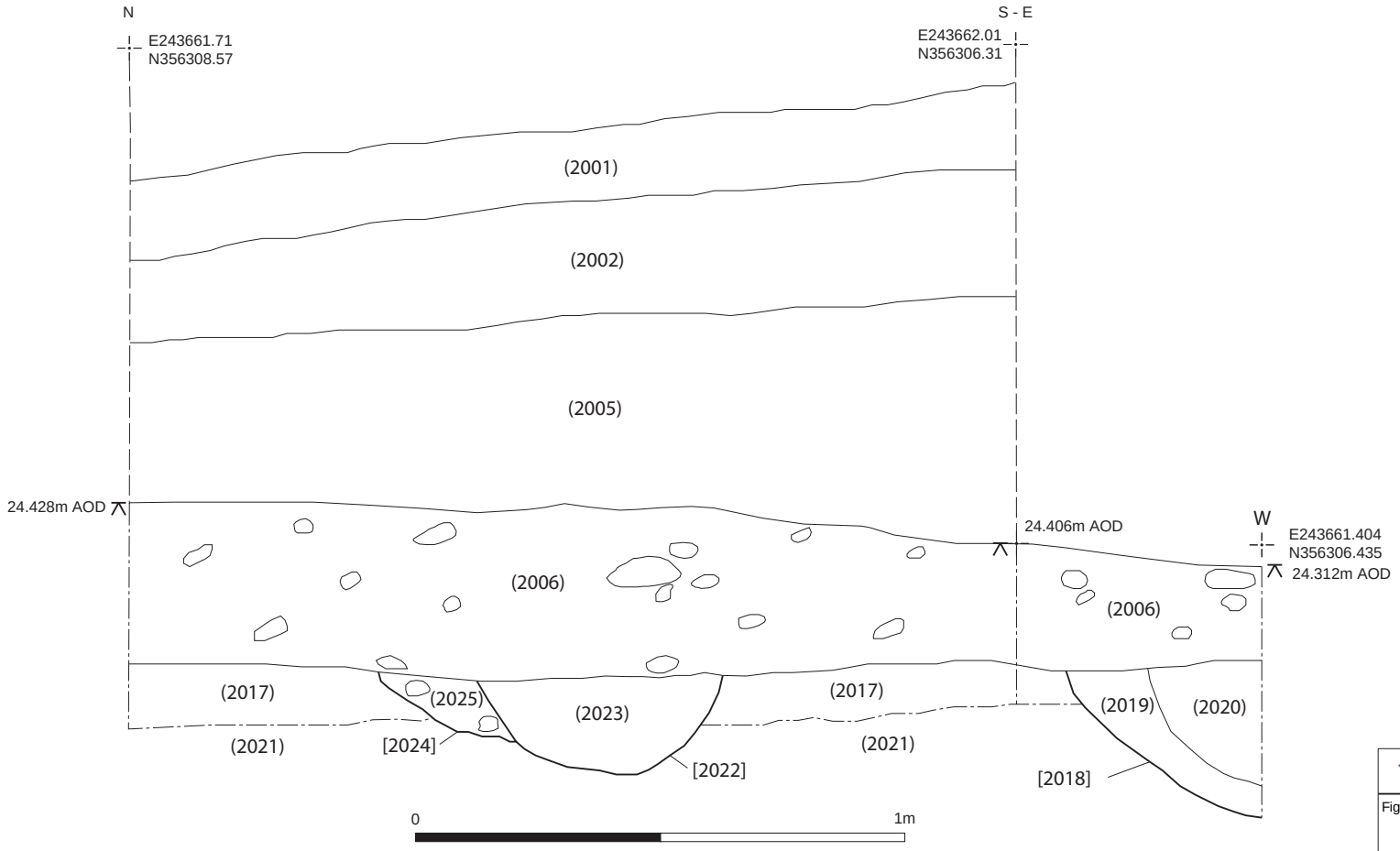
(2016)
(2009)
2001
S2001
(2004)
(2005)
Figure 05: Trench 02 feature plan
N
[2001] Archaeological feature context number
S2001 Section with drawing number
2002 Small find with number
Limit of excavation
Date: 02/09/2019
Author: CF
Office:
Drawing: G20030 TRPLN02REV01
Scale: 1:100@A3
0 1 2
metres

Figure 06: Section 2003, W facing section of pit [2022] and ditch [2024], and N facing section of pit [2018] in ondage 2.1

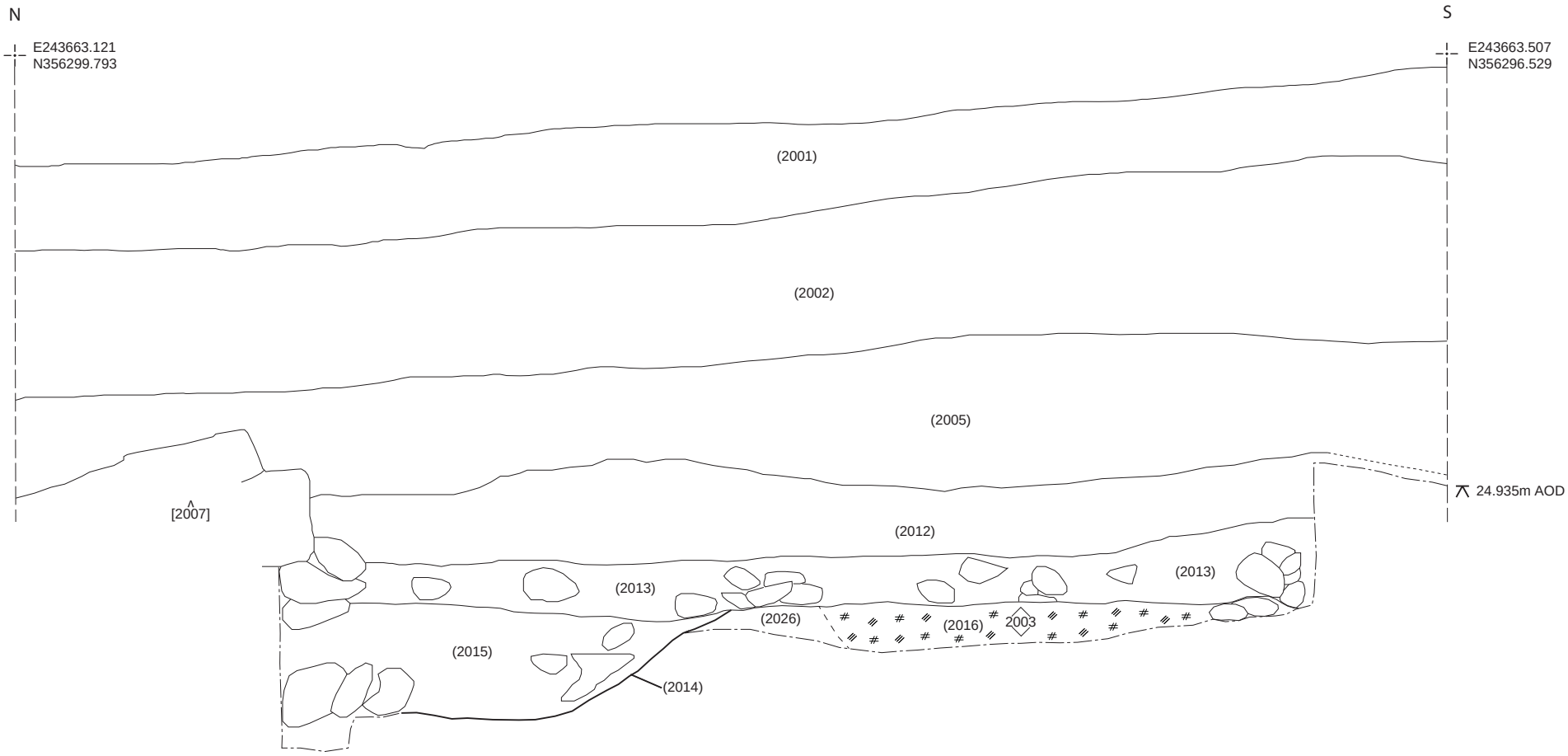


Gwynedd Archaeological Trust

Figure 06: W facing section of pit [2022] and ditch [2024], and N facing section of pit [2018] in Sondage 2.1

Date: 04/09/2019
Author: CF
Office:
Drawing: G2608/SEC2003/REV0
Scale: 1:10@A3

Stones
[2001] Archaeological context number
Limit of excavation



Gwynedd Archaeological Trust

Figure 07: Section 2006, W facing section of Pit 2014 and Sondage 2.2

Burnt Clay

Charcoal

Stones

[2001] Archaeological context number

Limit of excavation

Date: 04/09/2019	
Author: CF	
Office:	
Drawing: G2600/SEC2006/REV0	
Scale: 1:10@A3	

Plate 11: Post-machining plan shot of Trench 02; scale: 2x1m (archive reference: G2806_1003).

Plate 12: Plan shot of stone linear (2004), view from SE; scale: 2x1m (archive reference: G2806_1024).

Plate 13: Oblique shot of tumble from roundhouse wall [2007]; scale: 2x1m (archive reference: G2806_1032).

Plate 14: Oblique shot of layer (2010) north of roundhouse wall [2007]; scale: 2x1m (archive reference: G2806_1034).

Plate 15: Sondage 2.1; scale: 1x1m (archive reference: G2806_1088).

Plate 16: Possible pit [2018] in sondage 2.1; scale: 1x1m (archive reference: G2806_1076).

Plate 17: Upper lens of gravel (2011) in posible pit [2014]; scale: 1x1m (archive reference: G2806_1058).

Plate 18: Stones and slate in the base of possible pit [2014] and occupation layer (2016); scale: 1x1m (archive reference: G2806_1066).

4.3 Trench 03

4.3.1 Introduction

Trench 03 was located to investigate and characterise geophysical anomaly 32, one of a series of diffuse curvilinear features which were thought to be the ploughed-out remains of Iron Age or Medieval field boundaries or the result of natural changes (Figures 01, 02 and 08).

4.3.2 Overview

Trench 03 was located at the northern end of Excavation Area 02 on ground which sloped gently in both a north-south and east-west direction at a height of between 8.50m and 10.30m AOD. No archaeological features were noted above ground prior to excavation (Plate 19 and Plate 20). The uppermost deposit in the trench consisted of a 0.1m deep slightly greyish brown silty sand topsoil horizon (3001), which sealed a 0.26m deep slightly greyish brown silty sand ploughsoil deposit (3002); both deposits were present throughout the trench. Beneath the ploughsoil, a deposit of orangey brown slightly silty sand (3003) extended for approximately 3.5m from the western end of the trench. A small sondage measuring 1m x 0.5m was excavated at the western end of the trench to determine the depth of deposit (3003), confirming it was 0.1m deep. Below this was dark orangey brown sandy silt with charcoal flecks and abundant sub-angular pebbles and occasional sub-angular cobbles (3004), which appeared to be a buried soil, similar to deposit (4005), identified in Trench 04. A depth of 0.55m was reached in the sondage which had then become too narrow to allow deeper excavation; a tracked excavator was used to reduce the ground level at the western end of the trench. The ground reduction incorporated a slope to allow access to the deepest part of the excavation; consequently, the full depth of the lower deposits were limited to a 5.00m section of the trench. The buried soil (3004) had a maximum depth of 0.55m and extended 11.5m east gradually reducing in depth to 0.05m before tapering away altogether. The buried soil sealed (3006) which comprised firm, dark greyish brown slightly silty clay with sub-angular and sub-rounded cobble inclusions and a depth of between 0.22m, approximately 0.80m below the current ground surface; this deposit sealed a glacial orange clay (3007) which was identified at a depth of 1.02m (Plate 21; Figure 09.1). Towards the middle of the trench, beneath an orange brown sand deposit (3008 = 3003), a stony spread of sub-angular cobbles and sub-angular pebbles within a greyish brown silty sand matrix was identified (3005), located 9.7m from the western end of the trench (Plate 22; Figure 09.2). The stony spread was approximately 2.5m wide and was aligned southwest-northeast across the trench. A sondage measuring 1m wide by 4m long was excavated against the northern baulk to determine the depth of (3005) which proved to

be between 0.15m and 0.2m deep (Figure 10), followed by the glacial horizon ((3007); Figure 09.2). At the eastern end of the trench, a yellow sand (3009) was identified beneath (3008 = 3003) (Plates 23 and 24; Figure 09.2), which was interpreted as a windblown sand. A small sondage was excavated through this deposit, which confirmed it sealed a glacial horizon, (3010).

4.3.3 Discussion

Trench 03 appears to have been successful in identifying geophysical anomaly 32 as the location of stony deposit (3005). Whether this could be the remains of a former field boundary or a very rough track associated with the hillfort could be considered, however, given the limited nature of the evaluation trench and a lack of artefacts and dating evidence, there is also the possibility that (3005) may be a glacial deposit or a geological anomaly.

Other than two fragments of modern glass recovered from (3002) there were no artefacts within the trench; however, ecofact samples taken from (3004) (Sample No. 3001) may provide dating evidence for the buried soil and assist with further interpretation. No evidence of field boundaries or other agricultural activity was identified within the evaluation trench, therefore no explanation of the nature and function of this deposit can be made.

Shallow deposits of windblown sand were present beneath the ploughsoil, a single deposit (3003) above the buried soil at the western end, and two different deposits (3008) and (3009) at the eastern end.

Anne Marie Oattes

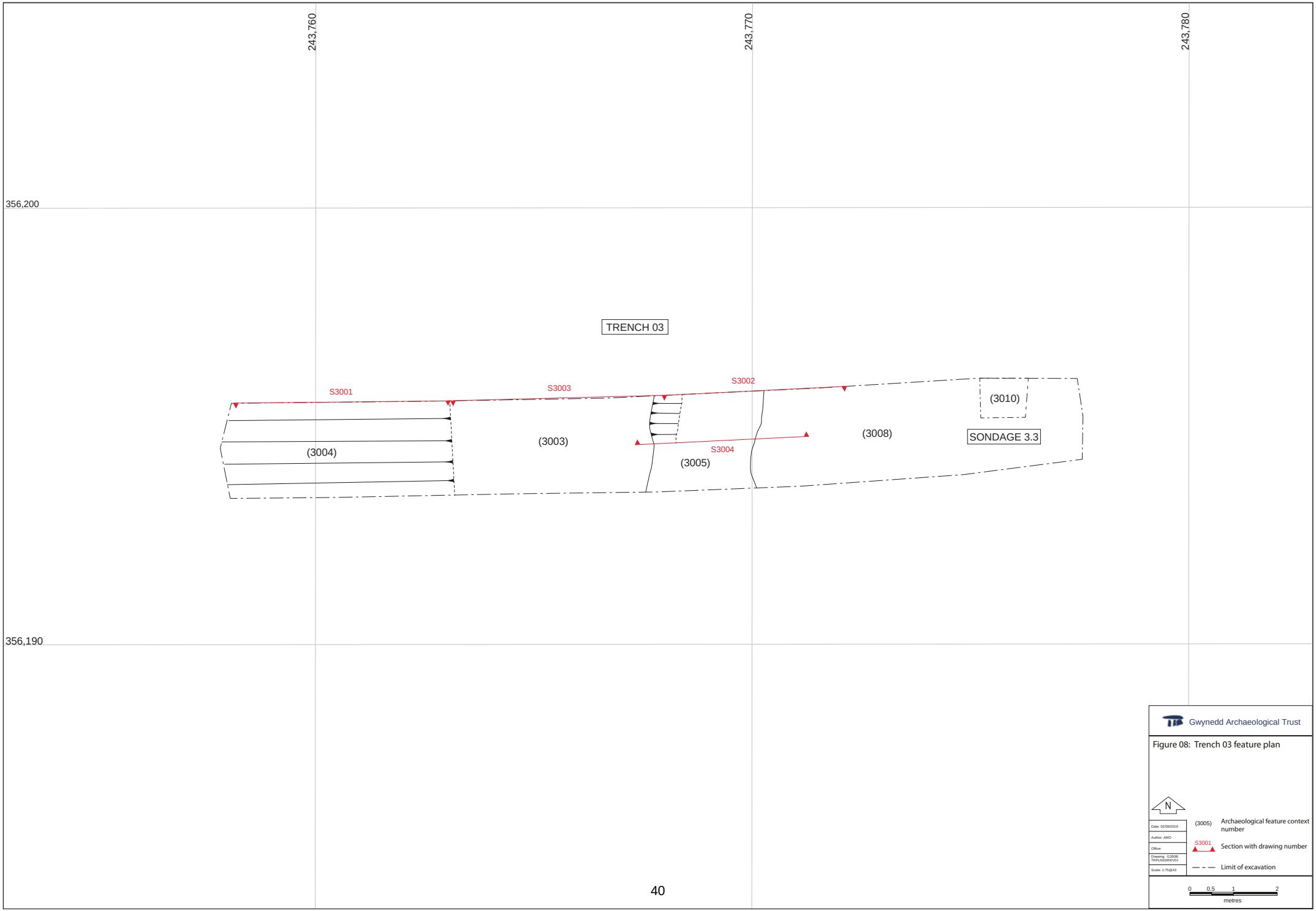

243,760
243,770
243,780
356,200
356,190
TRENCH 03
S3001
S3003
S3002
S3004
(3004)
(3003)
(3005)
(3008)
(3010)
SONDAGE 3.3
Gwynedd Archaeological Trust
Figure 08: Trench 03 feature plan
N
(3005) Archaeological feature context number
S3001 Section with drawing number
Limit of excavation
0 0.5 1 2
metres

Figure 09.1: Section 3002, South facing section of baulk

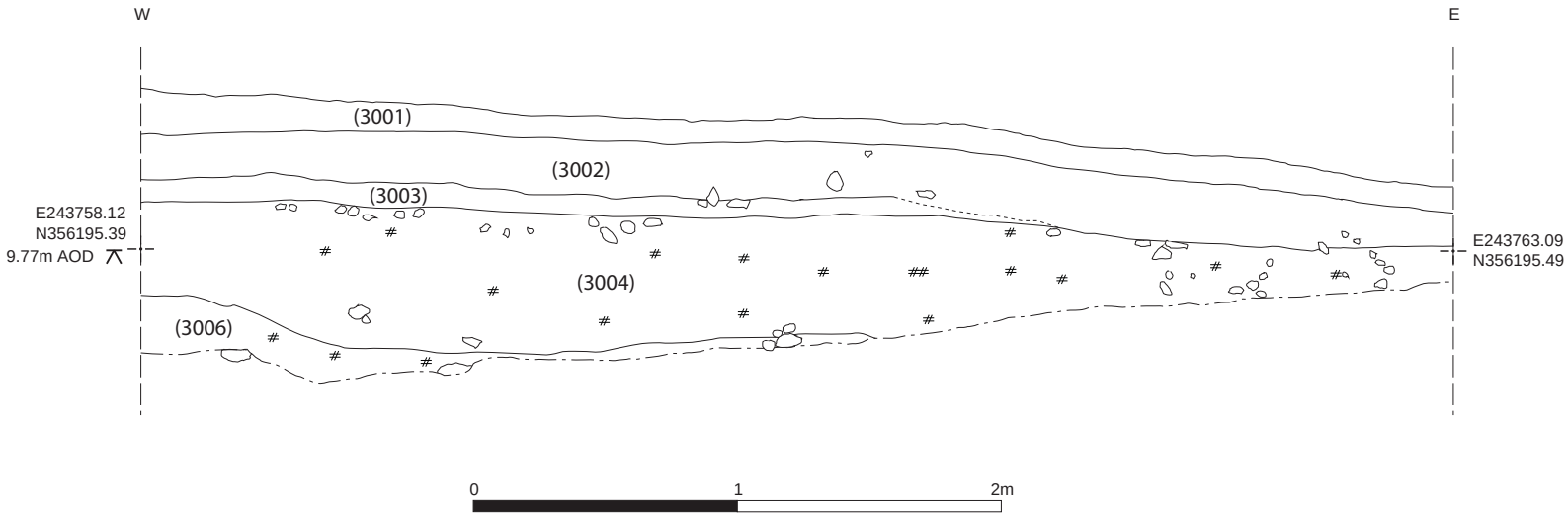
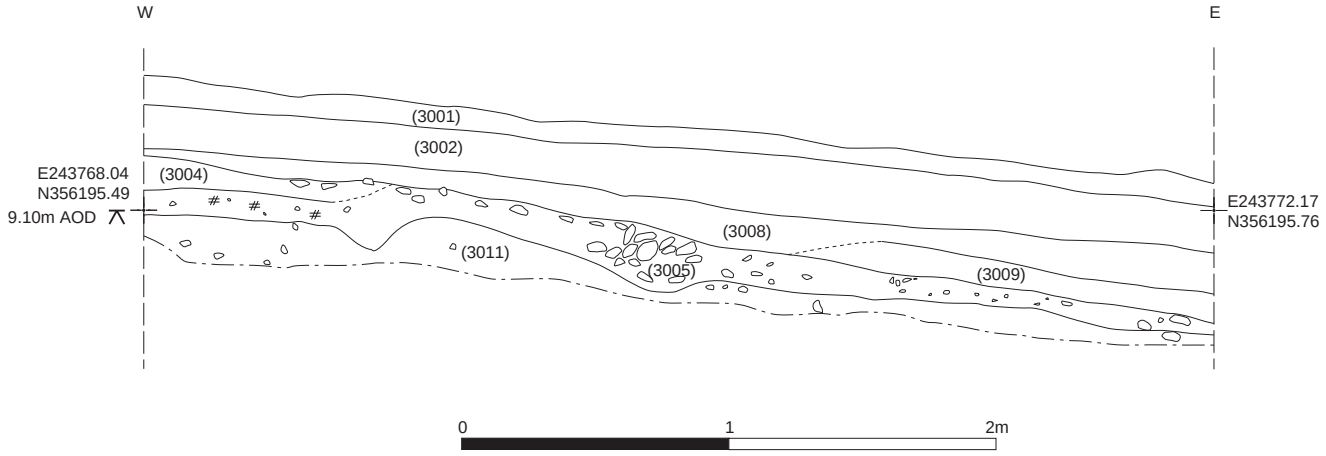


Figure 09.2: Section 3001, South facing section of baulk

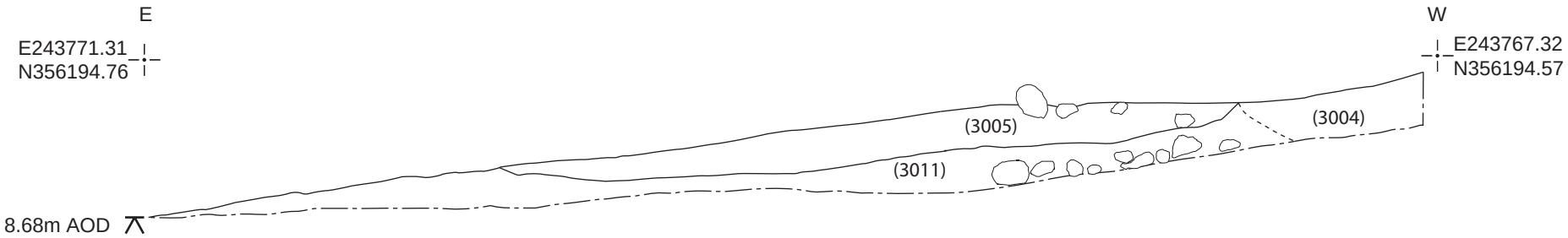


Gwynedd Archaeological Trust

Figure 09: Section 3002, South facing section of baulk and Section 3001, South facing section of baulk

Date: 02/09/2019
Author: AMO
Office:
Drawing: G2630/SEC3002/REV01
Scale: 1:20@A4

[3014] Archaeological context number
Charcoal
Stone
Limit of excavation



Gwynedd Archaeological Trust

Figure 10: Section 3004, North facing section through (3005) & (3011)

Date: 20/09/2019	
Author: AMO	
Office:	
Drawing: G2608/SEC3005	
Scale: 1:20@A4	

[3017] Archaeological context number

Stone

Limit of excavation

Plate 19: Trench 03 pre-excavation, viewed from the east; scale: 2x1m (archive reference: G2608_2035).

Plate 20: Trench 03 pre-excavation viewed from the west; scale: 2x1m (archive reference: G2608_2036).

Plate 21: Trench 03 west end showing depth of (3004); scale: 1x1m (archive reference: G2608_2083).

Plate 22: Trench 03 showing depth of (3005); scale: 1x1m (archive reference: G2608_2152).

Plate 23: Trench 03 south facing section; scale: 1x1m & 1x0.5m (archive reference: G2608_2041).

Plate 24: Trench 03 south facing section of baulk and (3005); scale: 1x1m (archive reference: G2608_2157).

4.4 Trench 04

4.4.1 Introduction

Trench 04 was located to investigate and characterise geophysical survey anomaly 38, which was interpreted as either the result of natural changes in the natural boulder clay either during its initial deposition of a result of dune formations and blow-outs, or it may be ploughed down remnants of a field system contemporary with the fort (Figures 01, 02 and 11).

4.4.2 Overview

Trench 04 was located centrally in Excavation Area 02, on ground that sloped from west to east at a height of between 7.36m – 6.02 m AOD. No above-ground traces of archaeological features were noted prior to excavation (Plates 25 and 26). The uppermost deposit in the trench consisted of a 0.15m deep slightly greyish brown silty sand topsoil horizon (4001). This sealed a 0.34m medium slightly greyish brown silty sand soil (4002) that included a small iron object (Small Find 4001). A deposit of medium orangey-yellow windblown sand (4004) was encountered below the soil. It extended along two thirds the length of the trench at an average depth of 0.28m below the ground surface and petered out roughly 3m from the eastern end of the trench.

Below the windblown sand was a deposit of medium brown ploughsoil (4005) lying at a depth of 0.5m. This deposit was similar to (3004) in Trench 03. Two sondages, 4.1 and 4.2, were excavated through (4005) to confirm depth, which was recorded as was 0.15m deep in Sondage 4.1 (Figure 12) and 0.17m deep in Sondage 4.2 (Plate 27) respectively. The ploughsoil sealed a layer of orange clay with charcoal inclusions (4015) which bore a very close resemblance to a similar deposit in Trench 03, (3007). The full extent of this deposit was not encountered or excavated within the current evaluation/excavation stage. The glacial horizon (4003), visible as yellow clay, was identified at depth of 0.65m at the western end of the trench.

4.4.3 Archaeological Features

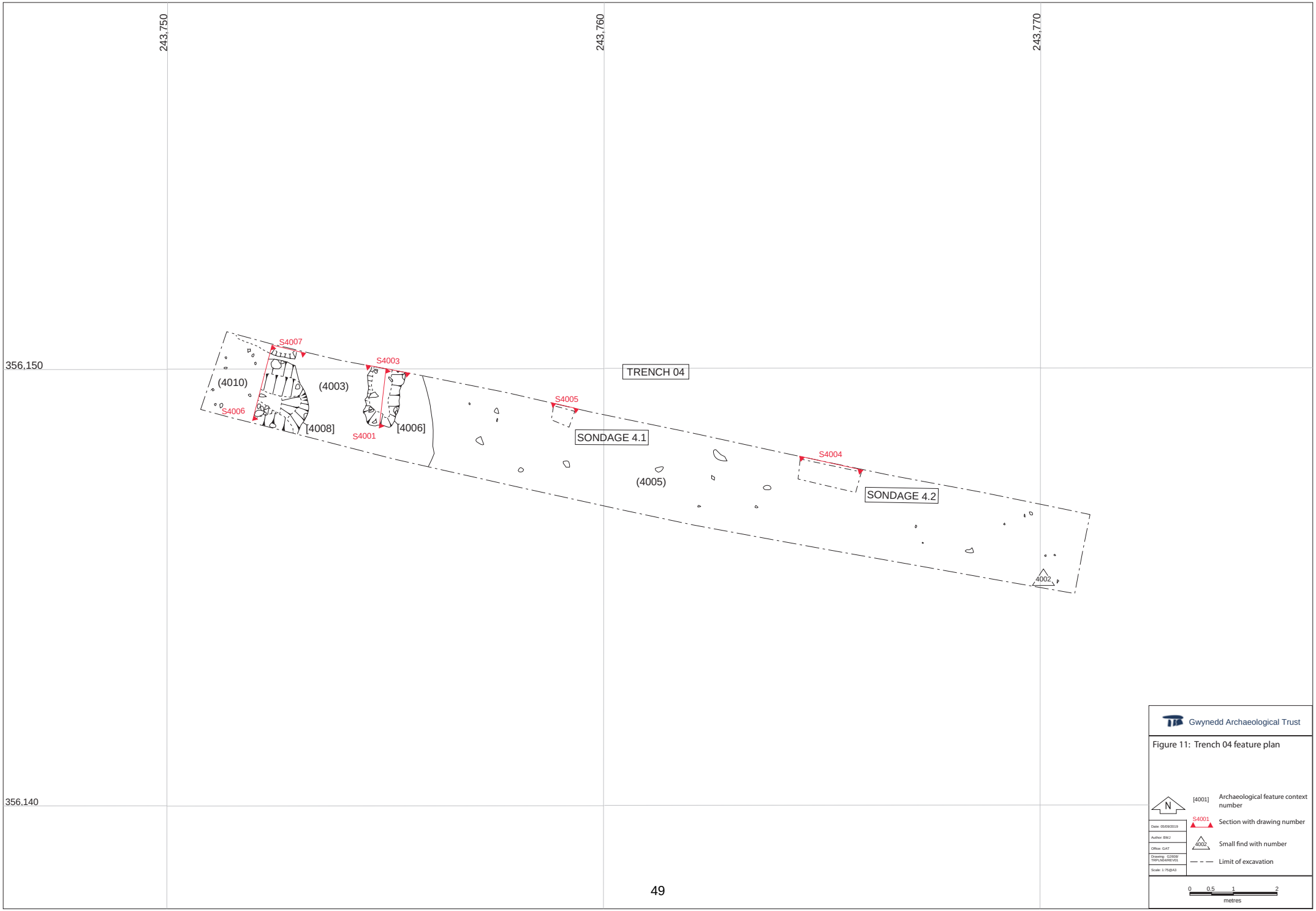
All of the features identified within Trench 04 were sealed by either the windblown sand (4004), or the buried ploughsoil (4005). The ploughsoil contained 2 artefacts: a piece of post-medieval blue glass (Small Find No. 4002), similar to a piece recovered from Trench 05, and a plough-struck piece of flint (Find No. 4005).

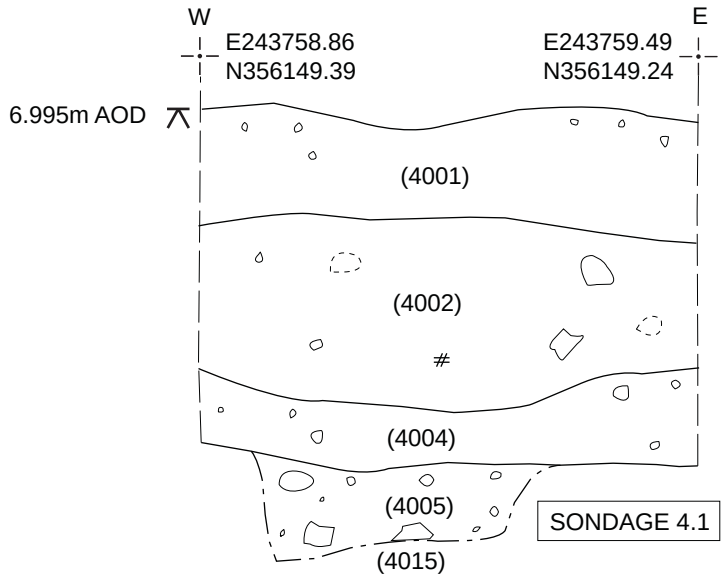
A sub-linear feature, [4008], was identified at the eastern end of the trench, orientated northeast to southwest that was subsequently interpreted as an elongated pit (Plate 28; Figure 13.1). The pit had a narrow u-shaped base and measured 2.3m in length 1.63m in width and 0.54m in depth. The pit contained two fills (Plate 29): the primary fill, (4009), was 0.42m thick and consisted of a loose medium orange silty-sandy clay with frequent sub-angular stone inclusions and infrequent charcoal; the secondary fill, (4010), was 0.12m thick and consisted of a medium brown sandy-silty clay with frequent sub-angular stones and cobbles. Three sherds of medieval pottery were recovered from the secondary fill (Find No. 4005; Plate 30) and an ecofact sample (Sample No. 4002) taken from this deposit for dating and interpretation. The pit truncated two earlier features, [4012] and [4013]. Linear feature [4012] was not fully exposed within the trench, but the visible dimensions were 0.5m in width and 0.38m in depth; the feature had a v-shaped profile, and contained a single fill (4011), which consisted of a very loose dark brown soil with very frequent large cobblestones, up to 0.12m x 0.25m in size, and with frequent charcoal flecks. An ecofact sample (Sample No. 4003) was taken for dating and interpretation. The feature cut into the glacial horizon. Adjacent to feature [4008] was linear [4013] (Figure 13.2; Plates 31 and 32), which was characterised by steep sides and a flat base, and measured 0.53m in width and 0.26m in depth; the feature continued beyond the trench edge and length could not be determined. The feature contained a single fill (4014), which consisted of a loose yellow sandy fill with very sparse inclusions bar the odd sub-rounded small stone. The feature cut into the glacial horizon. A sub-linear feature, [4006], was cut into glacial horizon, c.2m east of pit [4008] (Plate 33; Figure 14). The feature included a terminal end and extended from the northern edge of the trench for a length of 1.25m and measured 0.63m in width and up to 0.30m in depth. The feature had shallow sides at the eastern edge and a sharp to vertical edge on the western end, the terminus break of slope was concave with an undulating base (Plate 34). The single fill, (4007), was a medium yellow orange sand with angular stones and charcoal. An ecofact sample (Sample No. 4001) was taken for dating and interpretation. The feature cut into the glacial horizon.

4.4.4 Discussion

Trench 04 targeted geophysical anomaly 38, which was interpreted as either the result of natural changes in the natural boulder clay either during its initial deposition or a result of dune formations and blow-outs, or it may be ploughed down remnants of a field system contemporary with the fort (Hopewell, 2018). The results suggested evidence for both interpretations, with the presence of windblown sand indicative of dune formations and the presence of archaeological activity possibly contemporary with the fort. Specialist post-excavation assessment of possible medieval coarse ware sherds recovered from pit [4008] as well as the ecofact samples from should provide further information regarding the nature of the archaeological features encountered in the trench.

Bethan Jones


243,750
243,760
243,770
356,150
356,140
TRENCH 04
SONDAGE 4.1
SONDAGE 4.2
S4007
S4003
S4005
S4004
S4006
S4001
(4010)
(4003)
[4008]
[4006]
(4005)
4002
N
[4001] Archaeological feature context number
S4001 Section with drawing number
4002 Small find with number
Limit of excavation
0 0.5 1 2
metres
Gwynedd Archaeological Trust
Figure 11: Trench 04 feature plan



Gwynedd Archaeological Trust

Figure 12: Section 4005, South facing representative section of Sondage 4.1

[4004] Archaeological context number

Stone void

Stone

Charcoal

Limit of excavation

Date: 05/09/2019

Author: BMJ

Office: GAT

Drawing: G2608/SEC6007/REV01

Scale: 1:10@A4

Figure 13.1: Section 4006, E facing section through features [4008] , [4012] and [4013]

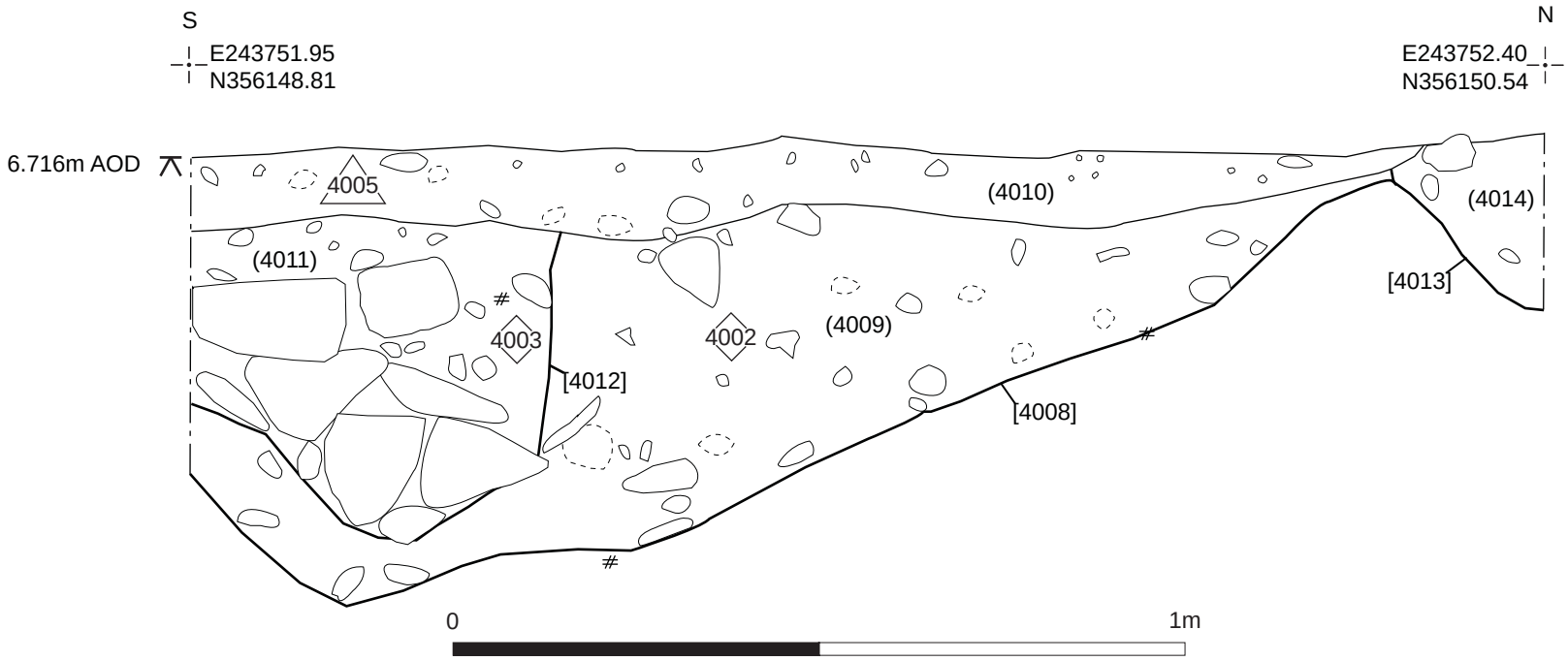
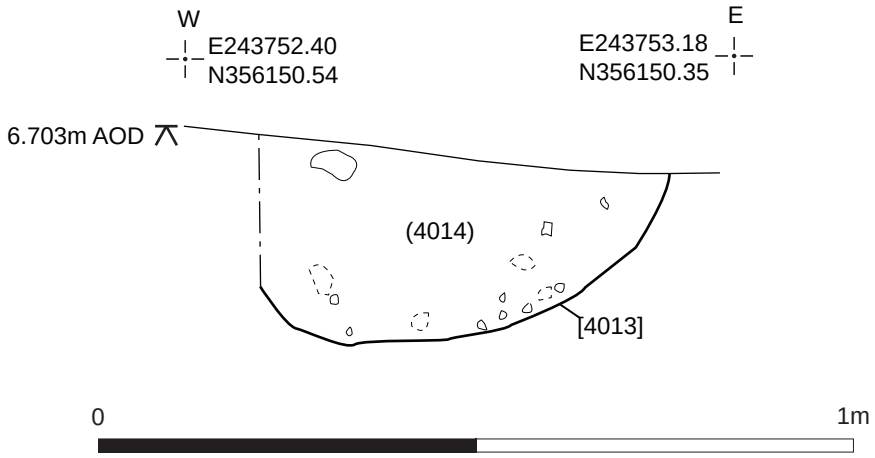


Figure 13.2: Section 4007, S facing section through feature [4013]



Gwynedd Archaeological Trust

Figure 13: Section 4006, E facing section through features [4008] , [4012] and [4013] and section 4007 through feature [4013]

[4004] Archaeological context number
Stone void
Stone
Charcoal
4004 Small Find
4004 Environmental sample
Limit of excavation

Date: 05/09/2019	
Author: BMJ	
Office: GAT	
Drawing: G2608/ SEC6007/REV01	
Scale: 1:10@A4	

Figure 14.1: Section 4001, E facing section of terminus [4006]

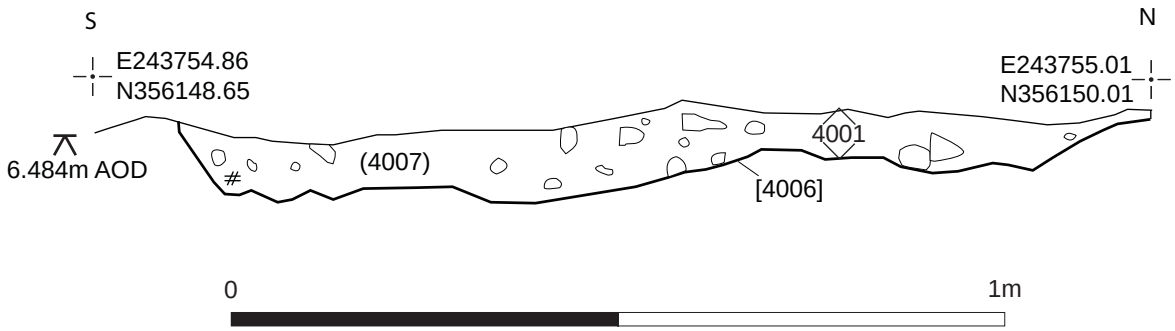
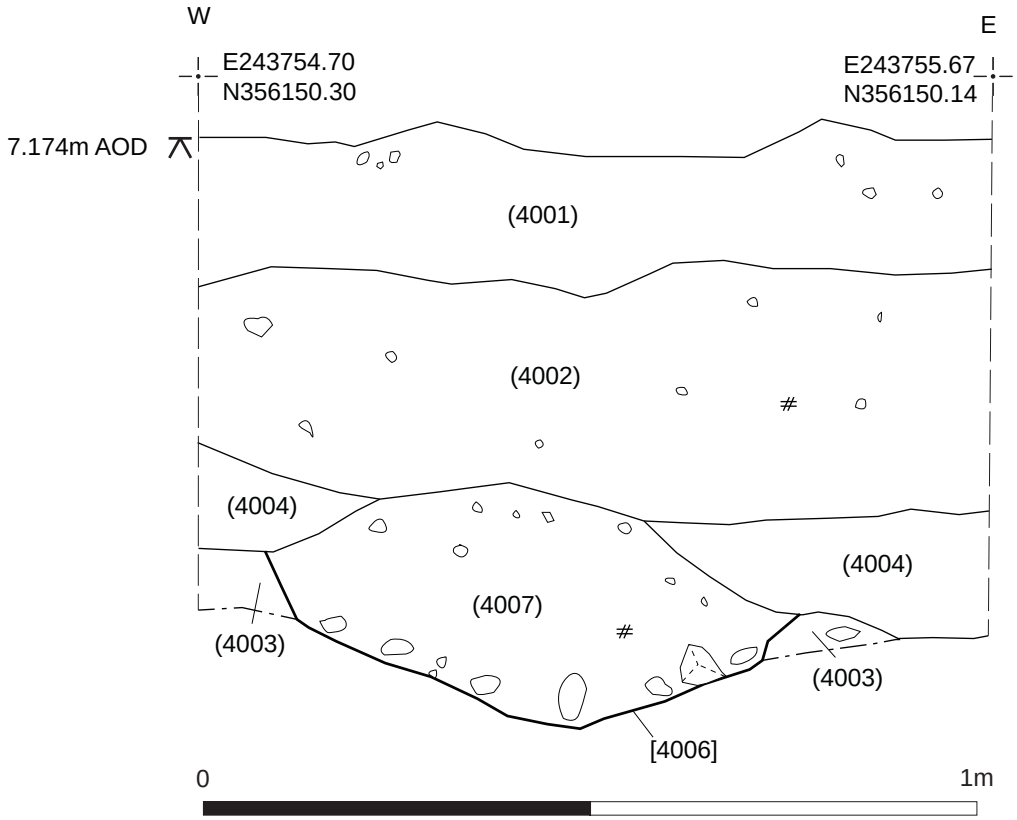


Figure 14.2: Section 4003, S facing baulk section of terminus [4006]



Gwynedd Archaeological Trust

Figure 14: Section 4001, E facing section of terminus [4006] and Section 4003, S facing baulk section of terminus [4006]

[4004] Archaeological context number

Stone

Charcoal

4004 Environmental sample

Limit of excavation

Date: 03/09/2019
Author: BMJ
Office: GAT
Drawing: G2608/SEC6007/REV01
Scale: 1:10@A4

Plate 25: TR04 - Post-machined view of TR04; scale: 2x1m (archive reference: G2608_2033).

Plate 26: TR04 - View of Trench 4 following re-machining; scale: 2x1m (archive reference: G2608_2061).

Plate 27: TR04 - View of sondage 4.2 revealing layer (4015); scale: 1x1m (archive reference: G2608_2107).

Plate 28: TR04 - Pre-ex view of feature [4008]; scale: 1x1m (archive reference: G2608_2075).

Plate 29: TR04 - Mid-excavation view of pit [4008] with feature [4013] ; scale: 1x0.5m (archive reference: G2608_21367).

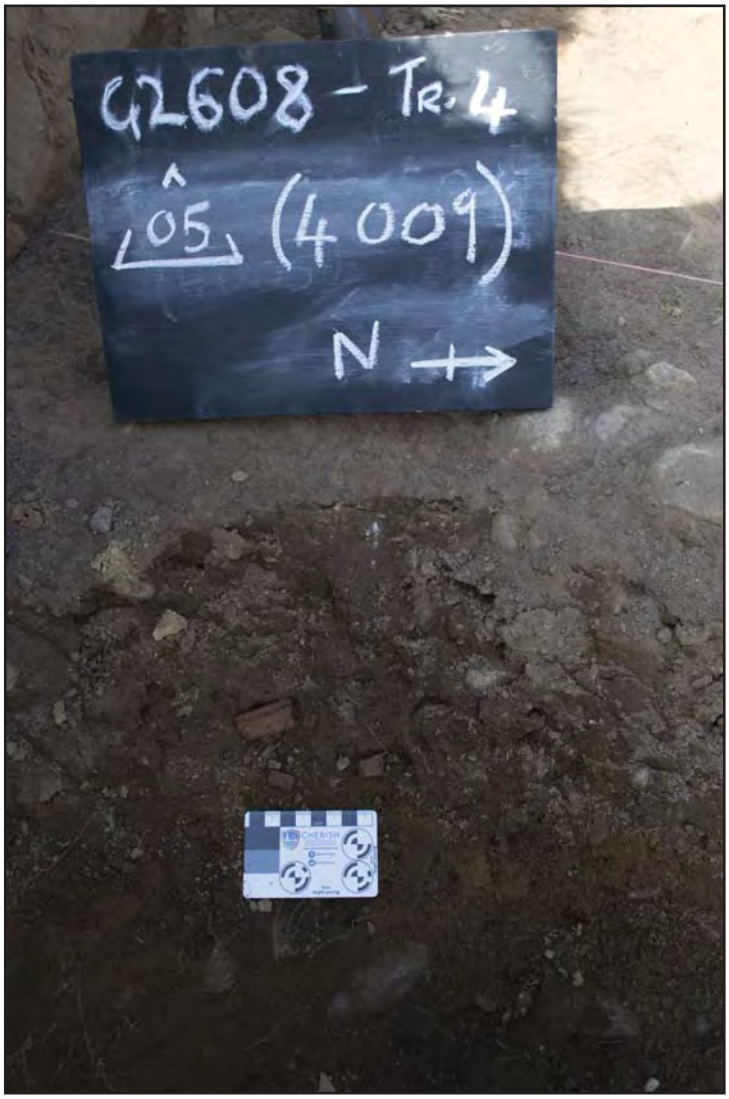


Plate 30: TR04 - View of SF05 Roman pottery sherds in-situ scale: 1x0.08m (archive reference: G2608_2103).

Plate 31: TR04 - Post-ex view of [4008], [4012] and [4013]; scale: 1x1m (archive reference: G2608_2149).

Plate 32: TR04 - View of south facing section through feature [4013]; scale: 1x0.5m (archive reference: G2608_2150).

Plate 33: TR04 - East facing section through terminus [4006] ; scale: 1x1m (archive reference: G2608_2082).

Plate 34: TR04 - South facing bulk section and post-ex view of terminus [4006]; scale: 1x1m (archive reference: G2608_2106).

4.5 Trench 05

4.5.1 Introduction

Trench 05 was located to the south west of Excavation Area 02 (Plate 35). It was sited to investigate and characterise geophysical survey anomalies 41 and 37. Anomaly 41 had been interpreted as a large pit, situated to the north of the location of a field boundary and a building shown on the 1849 Tithe Map (NLW Llandwrog Tithe Map 1849, Fields 104 and 105; Figure 15), but demolished by the time of the First Edition 25" to 1-mile County Series Ordnance Survey map of the area of 1889 (Figure 16). The feature is not however itself depicted on the map and may represent a demolition deposit.

4.5.2 Overview

A ploughsoil (5009) was identified 0.08m below a turf and bioturbation layer (5008) of improved grassland, indicating recent agricultural improvement. The ploughsoil (5009) extended to a depth of c.0.3m below the ground surface and consisted of mid orangey brown coloured sandy silt and included small to medium rounded and sub-angular stones, along with fragments of 19th century pottery and ceramic building material. This material is likely to have been brought up by the plough from archaeological features noted below. At a depth of 0.3m below the ground surface was a 0.80m thick deposit of windblown sand (5007), comprising very loose orangey yellow sand with very occasional small rounded stones and gravel. This sealed a mid-orangey brown sandy silt buried soil (5012), which contained small to medium rounded and angular stones; this deposit was only observed at the base of a 2m x 1m *sondage* (Plate 36). Into (5007) was cut a number of archaeological features: [5001], [5003] and [5005], which could all be demonstrated to be of post-medieval date from their contents (Figure 17).

4.5.3 Archaeological Features

Feature [5001] was a north-northwest south-southeast orientated ditch that crossed the east end of the trench (Figure 18.1; Plate 37). It measured 0.5m wide and 0.26m deep, but extended beyond the limits of excavation to both the north and south. It had a regular profile with steep sides and a sharp break of slope to a flat base and was filled with a mid-orangey brown silty sand (5002), which contained a few flecks of charcoal and hints of other burnt debris along with a substantial quantity of 19th century pottery, glass and metal (Find Nos. 5013 to 5016). Feature [5003] consisted of a 0.7m wide and 0.2m deep ditch orientated northwest to southeast across the trench, west of [5001] (Figure 18.2; Plate 38). The ditch had moderately irregular but concave sides, but these were somewhat obscured by the extensive animal burrowing. It was filled by a fine grained sandy silt of a light orangey brown colour, containing small to medium rounded beach pebbles and some angular stones and contained sherds of black lead glazed Buckley Ware pottery, along with a few sherds of creamwares and transfer printed pottery (Find Nos. 5009 and 5012). A small number of heavily corroded ferrous items were also encountered. This demonstrated that the ditch silted up in the 19th century. Feature [5005] was by far the largest encountered in Trench 05, and corresponded with anomaly 41 identified in the geophysical survey (Hopewell 2018). It measured 5.1m wide and between 0.3 and 0.6m deep, extending beyond the confines of the trench to both the north and the south (Figure 19; Plates 39-42). It had smooth concave sides and a sharp angle to a flat base at an angle of about 60° and had been cut into the windblown sand (5007) against the west to east slope of the field, forming only a portion of a much larger feature extending beyond the trench. The main, but secondary, fill (5006) consisted of mid orangey brown fine-grained silty sand, with a large proportion of stone within the matrix of up to 60%. These stone were a mixture of beach pebbles and angular quarried stone. Three very large stones, up to 0.6m by 0.6m by 0.35m were also encountered. These were interpreted as remnant building stones, which had been abandoned not *in situ*. A large and extensive deposit of pottery, including both black lead glazed Buckley Ware and finer glazed wares, glass and heavily corroded ferrous items, and roofing slate, were also encountered (Find Nos. 5001 to 5008). This material taken together suggests that it represents demolition rubble of 19th century date, perhaps of the building noted to the south on the tithe map (NLW, Llandwrog 1849; Figure 15)). The primary fill of the pit was a thin buried soil (5011) below the stony deposit (5006) at the eastern end of the feature (Figure 19). This measured 0.7m long, 0.45m wide and 0.07m deep and consisted of dark orangey brown sandy silt. It was probably a small patch of silting that occurred prior to the main rubble deposit fill. A small patch of burning (5010), 0.7m long and 0.45m wide, was also noted below (5006) and above the cut [5005], being 0.07m deep. This was

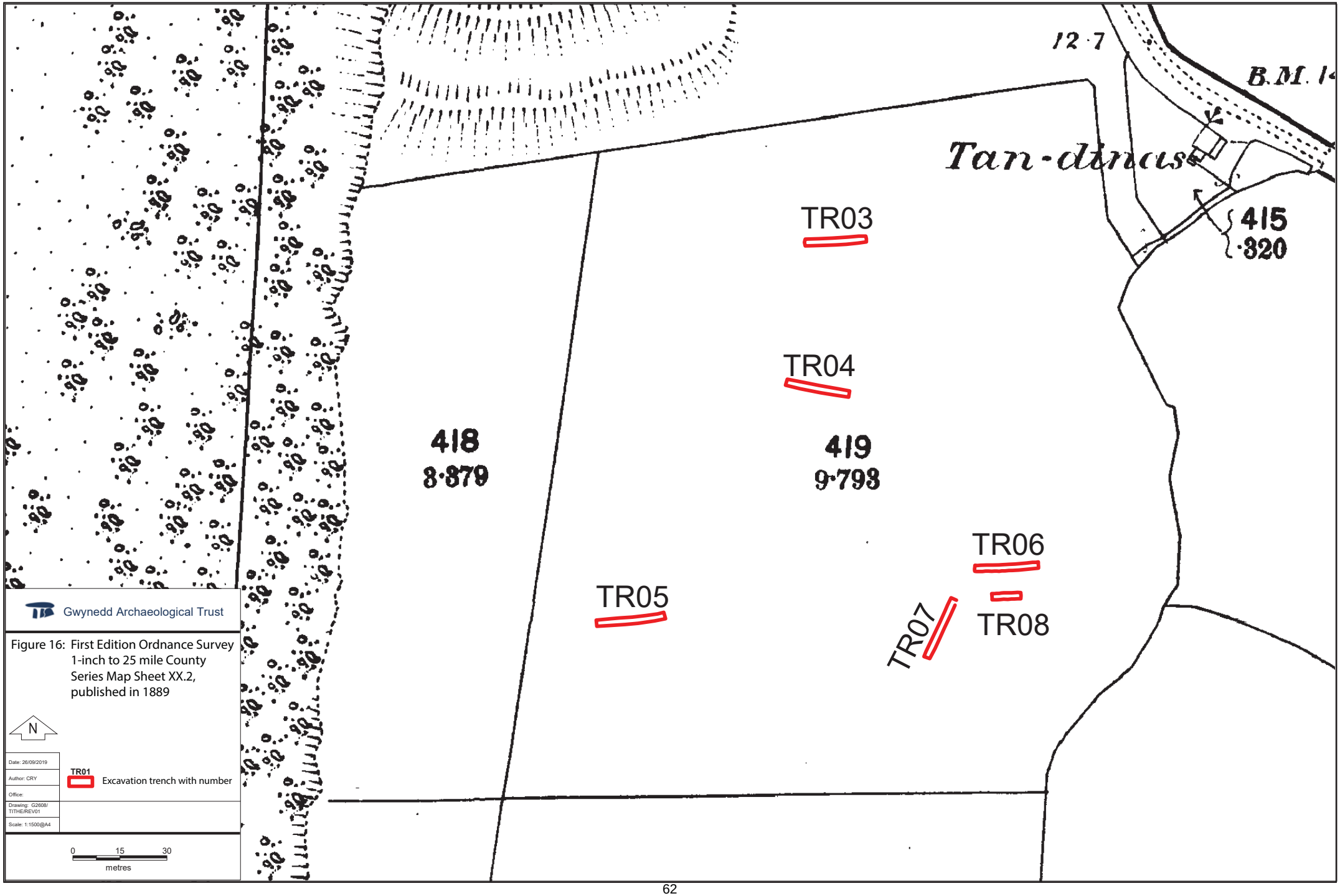
characterised as a more compact and reddish patch of soil with some charcoal inclusions, probably a result of burning associated with the demolition of the former building to the south of the trench.

4.5.4 Discussion

It appeared that two distinct phases of activity were visible in Trench 05 (Plate 43): post-medieval activity, as evidenced by features [5001], [5003] and [5005], cut into a windblown sand deposit (5007), which then sealed an earlier buried soil (5012) (Plate 36). The buried soil confirmed the presence of earlier activity, suggesting an unknown potential quantity of archaeology of medieval and earlier in date. Whilst the date of the sand inundation is not known, the available evidence would fit with the sand inundations noted on the Anglesey side of the Menai Strait between the 12 and 14th centuries, with a major known inundation in 1331 (Bailey ***et al.*** 2001, 703). There is evidence of more than one phase of sand inundation, however, and there have also been inundations in post-medieval times (*ibid.*, 704). The features cut into the windblown sand (5007) were all probably of 19th century date, with [5005] being characterised by the substantial quantity of domestic and building rubble (Plate 44). It is suggested that it represented the rubble from the demolition of the building. It is recommended that the artefacts assemblage is studied in order to place the material culture into a regional context, and to provide good relative dating evidence. The rubble spread continues beyond the confines of the trench, with a size suggested by the extent of geophysical anomaly 41 (Hopewell 2018). Ditches [5001] and [5003] also contained 19th century artefacts and material culture, suggesting that they relate to activity being carried out at the time the building was present. They probably represent drainage activity relating to the vicinity of the building shown on the tithe map.

Robert Evans


TR04
PENLLE
103
104
TR06
TR05
TR08
TR07
107
106
105
Gwynedd Archaeological Trust
Figure 15: Tithe Map 1849. The parish of Llandwrog in the County of Carnarvon
N
Date: 26/09/2019
Author: CRY
Office:
Drawing: G2608/TITHE/REV01
Scale: 1:1000@A4
TR01
Excavation trench with number
© Llyfrgell Genedlaethol Cymru - The National Library of Wales
0
10
20
metres


12·7
B.M. 1
Tan-dinas
415
·320
TR03
TR04
418
8·879
419
9·793
TR06
TR05
TR07
TR08
Gwynedd Archaeological Trust
Figure 16: First Edition Ordnance Survey 1-inch to 25 mile County Series Map Sheet XX.2, published in 1889
N
Date: 26/09/2019
Author: CRY
Office:
Drawing: G2608/TITHE/REV01
Scale: 1:1500@A4
TR01
Excavation trench with number
0
15
30
metres

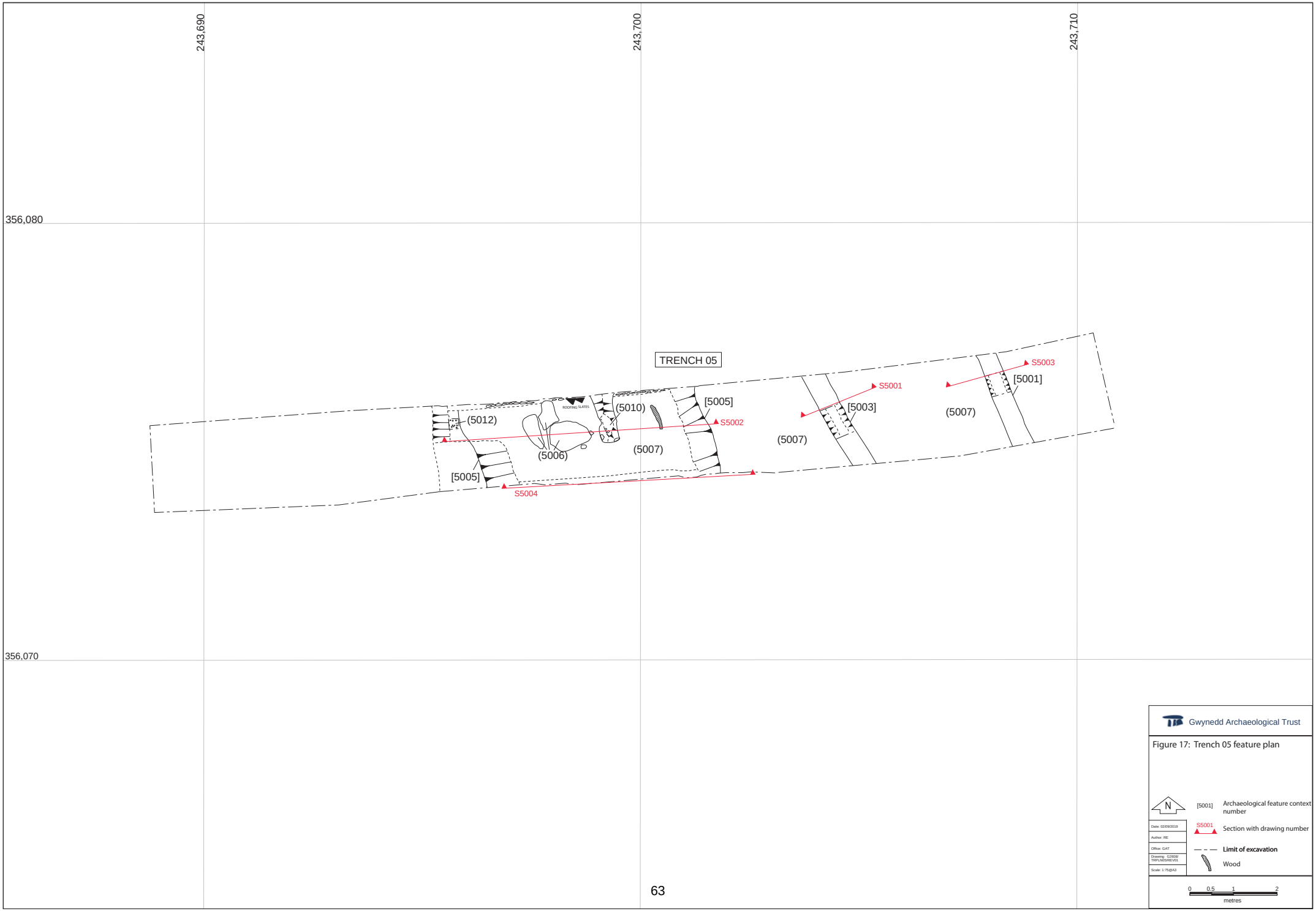

243,690
243,700
243,710
356,080
356,070
TRENCH 05
S5003
[5001]
S5001
[5003]
(5007)
[5005]
(5010)
S5002
(5012)
(5007)
(5006)
(5007)
[5005]
S5004
Gwynedd Archaeological Trust
Figure 17: Trench 05 feature plan
N
[5001] Archaeological feature context number
S5001 Section with drawing number
Limit of excavation
Wood
Date: 02/09/2019
Author: RE
Office: GAT
Drawing: G2/0030 TRPLM05REV01
Scale: 1:75@A3
0 0.5 1 2
metres

Figure 18.1: Section 5003, S facing section through small ditch [5001]

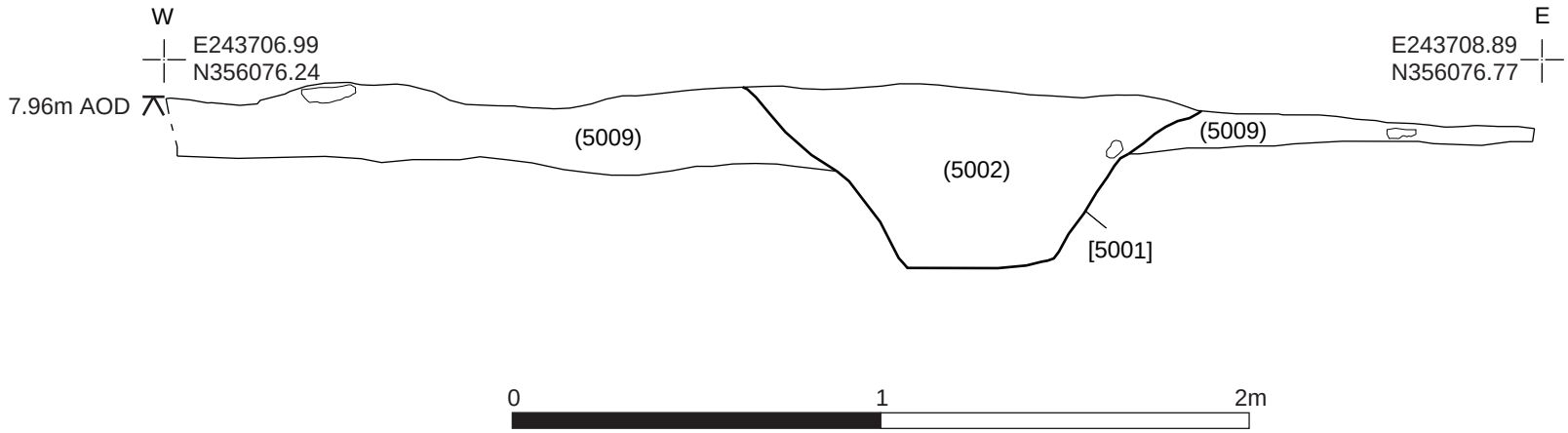
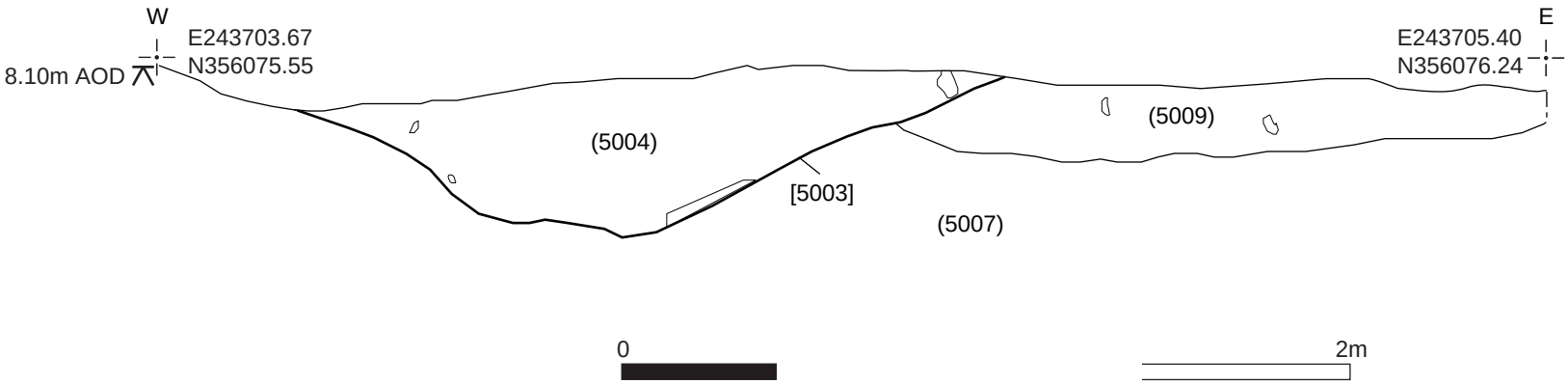


Figure 18.2: Section 5001, S facing section through small ditch [5003]



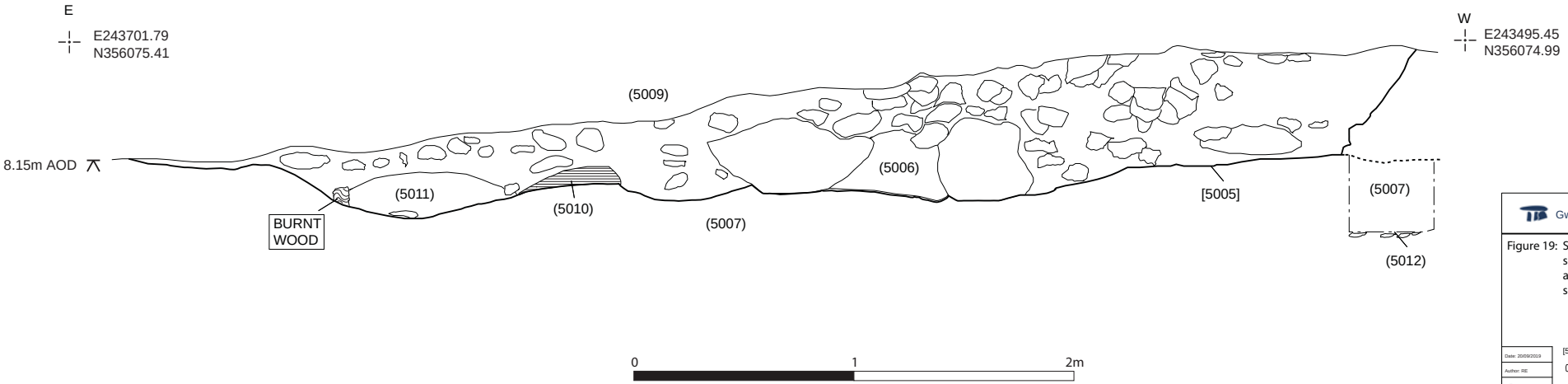
Gwynedd Archaeological Trust

Figure 18: Section 5003, S facing section through small ditch [5001] and Section 5001, S facing section through small ditch [5003]

Date: 20/09/2019	[5017] Archaeological context number
Author: RE	Stone
Office:	Limit of excavation
Drawing: G2608/SEC5003/5001	
Scale: 1:20@A4	

Figure 19.1: Section 5004, N facing section through pit [5005]

Figure 19.2: Section 5002, N facing section through pit [5005]



Gwynedd Archaeological Trust

Figure 19: Section 5004, N facing section through pit [5005] and Section 5002, N facing section through pit [5005]

Date: 20/09/2019
Author: RE
Office:
Drawing: G2009 SEC5004/5002
Scale: 1:20@A3

[5017] Archaeological context number
Stone
Limit of excavation
Burnt Wood
Burning

Plate 35: Pre-excavation view of Trench 05 from the east; scale: 2x1m (archive reference: G2608_2015).

Plate 36: View of test pit showing (5012) in the base; scale: 1x0.5m and 1 x 0.2m (archive reference: G2608_2160).

Plate 37: Post-excavation view of [5001]; scale: 1x1m (archive reference: G2608_2104).

Plate 38: Post-excavation view of [5003]; scale: 1x1m and 1 x 0.5m (archive reference: G2608_2077).

Plate 39: View of east - west slot through [5005] from the west; scale: 1x2m and 1 x 1m (archive reference: G2608_2067).

Plate 40: View of stones within (5006), cut [5005] from the north; scale: 1x2m (archive reference: G2608_2069).

Plate 41: View from the east of [5005] post-excavation; scale: 1x2m and 1x1m (archive reference: G2608_2144).

Plate 42: View of north facing section through [5005]; scale: 1x2m and 1x0.5m (archive reference: G2608_2143).

Plate 43: View of Trench 05 from the east post excavation; scale: 1x2m (archive reference: G2608_2146).

Plate 44: Selection of 19th century Buckley Ware Pottery from (5006) (archive reference: G2608_033).

4.6 Trench 06

4.6.1 Introduction

Trench 06 was one of two trenches sited to investigate and characterise geophysical survey anomaly 45. Curvilinear anomaly 45 had been interpreted as a boundary ditch that encompassed the location of a building shown on the 1849 Llandwrog tithe map (Figure 15). The feature was not however depicted on that map and may represent an earlier phase of land use and settlement than that depicted on the 1849 survey.

4.6.2 Overview

Trench 06 was located on the southeast side of Excavation Area 02 on ground that sloped gently from west to east at a height of between 3.99 - 4.59 m AOD (Plate 45; Figure 20). No above-ground traces of archaeological features were noted prior to excavation. The uppermost deposit in the trench consisted of a 0.26m deep slightly greyish brown silty sand topsoil horizon (6001) which contained occasional small fragments of post-medieval ceramic material (Plate 46). Below this lay a 0.34m deep slightly greyish brown silty sand ploughsoil deposit (6006) which also contained occasional fragments of post-medieval ceramics. A deposit of clean, orangey-yellow sand (6002) was encountered below the ploughsoil. It extended along the entire length of the trench at an average depth of 0.52m below the current ground surface. The sand is consistent with an aeolian, windblown deposit. The windblown sand deposit (6002) formed the first archaeological horizon within Trench 06 and all of the archaeological features recorded in the trench were cut through it. The majority appeared to represent a series of linear cut features running broadly north to south across the trench. These are all discussed in more detail below. Due to time constraints, (6002) could not be completely excavated to investigate the potential for earlier features sealed below. Once all of the features cut through (6002) had been excavated and recorded, a 1.77m long and 0.80m wide sondage (6.1) was however cut at the east end of the trench with the more limited aim of establishing the depth of (6002). The sondage established that sand deposit (6002) was 0.31m deep and overlay a shallow, 0.04m deep layer of greyish brown silty sand (6028) which was consistent with a buried soil horizon (Plate 47; Figure 21). This soil had itself formed on an earlier 0.15m deep orangey grey windblown sand deposit (6029) which also sealed another 0.05m deep mid-grey clayey sand buried soil horizon (6030). An orange mottled light grey glacial boulder clay natural deposit (6031) was identified below the buried soil (6030) at a depth of 0.99m below the current ground surface.

4.6.3 Archaeological features

All of the features identified within Trench 06 were cut through windblown sand deposit (6002) and overlain by ploughsoil (6006). They are discussed in order from east to west across the trench. A shallow straight linear gully [6009] ran from north to south across the eastern end of the trench (Plate 48). It had a maximum width of 0.76m and a depth of 0.12m with steeply sloping sides that broke gradually to an irregular base. It contained a single fill (6010): a soft dark brown clayey sand with occasional small fragments of what appeared to be iron mineralised soil inclusions and occasional sub-rounded and sub-angular stones up to 0.10m long. No other artefacts were recovered from the fill, which most likely accumulated as a result of natural silting processes. Appearance was very similar to ploughsoil (6006) and probably post-medieval in date. A much broader and more substantial straight linear ditch [6014] was identified just to the west (Plate 49; Plate 50; Figure 21). It ran from northwest to southeast across the trench, though its eastern side appeared to turn to the south against the southern baulk of the trench. It had a width of between 1.40 and 1.90m and a depth of 0.34m. Its sides were steeply sloping with a smooth, slightly convex profile. The ditch sides broke gradually to a smooth flattish base, slightly stepped along its deeper western side. It contained a single fill (6015): a loose light brownish-grey slightly silty sand with occasional small sub-angular and sub-rounded stones and flecks of charcoal. A large sub-rounded stone cobble (measuring 0.26m x 0.15m x 0.19m) was identified resting against the side of the ditch cut in the excavated portion. Again, the fill most likely accumulated as a result of natural silting; no artefacts were recovered. A narrow curvilinear ditch or gulley [6003] ran across the trench just to the west of [6014] (Plate 51; Plate 52; Figure 22.1). The gulley ran north to south as it emerged from the southern side of the trench, turning towards the northwest before it exited on the northern side of the trench. It was up to 0.55m wide with generally smooth, concave sides that broke gradually to a smooth concave base and contained a single fill (6004): a soft light brownish-grey slightly silty sand with no recorded inclusions. The fill did not appear to be anthropogenic in origin and again appears to have been a result of silting. No artefacts were recovered from fill (6004). Another broader, deeper ditch lay just to the west in the central part of the trench. This straight linear ditch cut [6007] ran north-northwest to south-southeast across the trench (Plate 53; Plate 54; Figure sec. 22.2). It was up to 1.70m wide and 0.53m deep with slightly irregular smooth, gently sloping sides that broke gradually to a flattish, slightly concave base. It contained three fills. A 0.31m deep deposit of light greyish brown slightly silty sand with occasional small sub-angular and sub-rounded stones (0.01m to 0.05m long) (6008) filled the upper portion of the ditch. A 0.11m deep layer of slightly darker greyish brown silty sand (6012) lay below the upper fill in the central part of the excavated portion of the feature. A number of large sub-rounded stone

cobbles, up to 0.20m long and 0.30m wide had come to rest at the base of the fill. The primary fill of the ditch (6013) was light brownish-grey silty sand with occasional small sub-angular and sub-rounded stones (0.01m to 0.05mm long). By and large, the fills of [6007] appear to have accumulated over time due to natural silting processes, but it is unclear whether the larger cobbles in (6012) had been intentionally dumped in the feature or had tumbled in. No artefacts were recovered from any of the fills of [6007]. A group of three shallow features emerged from the southern edge of the trench to the west of ditch [6007]. The most easterly of these, [6026], a narrow, shallow straight linear cut, ran in a southeast to northwest direction for a distance of 1.63m before fading out (Plate 55). It was 0.46m wide and 0.09m deep with concave sides and an irregular base. No artefacts were recovered from its fill (6027), a mid-brown silty sand with occasional small sub-rounded stone inclusions. The fill was indistinguishable from ploughsoil (6006) above and it seems likely that ditch [6026] most likely represents the base of a relatively late naturally silted feature cut through ploughsoil. A second shallow feature [6024] identified against the southern baulk may be the remains of a pit or the rounded terminus of a linear cut running off into the unexcavated area to the south (Plate 56). It was 0.86m wide, had an exposed length of 0.54m and was just 0.08m deep with concave sides that broke gradually to an irregular base. Again, it contained a single, ploughsoil like fill of mid-brown silty sand (6025) with no artefacts. Another small pit or ditch terminus [6022] lay just to the west (Plate 57). It was 0.60m wide, 0.50m wide and 0.10m deep and also had shallow concave sides that broke gradually to an irregular base. It contained a single, ploughsoil like fill of mid-brown silty sand (6023). No artefacts were recovered. A more substantial cut feature was located just to the west of this group discussed, comprising a north-south aligned linear with a rounded end [6020], may have been the northern end of either a sub-rectangular pit or a ditch terminus (Plate 58; Plate 59; Figure 23.2). It was 1.02m wide and had an exposed length of 1.03m and had concave sides that broke gradually to a flattish base 0.37m deep. It contained a single fill (6021) of mid-greyish-brown silty sand with lenses of cleaner orangey sand towards the base and occasional small sub-rounded and sub-angular stones (0.02m to 0.07m long) and flecks of charcoal. Fill (6021) also contained occasional fragments of slate, possibly roofing material, and three fragments of post-medieval earthenware ceramics, two of which had a black glaze applied to the inside face of the sherd (black lead glazed Buckley ware). The fill appeared to have accumulated as a result of silting processes rather than being intentionally deposited. Feature [6020] partially truncated the southern end of a straight linear ditch or gully [6018], which ran from north to south across the trench at its western end (Plate 59; Plate 60; Figure 23.2). Context [6018] was between 0.40m and 0.82m wide and up to 0.30m deep with slightly convex sides to the west and slightly concave sides along its eastern edge, breaking gradually to a generally flattish base although it

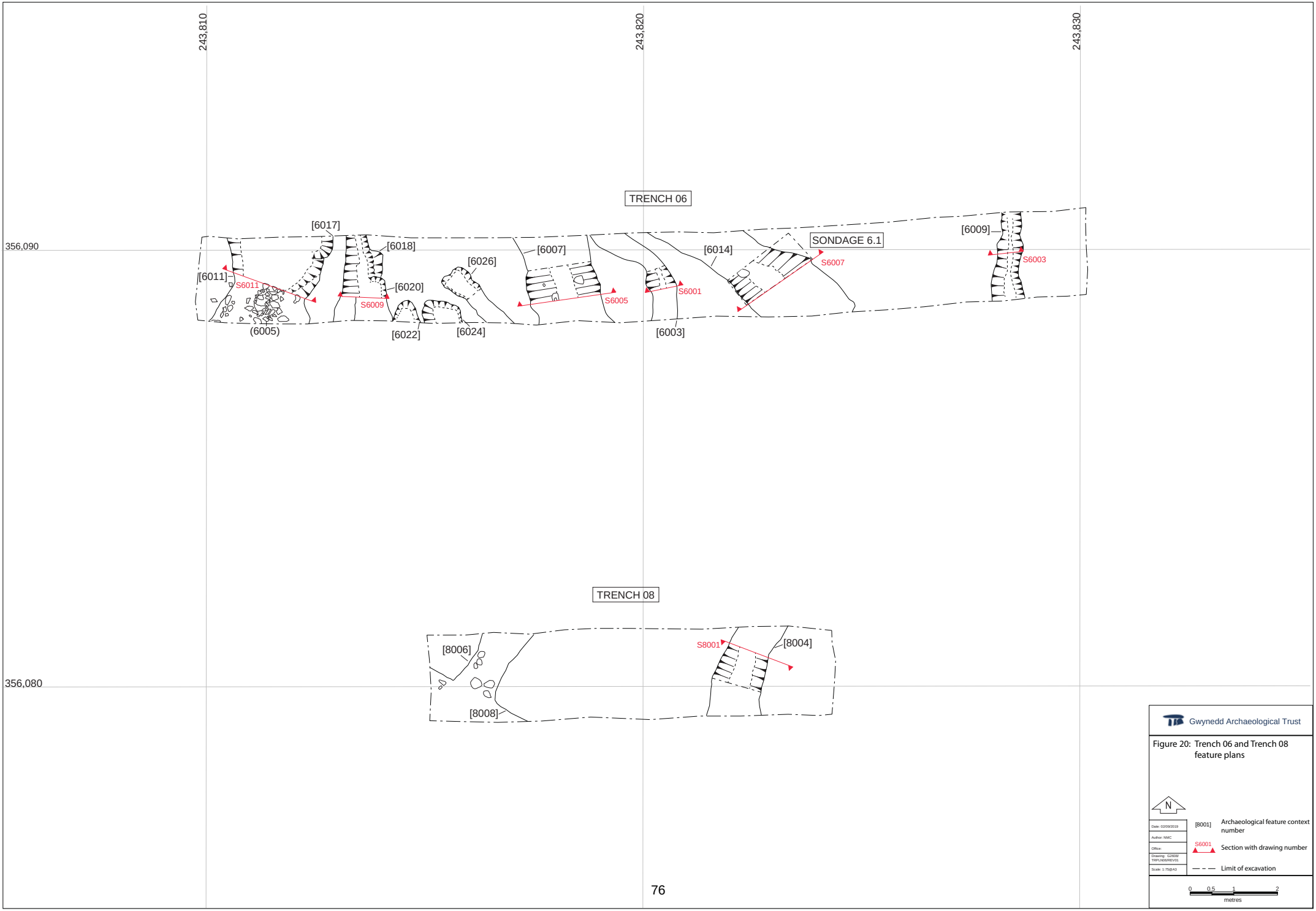
appeared ‘U’ shaped in the recorded sections. It contained a single fill (6019), a mid-greyish-brown slightly silty sand with occasional small sub-rounded stones. No artefacts were recovered from the fill. Gully [6018] appears to have silted up naturally before [6020] was cut through it. A further north-south aligned straight linear feature was identified at the extreme western end of the trench: ditch [6011] was up to 1.95 m wide with a stepped western edge that broke to deeper, concave sides and an irregular, uneven base up to 0.30m deep (Plate 61; Plate 62; Figure 23.1). The eastern edge of the feature was much less pronounced. The central portion of the feature was filled with a roughly straight linear, north to south aligned, deposit of sub-angular and sub-rounded cobbles which ranged in size from 0.15m x 0.15m x 0.10m to 0.30m x 0.15m x 0.15m (6005). The cobbles were initially thought to be the possible remains of a wall but investigation demonstrated that they were not part of a structure; instead, they appear to have been deliberately deposited into the cut. They were contained within a matrix of mid-orangey-brown silty sand (6016) with abundant fragments of post-medieval ceramics, predominately black glazed earthenware (Buckley ware), and occasional clay pipe stems and fragments of animal bone. A small sub-circular pit or ditch terminus [6017] on the north-western edge of [6011] was identified in the northern baulk of the trench though it was not possible to discern a stratigraphic relationship between the two features due to the similarity in their fills. Context [6017] was 0.60m wide, 0.35m deep and extended into the trench for a distance of 0.30m and was filled with (6032), mid-orangey-brown silty sand. No artefacts were recovered from the fill.

4.6.4 Discussion

Trench 06 appears to have been successful in identifying and characterising the remains of geophysical survey anomaly 45. The location, width and north-northwest to south-southeast orientation of enclosure ditch [6007] are consistent with that of the targeted geophysical survey anomaly. Unfortunately, no artefacts were recovered from the fills but a complete lack of post-medieval artefacts in a relatively substantial feature may point to it being relatively early. Bulk samples taken from the primary fill ((6013) Sample No. 6005) may provide an opportunity to establish an absolute date for the ditch. Enclosure ditch [6007] was one of three features with light brownish-grey leached out sandy fills; the other two being curvilinear gully [6003] and the northwest to southeast aligned ditch [6014]. The fills of these three features were characteristically different to those of other features encountered in Trench 06, which had darker brown more ploughsoil-like fills. None of the three contained any post-medieval material in their excavated portions and all may be earlier than the other, most likely post-medieval, features. The northwest to southeast aligned ditch [6014] appeared to be turning towards the south at the southern edge of the trench. A north-northeast to south-southwest aligned straight linear ditch in Trench 08, [8004], had a similar leached out silty

sand fill to [6014]. If [6014] does turn at 90^0 as it exits Trench 06 it is possible that these two features form a corner of a possible early enclosure not identified on the geophysical survey or depicted on historic mapping. The other features in the trench, either from their ploughsoil-like fills, the presence of artefacts, or both, all appear to be post-medieval in origin. They are most likely associated with the settlement and agricultural activity depicted on the 1849 Tithe Award Map though none can be easily related to individual field boundaries, enclosures or structures shown on it. The deliberately infilled post-medieval ditch [6011] appears to be the southern end of one of the north-northeast to south-southwest aligned linear anomalies identified during the geophysical survey as anomaly group 44. The observation that it was deliberately infilled supports the interpretation that the group represents a series of field boundaries from a field system that had been altered over time. Trench 06 proved to be one of the more archaeologically productive trenches in Excavation Area 02. It successfully identified geophysical survey anomaly 45 and also demonstrated the existence of archaeological features that the geophysical survey did not identify. It also retains considerable archaeological potential given the existence of two further possible archaeological horizons represented by the buried soils (6028) and (6030) which remain unexplored.

Neil McGuinness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SONDAGE 6.1
[6017]
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[6007]
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[6009]
[6011]
S6011
S6009
[6020]
S6005
S6001
S6007
S6003
(6005)
[6022]
[6024]
[6003]
TRENCH 08
[8006]
S8001
[8004]
[8008]
Gwynedd Archaeological Trust
Figure 20: Trench 06 and Trench 08 feature plans
N
Date: 02/09/2019
Author: NMC
Office:
Drawing: G2939 TRPLAN08REV01
Scale: 1:75@A3
[8001] Archaeological feature context number
S6001 Section with drawing number
Limit of excavation
0 0.5 1 2
metres

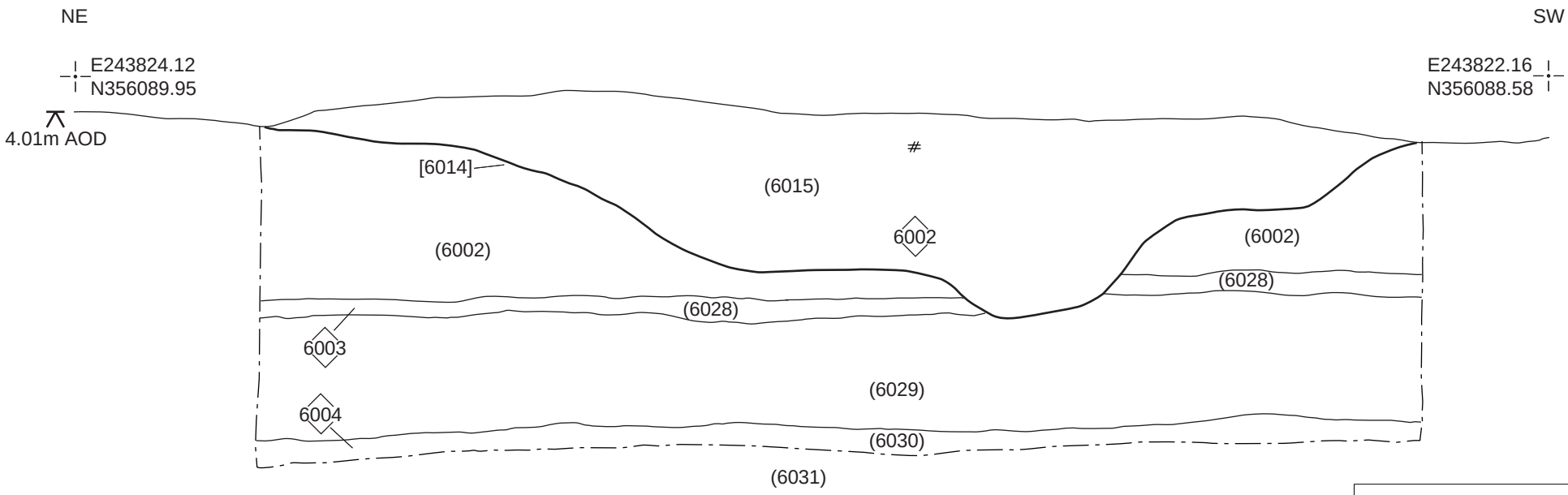

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Figure 21: Section 6007, NW facing section of ditch [6014] and sondage 6.1

[6014] Archaeological context number

Charcoal

6004 Environmental sample

Limit of excavation

Date: 02/09/2019

Author: NMC

Office:

Drawing: G2608/SEC6007/REV01

Scale: 1:10@A4

Figure 22.1: Section 6001, WNW facing section through gulley [6003]

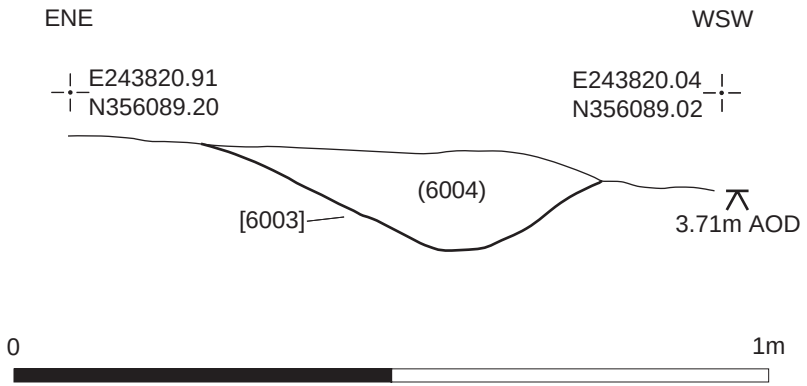

Figure 22.2: Section 6005, NNW facing section through ditch [6007]

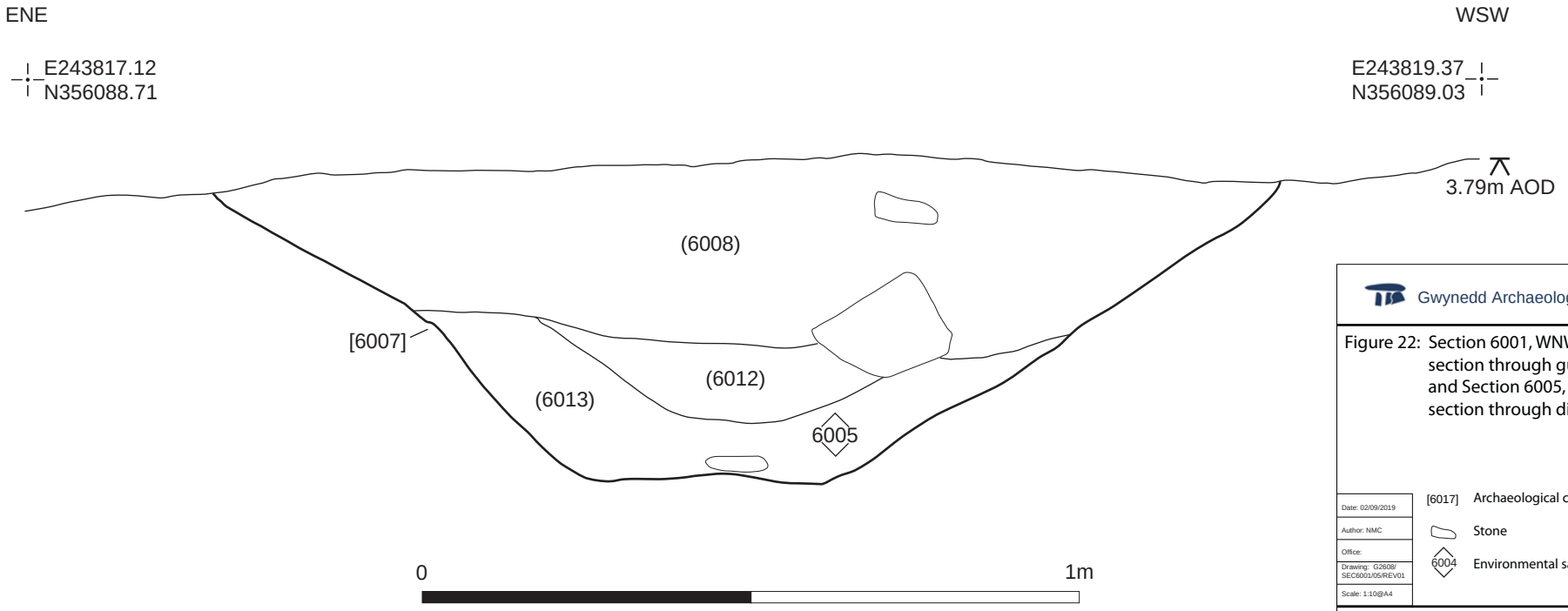

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Figure 22: Section 6001, WNW facing section through gulley [6003] and Section 6005, NNW facing section through ditch [6007]

Date: 02/09/2019
Author: NMC
Office:
Drawing: G2608/SEC6001/05/REV01
Scale: 1:10@A4

[6017] Archaeological context number
Stone
6004 Environmental sample

Figure 23.1: Section 6011, NE facing section through ditch [6011]

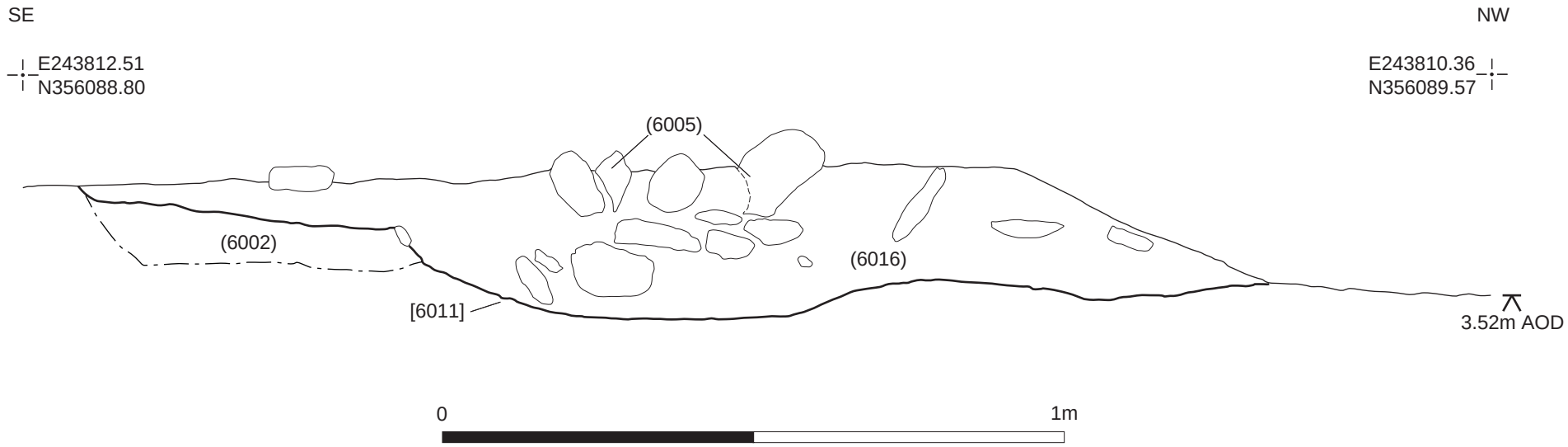

Figure 23.2: Section 6009, N facing section through ditch [6020] and gulley [6018]

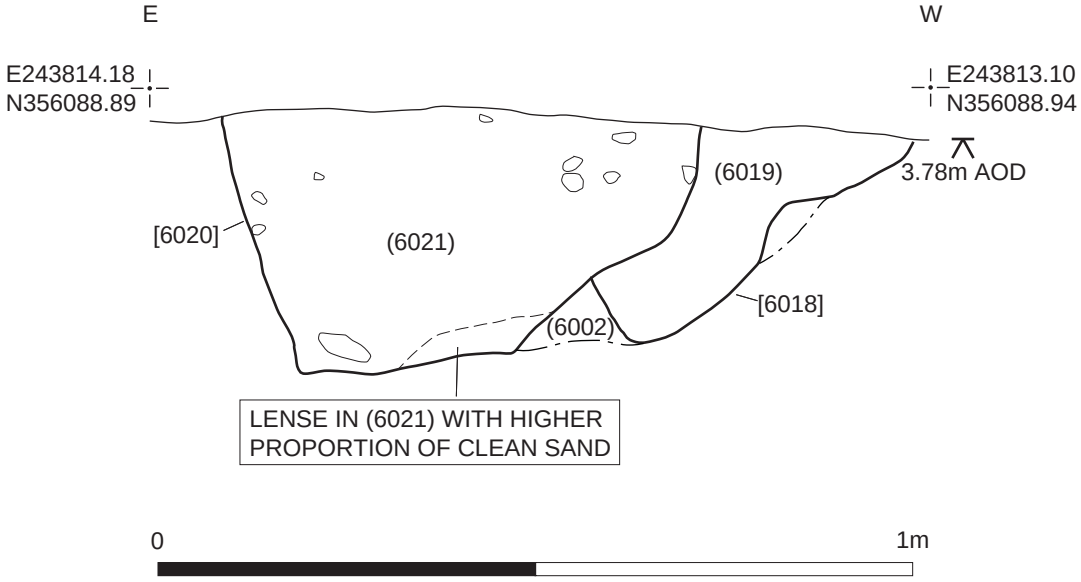

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Figure 23: Section 6011, NE facing section through ditch [6011] and Section 6009, N facing section through ditch [6020] and gulley [6018]

Date: 02/09/2019	
Author: NMC	
Office:	
Drawing: G2608/ SEC6011/09/REV01	
Scale: 1:10@A4	

[6017] Archaeological context number
Stone
Limit of excavation

Plate 47: NW facing section of sondage 6.1, viewed from the NW; scale: 1x0.5m (archive reference G2608_2169).

Plate 48: N facing section through gulley [6009], viewed from the N; scale: 1x0.5m (archive reference G2608_2053).

Plate 49: NW facing section through ditch [6014], viewed from the SW; scale: 1x1m (archive reference G2608_2101).

Plate 50: NW facing section through ditch [6014], viewed from the NW; scale: 1x1m (archive reference G2608_2099).

Plate 51: NNW facing section across gulley [6003], viewed from the ENE; scale: 1x1m (archive reference G2608_2029).

Plate 52: NNW facing section across gulley [6003], viewed from the NNW; scale: 1x1m (archive reference G2608_2030).

Plate 53: Ditch [6007] mid-ex, viewed from the ENE; scale: 1x1m (archive reference G2608_2063).

Plate 54: NNW facing section of ditch [6007], viewed from the NNW; scale: 1x1m (archive reference G2608_2062).

Plate 55: NW facing section of feature [6026], viewed from the NW; scale: 1x0.5m (archive reference G2608_2124).

Plate 56: N facing section of feature [6024], viewed from the N; scale: 1x1m (archive reference G2608_2121).

Plate 57: Overview shot of feature [6022] after removal of fill (6023), viewed from the N; scale: 1x1m (archive reference G2608_2120).

Plate 58: N facing section of features [6020] & [6018], viewed from the N; scale: 1x1m (archive reference G2608_2115).

Plate 59: Overview shot of features [6020] & [6018], viewed from the N; scale: 1x1m (archive reference G2608_2116).

Plate 60: S facing section of linear feature [6018] with fills (6019), viewed from the S; scale: 1x1m (archive reference G2608_2118).

Plate 61: Cut [6011] and stone fill (6005) following partial removing of (6016), viewed from the N; scale: 1x1m (archive reference G2608_2108).

Plate 62: NE facing section through cut [6011], viewed from the NE; scale: 1x1m (archive reference G2608_2131).

4.7 Trench 07

4.7.1 Introduction

Trench 07 is one of two trenches sited to investigate and characterise geophysical survey anomaly 45. Curvilinear anomaly 45 had been interpreted as a boundary ditch that encompasses the location of a building shown on the 1849 Llandwrog tithe map. The feature is not however depicted on the map and may represent an earlier phase of land use and settlement than that depicted on the 1849 survey.

4.7.2 Overview

Trench 07 was located on the southeast side of Excavation Area 02. No above-ground traces of archaeological features were noted prior to excavation (Plate 63 and Plate 64). The uppermost deposit in the trench consisted of a 0.31m deep light brown silty sand topsoil (7001), which contained occasional small fragments of post-medieval ceramic material. Below this at the south-southwest end of the trench was a layer of mid brown silty sand ploughsoil (7017) which, like the topsoil, contained occasional fragments of post-medieval ceramics. At the north-northeast end of the trench the topsoil gave way to a windblown deposit of clean, orangey-yellow sand (7002). This deposit extended over the entirety of the trench and under layer (7017). The windblown sand deposit (7002) formed the first archaeological horizon within Trench 07 and all of the archaeological features recorded in the trench were cut through it. These are all discussed in more detail below. Due to time constraints, (7002) could not be completely excavated to investigate the potential for earlier features sealed below it.

4.7.3 Archaeological features

All of the features identified within Trench 07 were cut through windblown sand deposit (7002) and overlain by (7001) at the north-northeast end of the trench, and (7001) and (7017) at the south-southwest end of the trench. They are discussed in order from north-northeast to south-southwest across the trench (Figure 24). A shallow sub oval pit [7003] (Plate 65; Figure 25.1) was the first feature encountered at the north-northeast end of the trench. It had a width of 0.60m and length of 0.70m with steeply sloping sides that broke gradually to a slightly concave base. It contained a single fill (7004), characterised as a loose dark brown silty sand with occasional charcoal fragments and rare sub-rounded stones up to 0.10m long from the fill (Plate 66). The charcoal flecks were not substantial and there was no evidence for in situ burning; the fill most likely accumulated as a result of natural silting processes and was probably post-medieval in date. No artefacts were recovered.

Feature [7011] had an irregular shape in plan and extended out of the trench to the east-southeast. It had a maximum length within the trench of 1.35m and a width of 0.97m. With imperceptible breaks of slope at the top and base and a relatively flat base it was considered to be a natural hollow. It contained one single fill (7012), which was a loose mid orangey brown silty sand with moderate sub-rounded stones and gravel inclusions and was very similar to the topsoil. A small quantity of post-medieval pottery was found in the fill. A group of three smaller features were located in the central portion of the trench. The first of these [7005] extended into the trench from the west-northwest and was visible in the east-southeast facing baulk cutting obliquely down into the trench west-northwest to east-southeast (Plate 67; Figure 25.2). Within the trench it had a maximum length of 0.43m, width of 0.41m and a depth of 0.18m, and had a sharp break of slope at the top, steeply sloping irregular sides and a gradual break of slope to an irregular base (Plate 68; Figure 26.1). It contained one single fill (7006) which consisted of a loose mid orangey brown silty sand with occasional sub-rounded stones, post-medieval pottery fragments and iron and was very similar in composition to the topsoil. This feature was interpreted as the terminus of an animal burrow. The second feature in this area was a small pit or terminus [7007], which was visible in the east-southeast facing baulk section to be cut through from the topsoil (7001) (Plate 67; Figure 25.2). It had a maximum width of 0.47m and a depth of 0.24m with steeply sloping sides that broke sharply to a tapered rounded point. It contained a single fill (7008) which consisted of mid-orangey brown silty sand with rare sub-rounded stone inclusions. A sherd of black lead glazed Buckley Ware was found at the base of the feature. The last of the smaller features [7009] was sub-circular in plan with a sharp break of slope at the top, a steeply sloping south westerly side, an irregular south easterly side and a sharp break of slope to a concave base. It had a maximum length of 0.30m, width of 0.26m and a depth of

0.12m. It contained a single fill (7010) which consisted of a light-orangey brown silty sand with charcoal flecks and root material inclusions (Plate 69). The fill was very similar in composition to the topsoil and the feature appeared to be a patch of bioturbation. The remainder of the features in the trench were overlain by ploughsoil (7017). The first of these was pit [7013], which was sub-oval in plan with a sharp break of slope at the top, moderately sloping sides though sharper on the north-northeast side and a gradual break of slope to a flattish base (Plate 70). It had a maximum length of 3.0m, width of 1.2m and a depth of 0.32m. It contained a single fill (7014), which consisted of a loose mid-yellowish brown silty sand with occasional medium sized stone inclusions and a concentration of larger cobbles (0.15m to 0.20m long) at the north-northeast end. Post-medieval artefacts were recovered including black lead glazed Buckley ware sherds and part of a clay pipe stem. At the south-southwest end of the trench, three features were identified at the location of anomaly 45 from the geophysical survey (Hopewell, 2018), comprising a straight linear ditch, a curvilinear ditch and a wall. Due to the similarity of the ditch fills they were not identified as separate features until they were fully excavated suggesting they went out of use contemporaneously. The relationship between these ditches was not caught in section though it is believed that the curvilinear ditch is the earlier feature. Straight linear ditch [7018] had a maximum width of 1.32m and a depth of 0.28m with fairly steep sides that broke to a flattish base (Plate 71). It contained a single fill (7019), a mid-greyish brown silty sand with rare sub-rounded stones and cobbles (Figure 26.2). No artefacts were recovered within the fill and it most likely accumulated as a result of natural silting processes. Curvilinear ditch [7020] had a maximum width of 0.94m and a depth of 0.40m with steely sloping sides which broke sharply on the west side and gradually on the east side to a concave base (Plate 72 & Plate 73; Figure 27). It contained a single fill (7021), a loose mid greyish brown silty sand with rare sub-rounded stones and rare rounded cobbles. No artefacts were found within the fill and it most likely accumulated as a result of natural silting processes. Situated on the southern edge of ditch [7018] was wall [7015]. This wall was orientated west-northwest to east-southeast and was constructed from large sub-angular stones (0.20m x 0.20m) bonded by soil (7016). There was no discernible cut for this structure and the wall material had partially slumped into ditch [7018] (Plate 74). Bonding material (7016) consisted of a mid-reddish brown silty sand with rare small sub-angular and sub-rounded stones. A small quantity of post-medieval pottery was recovered from (7016) including a sherd of black lead glazed Buckley ware.

4.7.4 Discussion

Trench 07 appears to have been successful in its intended aim of identifying and characterising the remains of geophysical survey anomaly 45. The location, width and

alignment of ditch [7020] are consistent with that of the targeted geophysical survey anomaly. No artefacts were recovered from the fill but a complete lack of post-medieval artefacts in a relatively substantial feature may point to it being relatively early especially considering the majority of other features within Trench 07 contained post-medieval artefacts. Ditch [7018] does not appear on the geophysical survey interpretation and appears to have been created, along with wall [7015], after enclosure ditch [7020]. As the ditch fills were very similar it is probable that the ditches were in use and went out of use contemporaneously. The other features in the trench, either from their ploughsoil like fills, the presence of artefacts, or both, all appear to be post-medieval in origin. They are most likely associated with the settlement and agricultural activity depicted on the 1849 Tithe Award Map. Trench 07 proved to be one of the more archaeologically productive trenches in Excavation Area 02. Whilst the geophysical anomaly has been characterised, the trench and local area still retains considerable archaeological potential given that the glacial horizon was not found at any point in the trench.

Carol Ryan Young

356,080

243,790

243,800

243,810

356,070

S7001

[7003]

S7007

[7005]

S7003

[7011]

S7005

[7009]

S7002

[7007]

TRENCH 07

S7010

[7013]

(7017)

S7016

[7020]

S7012

[7018]

S7015

S7012

[7015]

MID-EX PLAN

92

Gwynedd Archaeological Trust

Figure 24: Trench 07 feature plan

N

Date: 02/09/2019

Author: CRY

Office:

Drawing: G2608/TRPLN07/REV01

Scale: 1:75@A3

[7001] Archaeological feature context number

S7001 Section with drawing number

Limit of excavation

0 0.5 1 2

metres

Figure 25.1: Section 7001, NNE facing section of small pit [7003]

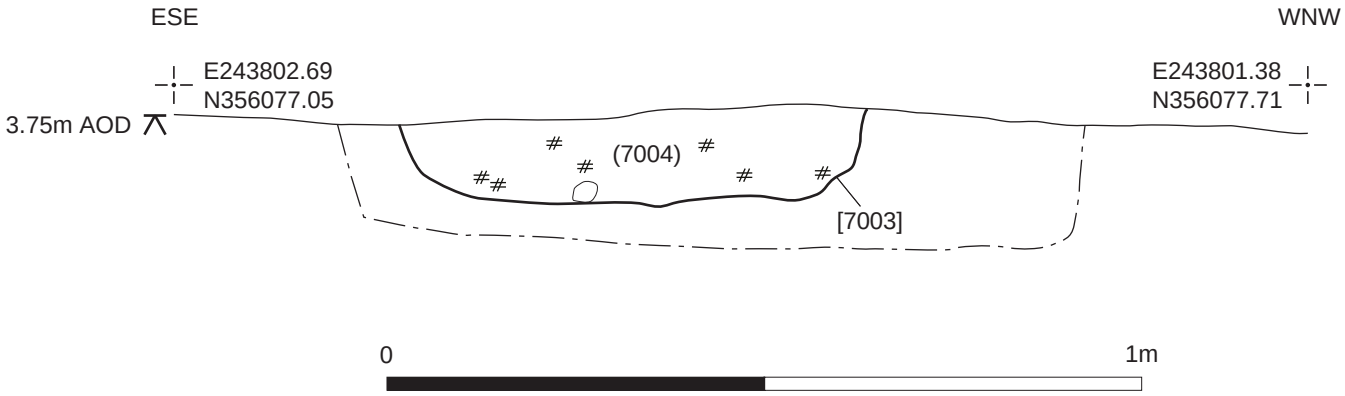
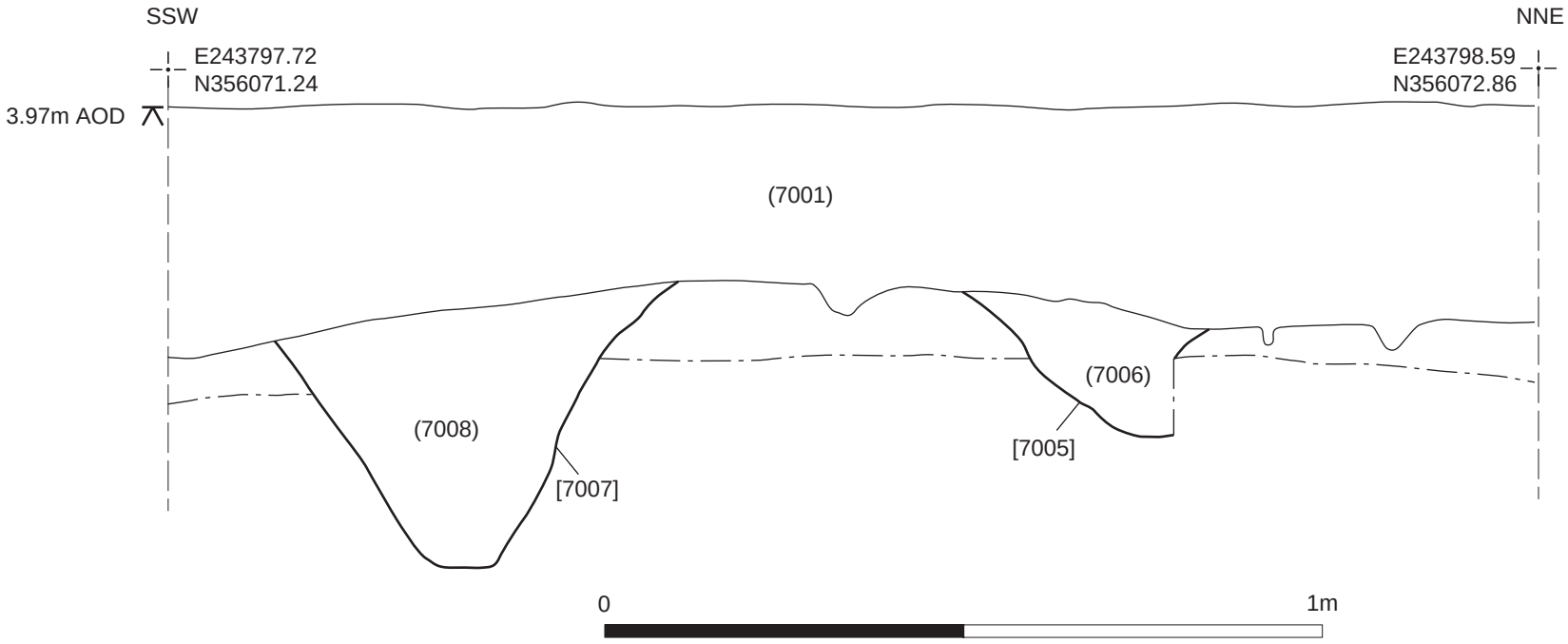


Figure 25.2: Section 7002, ESE facing section of animal burrow [7005] & pit [7007]



Gwynedd Archaeological Trust

Figure 25: Section 7001, NNE facing section of small pit [7003] and Section 7002, ESE facing section of animal burrow [7005] and pit [7007]

Date: 20/09/2019
Author: CRY
Office:
Drawing: G2608/SEC7001/7002
Scale: 1:10@A4

[7017] Archaeological context number
Stone
Charcoal

Figure 26.1: Section 7003, SSW facing section of animal burrow [7005]

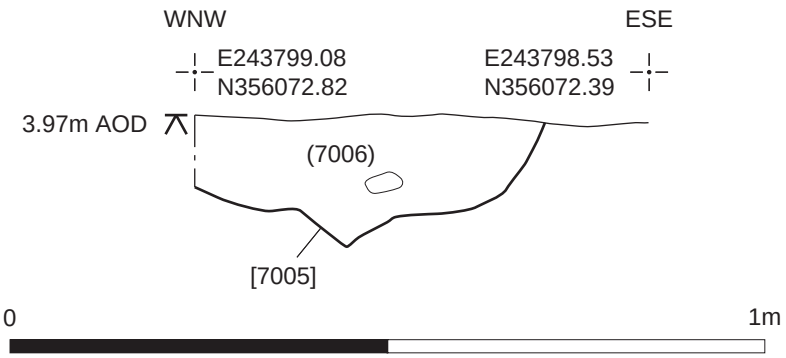
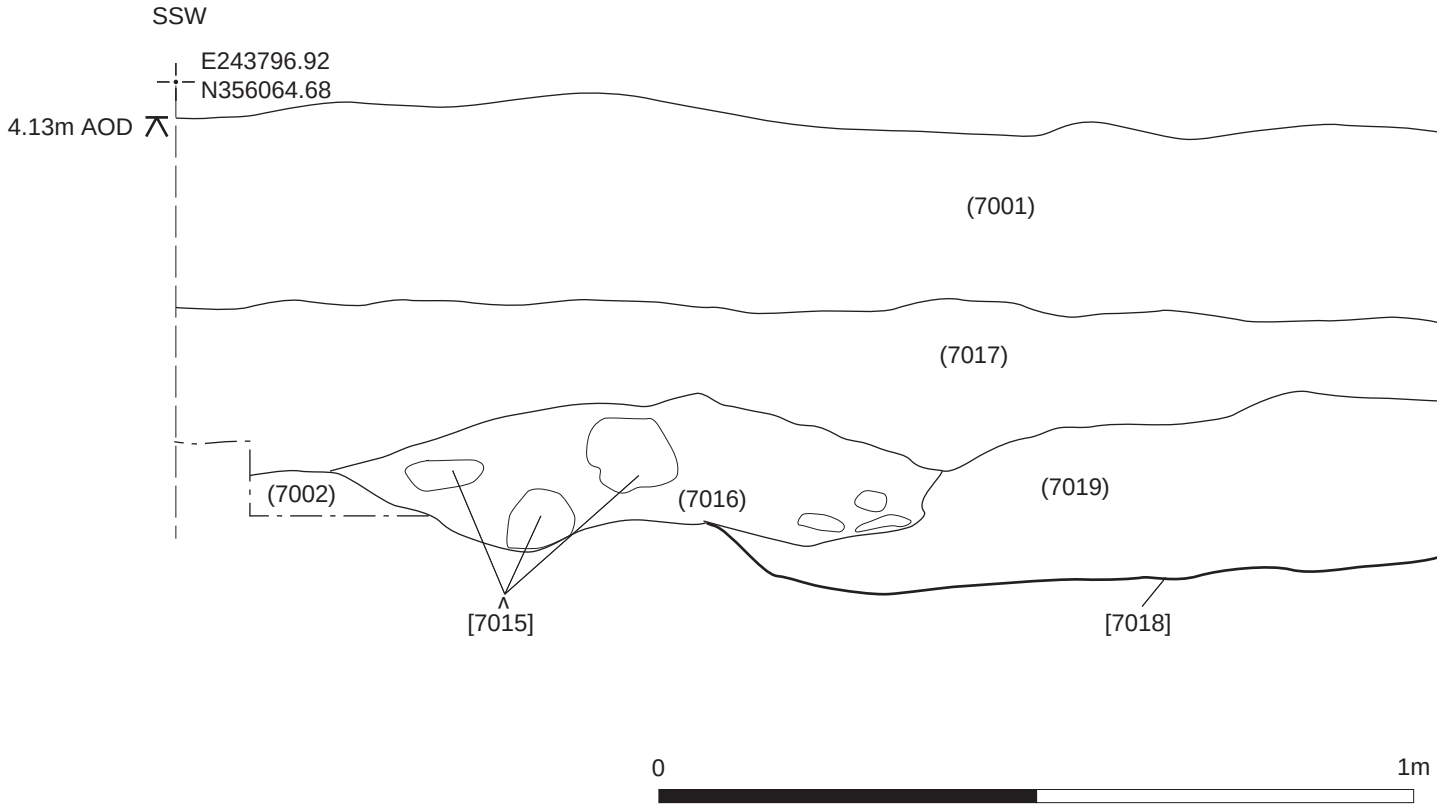


Figure 26.2: Section 7012, ESE facing section of ditch [7018] and wall [7015]



Gwynedd Archaeological Trust

Figure 26: Section 7003, SSW facing section of animal burrow [7005] and Section 7012, WNW facing section of ditch [7018] and wall [7015]

Date: 20/09/2019
Author: CRY
Office:
Drawing: G2608/SEC7003/7015
Scale: 1:10@A4

[7017] Archaeological context number
Stone
Limit of excavation

Figure 27.1: Section 7015, WSW facing section of ditch [7020]

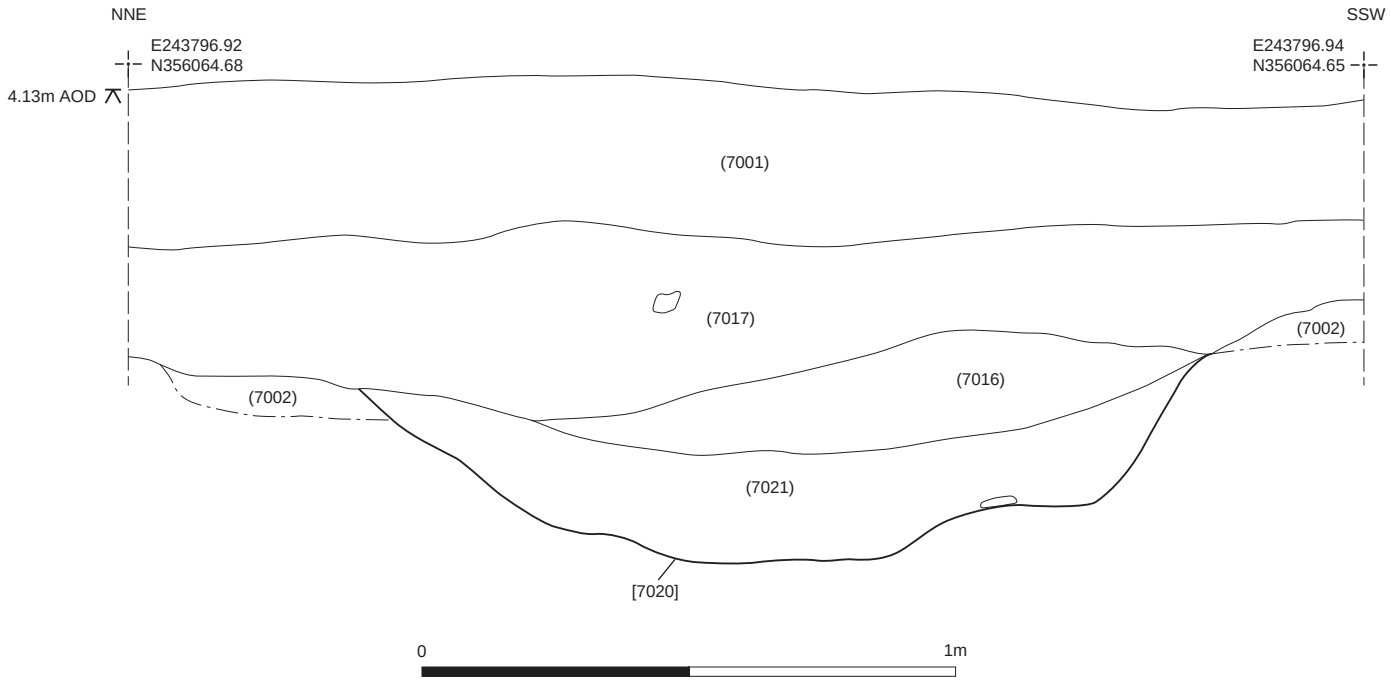
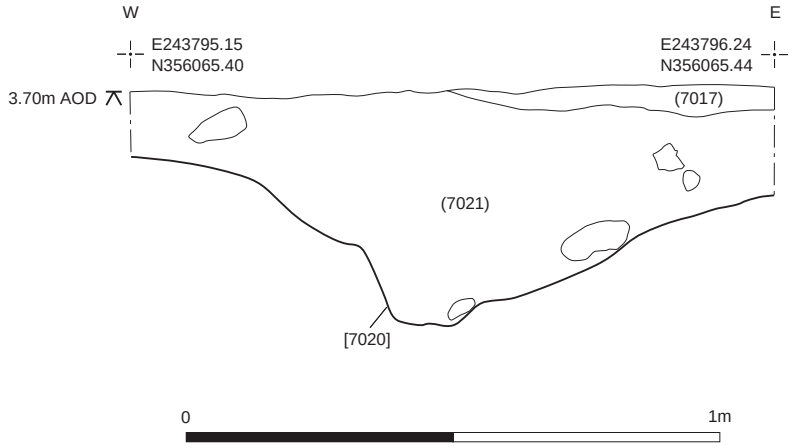


Figure 27.2: Section 7016, S facing section of ditch [7020]



Gwynedd Archaeological Trust

Figure 27: Section 7015, WSW facing section of ditch [7020] and Section 7016, S facing section of ditch [7020]

Date: 20/09/2019
Author: CRY
Office:
Drawing: G2600/SEC.7015/7016
Scale: 1:10@A3

[7017] Archaeological context number
Stone
Limit of excavation

Plate 63: Trench 07 pre-excavation, viewed from the SSW; scale: 2x1m (archive reference G2608_2004).

Plate 64: Trench 07 pre-excavation, viewed from the NNE; scale: 2x1m (archive reference G2608_2003).

Plate 65: Plan shot of pit [7003]; scale: 1x1m (archive reference: G2608_2039).

Plate 66: NNE facing section of pit [7003]; scale: 1x1m (archive reference: G2608_2013).

Plate 67: ESE facing baulk section of [7007] & [7005]; scale: 1x1m (archive reference: G2608_2018).

Plate 68: SSW facing section of animal burrow [7005]; scale: 1x1m (archive reference: G2608_2020).

Plate 69: SSW Facing Section of bioturbation [7009]; scale: 1x1m (archive reference: G2608_2027).

Plate 70: Plan shot of pit [7011]; scale: 1x1m (archive reference: G2608_2051).

Plate 71: Plan of Ditches [7018] and [7020]; scale: 1x1m (archive reference: G2608_2135).

Plate 72: S facing section of enclosure ditch [7020]; scale: 1x1m (archive reference: G2608_2136).

Plate 73: Plan shot of ditches [7018] and [7020]; scale: 1x1m (archive reference: G2608_2133).

Plate 74: Plan of wall [7015]; scale: 1x1m (archive reference: G2608_2056).

4.8 Trench 08

4.8.1 Introduction

Trench 08 was opened as an additional trench prior to the Young Archaeologist's Club (YAC) site visit on Sunday 18th August 2019 in order to provide an area in which YAC members could undertake archaeological excavation and recording. It was positioned to the south of Trench 06 to target the projected southern extension of a known archaeological feature from Trench 06, ditch [6007] (geophysical survey anomaly 45).

4.8.2 Overview

Trench 08 was located on the south-east side of Excavation Area 02 approximately 7m to the south of Trench 06 on ground that sloped gently from east to west at a height of between 4.53 - 4.21 m AOD (Plate 75). No above-ground traces of archaeological features were noted prior to excavation. The uppermost deposit in the trench consisted of a 0.20m deep slightly greyish-brown silty sand topsoil horizon (8001) which contained occasional small fragments of post-medieval ceramic material (Plate 76). Below this lay a 0.34m deep slightly greyish brown silty sand ploughsoil deposit (8002), which also contained occasional fragments of post-medieval ceramics. As in Trench 06, a deposit of clean, orangey-yellow sand (8003) was encountered below the ploughsoil. It extended along the entire length of the trench at an average depth of 0.54m below the current ground surface. The sand was consistent with an aeolian, windblown deposit. Due to time constraints, a limited amount of work was carried out in the trench following the YAC visit. Three archaeological features were identified cut through (8003), all of which were straight linear ditches.

4.8.3 Archaeological features

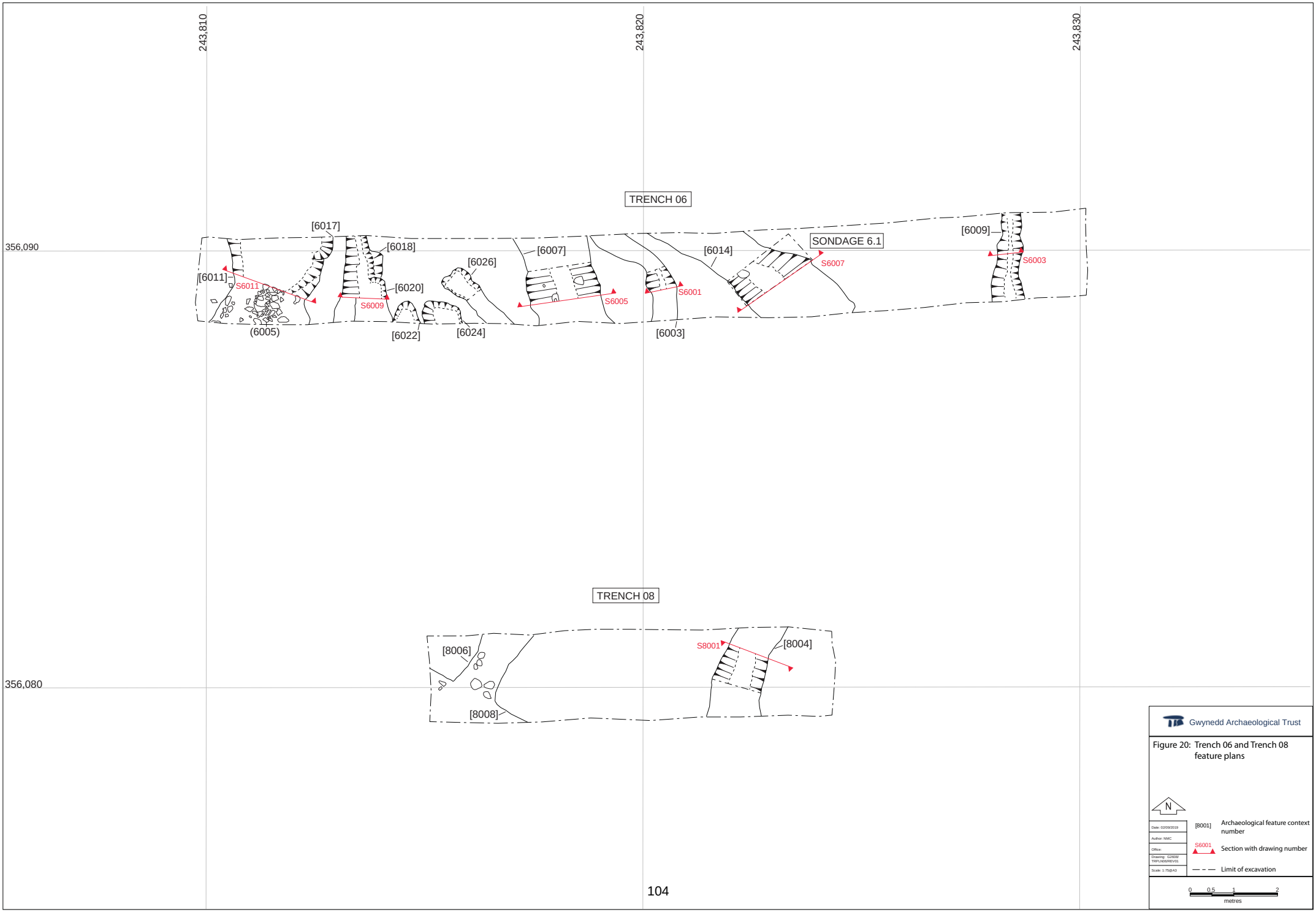
All three of the features identified within Trench 08 were cut through windblown sand deposit (8003) and overlain by ploughsoil (8001). They are discussed in order from east to west across the trench (Figure 20). A straight linear ditch [8004] ran from north-northeast to south-southwest at the eastern side of the trench (Plate 77; Plate 78; Figure 28). It had a maximum width of 1.20m and a depth of 0.29m, with slightly concave sides that broke gradually to a flattish base. It contained a single fill (8005), a soft light brownish-grey silty sand which became greyer towards its base. The fill contained occasional small sub-rounded stones and cobbles up to 0.10m long. No artefacts were recovered from the excavated part of the fill. The fill most likely accumulated as a result of natural silting processes. The two other features in Trench 08 were cleaned and recorded but not excavated. Both were located at the western end of the trench. A straight linear length of ditch [8006] ran from northeast to southwest (Plate 79). It was 0.75m wide and its upper levels were filled with (8007), a mid-

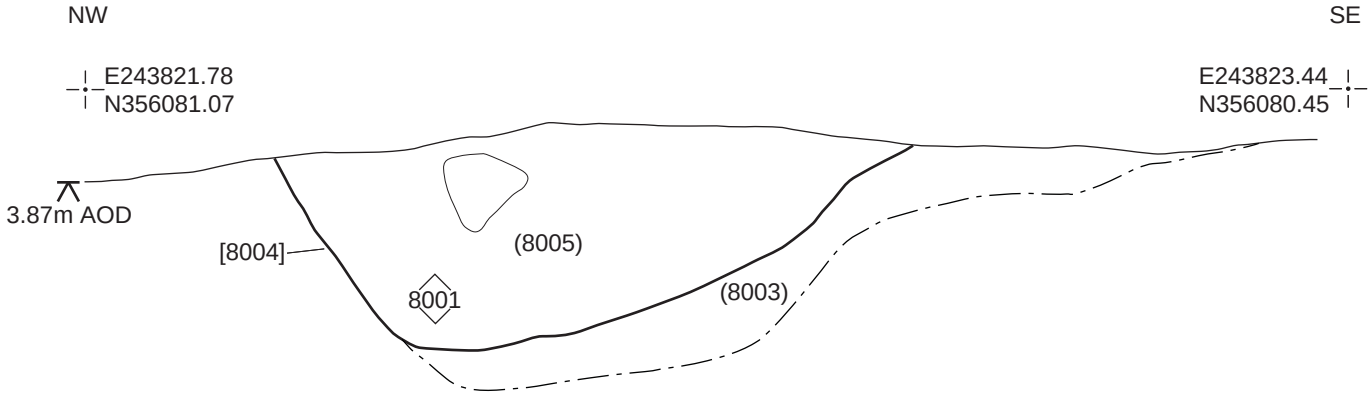
brown silty sand. Six sub-angular and sub-rounded cobbles, up to 0.20mm long, could be seen projecting through the cleaned surface of the fill. Another straight linear ditch [8008], at least 1.10m wide, ran from northwest to southeast across the southwestern corner of the trench perpendicular to [8006] (Plate 80). It appeared to truncate [8006] but without excavation this could not be conclusively demonstrated. The upper levels of ditch [8008] were filled with (8009), a mid-brown slightly silty sand which contained occasional flecks of charcoal. Two sub-rounded cobbles up to 0.18m long could be seen projecting through the cleaned surface of the fill at its north-west end.

4.8.4 Discussion

Trench 08 was targeted the projected southern extension of a known archaeological feature from Trench 06, ditch [6007] (geophysical survey anomaly 45). According to the geophysical survey interpretive plot, the anomaly should have been located at the centre of the trench. Close analysis of the greyscale plot of the geophysical survey results, however, suggests that anomaly 45 may, in fact, be the unexcavated northeast to southwest aligned ditch [8006] at the western end of the trench. Ditch [8006] may, therefore, represent part of an enclosure earlier than that depicted on the 1849 Tithe Map. The unexcavated ditch [8008] in the southeast corner of the trench does not appear to have been picked up in the geophysical survey and nor can it be easily related to features depicted on historic mapping. It is difficult to interpret its function or date based on a fragmentary understanding of its extent, its fills, or its stratigraphic relationship with [6006]. Ditch [8004] at the eastern end of the trench does not appear on the geophysical survey results nor is it depicted on historic mapping. The leached out brownish-grey sand fill (8005) and lack of post-medieval artefacts may suggest it is a relatively early feature. As was discussed for Trench 6, the northwest to southeast aligned ditch [6014] with a characteristically similar brownish-grey sand fill (6015) may turn towards the south as it exits Trench 06. Ditch [8004] may be a continuation of [6014], forming the eastern side of the corner of a previously unknown early enclosure. Though the extent of archaeological works carried out in Trench 08 was limited, they have still contributed to our understanding of the geophysical survey results and they also provide further evidence for the existence of archaeological features that the geophysical survey did not identify. As with Trench 06, the identification of aeolian sand deposits means that Trench 08 still retains considerable archaeological potential as the windblown sand may seal further archaeological horizons below.

Neil McGuinness


243,810
243,820
243,830
356,090
356,080
TRENCH 06
TRENCH 08
SONDAGE 6.1
[6017]
[6018]
[6011]
S6011
[6020]
S6009
[6026]
[6007]
S6005
[6014]
S6001
S6007
[6009]
S6003
(6005)
[6022]
[6024]
[6003]
[8006]
S8001
[8004]
[8008]
Gwynedd Archaeological Trust
Figure 20: Trench 06 and Trench 08 feature plans
N
[8001] Archaeological feature context number
S6001 Section with drawing number
Limit of excavation
0 0.5 1 2
metres



Gwynedd Archaeological Trust

Figure 28: Section 8001, SW facing section through ditch [8004]

Date: 02/09/2019	
Author: NMC	
Office:	
Drawing: G2608/ SEC8001/REV01	
Scale: 1:10@A4	

[8004] Archaeological context number

Stone

8001 Environmental sample

Limit of excavation

Plate 75: Trench 08 pre-excavation, viewed from the W; scale: 2x1m (archive reference G2608_2089).

Plate 76: Trench 08 representative section, viewed from the N; scale: 1x1m (archive reference G2608_2170).

Plate 77: Pre-ex shot of ditch [8004], viewed from the E; scale: 1x1m (archive reference G2608_2091).

Plate 78: SW facing section through ditch [8004], viewed from the SW; scale: 1x1m (archive reference G2608_2112).

Plate 79: Linear ditch [8006] pre-ex, viewed from the SW; scale: 1x1m (archive reference G2608_2171).

Plate 80: Linear ditches [8006] & [8008] pre-ex, viewed from the NE; scale: 1x1m (archive reference G2608_2173)

4.9 Resistivity Survey

The earth resistance survey was undertaken by *Eden Mapping* on 13th August 2019 and targeted a circular mound in the northeast corner of the hillfort's interior as well as a section of the eastern defensive rampart, using a predetermined survey grid established by GAT. The results are detailed in *Eden Mapping* Report GAT-19-DIN (Barker, N. 2019; reproduced as Appendix VI), which concluded that high resistance readings in the southern section of the mound and nearby rampart suggested the presence of a stone infill, whilst the lower resistance in the centre of the mound suggested material from this area could have been excavated; weak and low resistance readings were also generally identified. The results were not able to identify specific archaeological activity, but they do suggest potential for further investigation.

5 POST-EXCAVATION RESULTS

5.1 Ecofact Assessment

A total of 15 ecofact samples were recovered during the evaluation/excavation at Dinas Dinlle (Table 5.1). The primary aim of the ecofact assessment was to recover charred macroplant remains to provide additional interpretative material, both for individual features and the site as a whole, for radiocarbon dating and to recover any additional artefacts.

Sample No.	Context No.	Site Sub Division	Description of feature	Reason for sample
1001	1003	TR01	Sandy dark layer of windblown sand	Interpretation and dating
1002	1017	TR01	Dark silty clay layer within centre of round house	Interpretation and dating
2001	2006	TR02	Buried Soil	Interpretation and dating
2002	2019	TR02	Lower fill of a possible pit [2018]	Interpretation and dating
2003	2016	TR02	Occupation layer	Interpretation and dating
3001	3004	TR03	Buried soil	Interpretation and dating
4001	4007	TR04	Fill of terminus [4006]	Interpretation and dating
4002	4009	TR04	Primary fill of possible pit [4008]	Interpretation and dating
4003	4011	TR04	Fill of discrete feature [4012]	Interpretation and dating
6001	6010	TR06	Fill of [6009]	Interpretation and dating
6002	6015	TR06	Fill of [6014]	Interpretation and dating
6003	6028	TR06	Buried soil layer below upper windblown sand deposit (6002)	Interpretation and dating
6004	6030	TR06	Buried soil layer below lower windblown sand deposit (6029)	Interpretation and dating
6005	6013	TR06	Primary fill of ditch [6007]	Interpretation and dating
8001	8005	TR08	Fill of [8004]	Interpretation and dating

Table 5.1 Ecofact samples

The ecofact post-excavation assessment was completed as a two stage process:

- The bulk samples were processed in house by GAT. This consisted of flotation and wet sieving using a 500 micron mesh to collect the residue, with the flot collected in a 250 micron mesh. The residues were sorted to recover artefacts and non-floating ecofacts. Once sorted the residues were discarded.
- Flots containing recovered charcoal and macroplant remains were sent for specialist assessment to Oxford Archaeology North (Appendix VII). The submitted material was scanned using a Leica stereo-microscope and any plant material, including fruits, seeds, chaff, tubers, charcoal and wood fragments, was quantified, provisionally identified, and assessed. Nomenclature of the plant remains followed *New Flora of the British Isles*, 3rd Edition (Stace 2010). Wood charcoal fragments 2mm and larger were collected for species identification. Wood taxonomy followed *The identification of the Northern European woods* (Hather 2000). The palaeoenvironmental assessment report also included recommendations for any subsequent analysis and radiocarbon dating.

5.1.1 Bulk sample processing

During the course of the in house processing of the bulk samples, a jet bead (SF1003) was recovered from the residue of sample 1001, context (1003), the dark layer of windblown sand in Trench 01. All but one of the samples, sample 6001 from context (6010), the fill of ditch [6009] in Trench 6, contained charcoal and or charred macroplant remains suitable for further assessment. Flots from the 14 samples suitable for further work were subsequently submitted to Oxford Archaeology North for palaeoenvironmental assessment and analysis.

5.1.2 Palaeoenvironmental assessment

The results of the palaeoenvironmental assessment by Oxford Archaeology North confirmed that the 14 samples submitted for analysis contained frequent to abundant identifiable charcoal fragments, and, in a few cases, abundant charred plant remains (Appendix VII; Table 5.2).

Sample no.	Context no.	Context description	Flot Vol (ml)	Charred Plant Remains	Charcoal >2mm	Radiocarbon dating potential
1001	1003	Dark windblown sand deposit	100	Grains (3): *cf Triticum aestivum, Secale cerale, Hordeum* sp and other *Triticum* (glumed), indeterminate grains. Chaff (2): *Triticum spelta* glumes, *Avena* sp awns. Weed seeds (1): *Polygonum aviculare, Rumex* sp, *Carex* sp	(3/4) mostly diffuse porous taxa, including Maloideae, *Prunus* sp, *Alnus/Corylus*, frequent *Quercus* sp, rare *Fraxinus excelsior,* roundwood and other	Yes, glumed *Triticum* or *Triticum spelta* glumes. *Secale cereal* grain for archaeobotanical interest
1002	1017	Occupation layer within roundhouse	10	Grains (1): indeterminate. Chaff (1): *Triticum spelta* glume bases, stem fragments	(3) mostly *Quercus* sp, a few diffuse porous taxa, including *Alnus/Corylus* and roundwood	Yes, charred roundwood
2001	2006	Buried soil	20	Grains (1): indeterminate. Chaff (1): *Triticum spelta* glume bases, stem fragment. Weed seeds (1): small Fabaceae	(2) *Quercus* sp	Yes, but old wood effect
2002	2019	Lower fill of a possible pit [2018]	5	Grains (1): *Triticum* sp, indeterminate Chaff (1): *Triticum spelta* glume bases	(3) *Quercus* sp	Yes, but old wood effect

Sample no.	Context no.	Context description	Flot Vol (ml)	Charred Plant Remains	Charcoal >2mm	Radiocarbon dating potential
2003	2016	Occupation layer	70	Grains (3): *Triticum* sp, *Hordeum* sp, *cf Avena* sp, indeterminate. Chaff (2): small culm fragments, culm nodes, *Triticum spelta* glumes. Weed seeds (2): small Fabaceae, *Rumex* sp, *Carex* sp, *Persicaria lapathifolia, Polygonum* sp, *Erica* sp, *Plantago lanceolata and others*. Other (1): tuber	(4) mostly *Quercus* sp, frequent roundwood	Yes, *Triticum spelta* glumes, or charred roundwood
3001	3004	Buried soil	100	Grains (1): indeterminate. Weed seeds (1): small Fabaceae, *cf Persicaria* sp, culm fragment, unknown charred item	(3) mostly diffuse porous taxa, *cf* Maloideae, *Alnus/glutinosa*, *Prunus* sp, roundwood, few *Quercus* sp	Yes, diffuse porous charcoal (though taphonomy uncertain)
4001	4007	Fill of terminus [4006]	50	Unknown charred items, possibly indeterminate grains	(2) *Quercus* sp	Yes, but old wood effect
4002	4009	Primary fill of possible pit [4008]	50	Chaff (1): *Triticum spelta* glume	(2) mostly *Alnus/Corylus*, rare *Quercus* sp	Yes, *Alnus/Corylus* charcoal if deposit secure
4003	4011	Feature [4012]	70	Grain (1): *Triticum* sp. *Corylus avellana* nut-shell fragments	(3/4) mostly *Quercus* sp, few diffuse porous taxa including *Alnus/Corylus*	Yes, *Corylus avellana* nut-shell

Sample no.	Context no.	Context description	Flot Vol (ml)	Charred Plant Remains	Charcoal >2mm	Radiocarbon dating potential
6002	6015	Fill of 6014	10	Small culm fragments	(2) mostly *Alnus/Corylus* but poorly preserved	Yes, *Alnus/Corylus* charcoal if deposit secure
6003	6028	Buried soil	5	-	(3) *Quercus* sp, diffuse porous taxa including Maloideae, roundwood	Yes, roundwood if secure context
6004	6030	Buried soil	<5	Tuber fragment	(2) *Quercus* sp, a few diffuse porous taxa including Maloideae	Yes, but old wood effect, and if context secure
6005	6013	Primary fill of ditch [6007]	50	Grains (2): *Hordeum* sp, *Avena* sp, indeterminate. Weed seeds (1): small Fabaceae, small culm fragments	(3) mostly *Quercus* sp, a few diffuse porous taxa including *Alnus/Corylus* and others	Yes, *Hordeum* sp if context secure
8001	8005	Fill of 8004	5	Grain (1): indeterminate. Weed (1): *Rumex* sp. *Corylus avellana* shell fragments, small culm fragments	(3) mostly diffuse porous taxa including *Alnus/Corylus* (poorly preserved), a few roundwood including a fragment with bark and rare *Quercus* sp fragments	Yes, if context secure

Note: Quantification is based on a score of 1 to 4, where 1 = rare (one to five items), 2 = frequent (6-25), 3 = common (26-100), 4 = abundant (>100 items)

Table 5.2 **Palaeoenvironmental assessment results**

The palaeoenvironmental assessment report stated that most of the samples contained at least some charred cereal grains, and although preservation was described as variable, most were identifiable to type. The windblown sand layer (1003) in Trench 01 and occupation deposit (2016) in Trench 02, both located within Excavation Area 1 within the hillfort interior, contained the largest cereal assemblages, with the report stating that common wheat (Triticum sp), barley (Hordeum sp), and possible oat (cf Avena sp) were present. The report stated that several of the wheat grains from windblown sand (1003) were

squat and plump, possessing characteristics consistent with a free-threshing variety of wheat such as bread wheat (Triticum aestivum), whilst possible rye grains (Secale cereale) were also identified. In excavation Area 02, deposit (4011), the fill of Feature [4012] in Trench 04, also contained rare common wheat (Triticum sp), whilst in Trench 06 examples of barley (Hordeum sp) and possible oat (Avena sp) grains were recovered from deposit (6013), the primary fill of ditch [6007].

The specialist report also stated that the cereal chaff assemblage, a by-product of crop processing, was dominated by spelt wheat (Triticum spelta) glume bases. Spelt wheat glume bases were identified in Excavation Area 1 in the occupation layer within the roundhouse (1017) and the windblown sand layer (1003) in Trench 01, and the buried soil (2006), a fill (2019) of possible pit [2018], and occupation deposit (2016) in Trench 02. In Excavation Area 2, Triticum spelta glumes were recovered from the primary fill (4009) of possible pit [4008] in Trench 04. Other types of cereal chaff identified included spelt wheat stem fragments from the occupation layer (1017) within the roundhouse in Trench 01 and the buried soil (2006) in Trench 02, and oat awn fragments from the windblown sand deposit (1003) in Trench 01.

The report also identified several charred weed seeds/fruits, particularly in the richer cereal assemblages from Excavation Area 1. The charred weed seeds/fruits included small pea (Fabaceae) from the buried soil (2006) and occupation layer (2016) in Trench 02; knotgrass (Polygonum aviculare), dock (Rumex sp) and sedge (Carex sp) from the windblown sand deposit (1003) in Trench 01 and occupation layer (2016) in Trench 02; and pale persicaria (Persicaria lapathifolia) and ribwort plantain (Plantago lanceolata) from (2016) in Trench 02. A single possible heath (Erica sp) seed was also recovered from deposit (2016). Small pea (Fabaceae) was also identified in Excavation Area 02 in the primary fill (6013) of ditch [6007] in Trench 06, and dock (Rumex sp) in the fill (8005) of ditch [8004] in Trench 08. Deposits (4011) in Trench 04 and (8005) in Trench 08 contained rare hazelnut shell (Corylus avellana) fragments.

The report stated that the majority of the flots contained common to abundant identifiable charcoal fragments and deposits appeared to be dominated by either oak (Quercus sp) or diffuse porous (mostly short-lived) taxa, including hawthorn-type (Maloideae), blackthorn-type (Prunus sp) and alder/hazel (Alnus glutinosa/Corylus avellana); Ash (Fraxinus excelsior) was also recovered from the windblown sand deposit (1003) in Trench 01.The report stated that as the quantities of charred plant remains were small in most of the deposits, they only provide limited data for crop husbandry and the local environments. The report stated that two of the excavated features in the interior of the hillfort (Excavation Area

1), windblown sand layer (1003) in Trench 01, and the occupation layer (2016) in Trench 02, produced relatively rich cereal assemblages, although they comprised types more in common with medieval/post-medieval cultivation than late prehistoric / Romano-British. The report highlighted that thirteenth-century drying-kiln deposits from Rhuddlan in Denbighshire, produced a similar mixed crop assemblage of rye, barley, bread wheat and oat (Quinnell and Blockley 1994 cited in Golebiewska and Druce 2020). Although rare examples of free-threshing wheat, such as those identified in the windblown sand layer (1003) in Trench 01, have been discovered at other late prehistoric sites in north Wales, such as the Iron Age site discovered during the construction of the Pwllheli to Blaenau Ffestiniog pipeline (Treasure 2016 cited in Golebiewska and Druce 2020), its presence alongside oat and rye in the same deposit suggested it was likely to be intrusive.

The spelt chaff from several of the deposits, was identified in the report as a variety of wheat more consistent with the occupation of the hillfort during the Iron Age, with the "small quantities perhaps suggest its presence as scattered floor debris" (*ibid.*: 5). The Iron Age site discovered during the construction of the Pwllheli to Blaenau Ffestiniog pipeline produced a large concentration of cereal grains (113 grains/litre) and some chaff, and although emmer wheat was dominant, the other cereals included spelt wheat and barley (*ibid*).

The charred weed seed assemblages were seen to provide tentative evidence for the presence of rough/waste grassland and heathland, but the "possible mixed nature of the remains, call into question which period they originate from" (*ibid*), with a similar situation found with the charcoal, as "although several of the features produced common to abundant identifiable fragments, dominated by either oak or diffuse porous taxa such as alder or hazel, without direct dating the period from which it originates remains uncertain" (*ibid*).

The conclusion of the report states that little additional information would be gained by further analysis of the charred plant remains, though further analysis of the charcoal, as an aid to investigating fuel-use, may be warranted if representative fragments were directly dated. The assessment suggested that all of the 14 samples contained material suitable for radiocarbon dating, but that the charcoal from long lived species such as oak (Quercus sp) from the buried soil (2006) and the fill (2019) of pit [2018] in Trench 02, the fill (4007) of ditch terminus [4006] in Trench 04, and the buried soil (6030) in Trench 06, may be subject to old wood effect which may produce misleading results. A copy of the assessment report by Oxford Archaeology North is included as Appendix VII. The remaining ecofacts will be accessioned to the Gwynedd Museum and Archives Service Storiel facility.

5.2 Artefact Assessment: Pottery

Eleven sherds or fragments of potential Roman pottery were recovered from Trenches 01 and 02 in Excavation Area 1, and three sherds of medieval pottery were recovered from Trench 04 in Excavation Area 2, all of which were sent to specialists for assessment.

5.2.1 Roman Pottery

All of the potentially Roman pottery sherds recovered during the excavations were from contexts in Trenches 01 and 02 in Excavation Area 1, the interior of the hillfort. The assemblage was assessed by Gill Dunn, a Roman pottery specialist and senior archaeologist at the Grosvenor Museum, Chester (Appendix VIII). It comprised 11 sherds or fragments weighing 74.8g, the details of which are shown below (Table 5.3):

Find Number	Trench	Context	Context description	Description	Weight (g)
1004	01	1003	Dark windblown sand deposit	1 Dorset black-burnished ware plain-rimmed dish rim sherd. Trace of decoration just below the rim	4
1002	01	1015	Fill of possible storm drain on southern side of round house	1 samian ware dish or bowl rim sherd	4.8
2003	02	2006	Dark silty sand layer with stones on north side of trench	1 oxidised coarse ware body sherd, probably from a jar or bowl	27
2004	02	2010	Silty sand layer on the north side of trench	1 oxidised coarse ware flanged bowl rim sherd	19
2005	02	2010	Silty sand layer on the north side of trench	1 Dorset black-burnished ware body sherd. Some cross-hatching decoration is visible, indeterminate vessel form.	4
2007	02	2010	Silty sand layer on the north side of trench	3 fragments of ceramic material - probably not pottery but building material	8
2008	02	2010	Silty sand layer on the north side of trench	1 fragment of coarse oxidised quartz-rich ceramic - indeterminate as to whether it is a pottery sherd or a fragment of building material	2
2013	02	2006	Dark silty sand layer with stones on north side of trench	3 fragments of ceramic material - probably not pottery but building material	6

Table 5.3 **Roman Pottery**

Only 5 of the 11 fragments, small finds SF1004, 1002, 2003, 2004, and 2005, weighing 58.8g, could be positively identified as vessel fragments. The two coarseware fragments were suggested in the report to be derived from a bowl (SF2004) and either a bowl or jar (SF2003). The samian rim sherd (SF2004) was also interpreted in the report as part of a dish or bowl, which also suggested the coarse ware and samian ware sherds were in a poor abraded condition which had resulted in any surface treatment or decoration being lost, and in the case of the samian sherd, the slip was described as worn.

The two black-burnished ware sherds were identified as less abraded and were described as in generally better condition, consisting of a decorated rim sherd (SF1004) from a plain rimmed dish, recovered from the windblown sand deposit (1003) in Trench 1, and a cross-hatched body sherd (SF2005) from a vessel described as of inderterminate form, retrieved from the silty sand layer (2010) on the north side of Trench 02.

The two coarse ware sherds and the samian sherd were dated in the report to the second century AD, and the two Dorset black-burnished ware sherds were given a terminus post quem of AD 120.

No recommendations were made for further analysis of the Roman pottery in the report. However, three sherds (SF4005) from context (4010) in Trench 4 (Excavation Area 2) (not listed in Table 5.3) which were included in the assemblage were assessed to be medieval in date and specialist analysis of them was recommended (see Sec 5.2.2). A copy of the Roman pottery assessment report by Gill Dunn is included as Appendix VII. The Roman pottery sherds will be accessioned to the Gwynedd Museum and Archives Service Storiel facility, in line with their 2009 guidelines.

5.2.2 Medieval Pottery

Three sherds of medieval pottery were recovered from the secondary fill (4010) of a possible pit [4008] in Trench 04, Excavation Area 2. The sherds were initially thought to be Roman, however Gill Dunn identified them as more likely to be medieval and consequently they were sent for assessment to Julie Edwards, senior archaeologist and medieval pottery specialist at the Grosvenor Museum, Chester (Appendix IX). Additional petrographic analysis to investigate the provenance of the pottery was conducted by Dr, Patrick Sean Quinn at Ceramic Petrography Analytical Service, University College London. The assemblage weighed 14g, the details are shown below (Table 5.4):

Find Number	Trench	Context	Context description	Description	Weight (g)
4005	04	4010	Secondary fill of possible pit [4008]	3 coarse ware pottery sherds, including 1 rim sherd	14

Table 5.4 **Medieval pottery**

The specialist report (Edwards, 2020) stated that the three sherds of soft, oxidised red earthenware were part of the rim and neck of a single thin walled vessel that appeared to have been a jar and that original vessel did not appear to have been wheel thrown and there was no trace of glaze or decoration on the exterior or interior of the sherds (*ibid.*). The overall appearance and method of manufacture suggested that the pottery was identified broadly medieval in date, wit the shape and presence of burning/sooting on the rim suggesting that the vessel may have been used for cooking or heating food or liquid (*ibid.*).

The report stated that the fabric contained a moderately abundant amount of coarse and very coarse igneous rock inclusions, suggesting that it may have been manufactured in an area where granite bedrock was present, although a glacial erratic source for the material was not ruled out (*ibid.*). The report stated that whilst there is some granite in North Wales it is not in areas associated with medieval pottery production and the author identified several areas in the British Isles where medieval handmade wares with granite-derived fabrics were produced: North Devon, Cornwall, Cumbria and North Wicklow / Leinster in Ireland. Given the coastal location of Dinas Dinlle and the maritime connections around the Irish Sea and along the west coast of Britain, a source in such relatively distant areas was deemed quite possible (*ibid.*).

The author recommended that the sherds were drawn (Figure 29) and that thin-section (petrographic) analysis should be undertaken to confirm the identification of the inclusions

and to identify their potential geological source that may indicate where the pottery was made.

Thin-section analysis was completed by Dr. Patrick Sean Quinn (Appendix X). The petrographic analysis report (Quinn, 2020) confirmed that the fabric contained granite derived inclusions but that their low abundance and altered nature meant that petrography did not add significantly to the existing characterisation apart from the observation that the inclusions contained muscovite, mica and myrmekite, and had been added as temper. The author identified Twt Hill Granite Pluton near Caernarfon, a few miles from the site, as the closest granitic bedrock location and also noted that glacial till covers large areas of North Wales, including Gwynedd, and suggested that either source could have provided the granite temper used in the pottery (*ibid.*). Acknowledging the lack of evidence for local medieval pottery production however, the author suggested that of the areas in the British Isles where medieval handmade wares with granite-derived fabrics are known to have been made, Leinster in Ireland may tentatively provide the best match for the source of the granite inclusions and that the pottery may be an example of Leinster Cooking Ware (*ibid.*). Leinster Cooking Ware was in use mainly in the mid-13th - 14th centuries but it has been found in mid-12th century deposits in Waterford (*ibid.*).

No further recommendations were made for further analysis in the petrographic analysis report. A copy of the medieval pottery assessment report by Julie Edwards is included as Appendix IX and a copy of Patrick Quinn's petrographic analysis as Appendix X. The medieval pottery sherds will be accessioned to the Gwynedd Museum and Archives Service Storiel facility, in line with their 2009 guidelines.

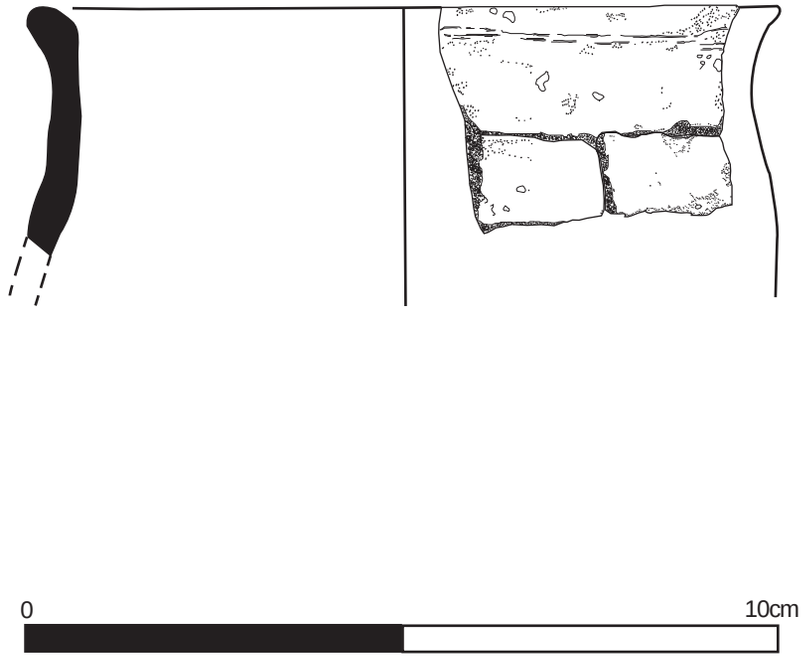


Figure 29: Illustration of SF4005; drawn by Bethan Jones (Gwynedd Archaeological Trust)

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Gwynedd Archaeological Trust

5.3 Artefact Assessment: Lithics

A small flint fragment was recovered from a silting deposit against the inner face of the roundhouse wall in Trench 01, Excavation Area 1. The flint fragment was analysed and assessed by George Smith of Gwynedd Archaeological Trust in order to assess its form, function and possible date. Details of the object are shown in Table 5.6.

Find Number	Trench	Context	Context description	Description	Dimensions (mm)	Weight (g)
1001	01	1018	Silt deposit formed around the northern inner face of roundhouse wall	Flint flake	12x13x4	1.9

Table 5.5 Lithic Artefacts

The artefact SF1001 was identified as a small, broad, thick chip of mid-grey flint (Smith 2019). The flint was described as having been struck by heavy impact (*ibid.*). The surface of the flint was identified as fresh with no weathering evident, with the condition and location in a windblown silting deposit suggesting that it may not be an ancient artefact and that as it was roughly trimmed on both edges creating a sub-rectangular shape, it was likely to be a post-medieval gunflint, made locally (*ibid.*).

No recommendations were made for further analysis of the flint artefact. A copy of George Smith's assessment report is included as Appendix XI. The flint will be accessioned to the Gwynedd Museum and Archives Service *Storiel* facility, in line with their 2009 guidelines.

5.4 Artefact Assessment: Metal objects

A total of four metal artefacts requiring further assessment were recovered from contexts within Trench 02, Excavation Area 1, the interior of the hillfort. They were initially sent to Phil Parkes, metallurgist and archaeological conservator at Cardiff University for diagnostic x-ray and assessment (Appendix XII). The artefacts were x-rayed using a Faxitron 43805 cabinet system and the x-ray films were digitised using an Array Corporation 2905 Laser Film Digitiser. The artefacts and the results of the x-ray analysis and initial assessment were then forwarded to Jörn Schuster at Archaeological Small Finds for further analysis (Appendix XIII). Details of the metal artefacts are shown in Table 5.5 below.

Find Number	Trench	Context	Context description	Material	Description	Weight (g)
2001	02	2005	Windblown sand	Pb	Folded lead strip / sheet, x-ray unable to penetrate fully.	14
2006	02	2010	Silty sand layer on the north side of trench	Pb	Lead weight, x-ray unable to penetrate fully.	25
2009	02	2023	Silty sand fill of a possible ditch [2022]	Fe	Tool – small hammer head	102
2010	02	2006	Dark silty sand layer with stones on north side of trench	Fe	Tool – small chisel / wedge-shaped tool.	57

Table 5.6 Metal objects

Visual inspection and x-ray analysis confirmed that the assemblage consisted of a folded lead strip fragment (SF2001), a lead weight (SF2006) an iron hammer (SF2009) and an iron chisel (SF2010). The initial assessment found that all four of the objects were in a sound condition with no visible signs of post-excavation corrosion (Parkes, 2020).

Jörn Schuster's analysis states that the lead strip (SF2001) might have been a fragment folded in order to remelt it in a crucible (Schuster, 2020). He also notes that the discoid lead weight (SF2006) weighs approximately 24.9g, and may thus have been intended to be an ounce or 1/12 of a "Celtic" pound, rather than conforming to the Roman standard with a heavier ounce of 27.288g, which may suggest an Iron Age date for the object (*ibid.*).

The iron hammer head (SF2009) was described as having an elongated, oval eye, which was a feature typical of Iron Age and post-Roman hand-hammers and that its weight of less than 100g suggested that it had been used for more delicate work. The report also stated that the dimensions of small chisel (SF2010) suggested it could have been used as a hot chisel but it was not possible to provide a potential date for the chisel as its "basic morphology is chronologically indistinct" (*ibid.*).

The report stated that although limited in size, the metal assemblage from Dinas Dinlle was thought to have significant potential to contribute to the functional and chronological analysis of the activities carried out at the site, as well as the socio-economic and technological links of its inhabitants (*ibid.*). The report recommended that further analysis of the lead weight and the two iron tools will allow confirmation of their identification, providing a more secure date and, assuming the Iron Age date of the contexts from which the objects were recovered is confirmed during analysis, the assemblage represented a nationally significant addition to the small number of Iron Age tools known from Wales (*ibid.*). The report states that a poker is known from the Tre'r Ceiri Hillfort, less than 14km along the coast to the southwest of the site, and two iron tongs were found as part of the metalwork hoard at Llyn Cerrig Bach on Anglesey, c. 25km to the northwest. Additionally, while there is one other chisel from Tywn-y-Gaer hillfort in Gwent, the report suggests the Dinas Dinlle hammer appears at present to be the first such tool form an Iron Age context in Wales (*ibid.*).

The assessment report recommended that a report for publication should be prepared, expanding upon the results of the assessment, and it should involve additional literature research, in order to place the objects within their regional and wider context. It also recommended that the hammer is cleaned in order to provide a better understanding of its working faces and that all of the metal objects should be illustrated for publication (*ibid.*).

A copy of the Phil Parkes' X-ray assessment is included as Appendix XII and a copy of Jörn Schuster's assessment as Appendix XIII. The metal artefacts will be accessioned to the Gwynedd Museum and Archives Service Storiel facility, in line with their 2009 guidelines.

5.5 Artefact Assessment: Jet bead

A jet bead was recovered from the residue of bulk sample 1001, context (1003), the dark layer of windblown sand in Trench 01, Excavation Area 1. The bead was submitted to Hilary Cool of Barbican Research Associates for assessment. The aim of the assessment was to confirm the bead's material, function and date, and to identify its potential for further analysis. Details of the artefact are shown in Table 5.7 below.

Find Number	Trench	Context	Context description	Description	Dimensions (mm)	Weight (g)
1003	01	1003	Dark layer of windblown sand	Jet bead	5x2.5 perforation diameter 1.5	1.9

Table 5.7 Jet bead

The bead was confirmed in the report as being made from jet and was a long, square-sectioned bead with angles rounded from polishing. The report (Cool, 2019) stated that the bead had been bevelled to produce a long diamond shape on each face and may originally been part of a jet necklace that was probably made in the late Roman period, the 4th century AD as the use of jet to make beads was commonest at this point and the use of bevels to produce a diamond and triangle faceted pattern used on beads in a variety of materials is also a feature of that period (*ibid.*).

The report identified similarly sized jet beads with this pattern on a necklace with an inhumation at Kelvedon, Essex attributed to the first half of 4th century AD and that the form also occurred on the multi-strand jet necklace worn by the possible *gallus* at Catterick, North Yorkshire, again from a burial is likely to belong to the 4th century AD so a "similar date can be suggested for the Dinas Dinlle bead" (*ibid.)*.

No recommendations were made for further analysis of the jet bead in Hilary Cool's report; a copy of which is included as Appendix XIV. The jet bead will be accessioned to the Gwynedd Museum and Archives Service *Storiel* facility, in line with their 2009 guidelines.

5.6 Ecofact Analysis: Radiocarbon Dating

Radiocarbon dating was proposed for selected charcoal fragments and charred macroplant remains, based on recommendations by Oxford Archaeology North (Appendix VII). Sixteen samples were submitted to the Scottish Universities Environmental Research Centre (SUERC) Accelerator Mass Spectrometry (AMS) Laboratory, East Kilbride. The purpose of the radiocarbon dating was to provide calibrated date ranges for the selected material in order to identify the chronology of activities and events represented by selected features and deposits in the trenches in both Excavation Area 1, the hillfort interior, and Excavation Area 2, the field to the south of the hillfort. Sixteen charcoal or charred macroplant samples, two from each of the eight archaeological contexts selected, were submitted. Their details are shown in Table 5.8 below.

Sample No	Context No	Context description	Material / species	Common Name
1002	1017	Dark silty clay layer within centre of round house	Charred plant remains: Triticum spelta glume base	Spelt wheat
1002	1017	Dark silty clay layer within centre of round house	Charcoal: Alnus glutinosa round wood	Alder
2003	2016	Occupation layer	Charcoal: Alnus glutinosa	Alder
2003	2016	Occupation layer	Charcoal: Quercus round wood (2 years growth, no bark)	Oak
4002	4009	Primary fill of possible pit [4008]	Charcoal : Corylus avellana round wood	Hazel
4002	4009	Primary fill of possible pit [4008]	Charcoal : Corylus avellana round wood	Hazel
4003	4011	Fill of discrete feature [4012]	Charred plant remains : Corylus avellana nut-shell fragment	Hazelnut
4003	4011	Fill of discrete feature [4012]	Charcoal : Corylus avellana	Hazel
6002	6015	Single fill of ditch [6014]	Charcoal : Alnus/corylus twig fragments (x2) and indeterminate twig fragments (x3)	Alder/Hazel/ indeterminate
6002	6015	Single fill of ditch [6014]	Charcoal : Alnus glutinosa/Corylus avellana	Alder/Hazel

Sample No	Context No	Context description	Material / species	Common Name
6003	6028	Buried soil layer below upper windblown sand deposit (6002)	Charcoal : Leguminosae round wood	Legume family
6003	6028	Buried soil layer below upper windblown sand deposit (6002)	Charcoal : Leguminosae round wood	Legume family
6005	6013	Primary fill of ditch [6007]	Charred plant remains : Hordeum sp	Barley
6005	6013	Primary fill of ditch [6007]	Charcoal : Corylus avellana	Hazel
8001	8005	Single fill of ditch [8004]	Charred plant remains : Corylus avellana nut-shell fragment	Hazelnut
8001	8005	Single fill of ditch [8004]	Charcoal : Alnus glutinosa/Corylus avellana (outermost 5 rings with bark)	Alder/Hazel

Table 5.8 Charred plant remains submitted for radiocarbon dating

The radiocarbon ages established for the submitted samples are expressed as conventional years BP (before 1950 AD) with errors quoted at one standard deviation. These radiocarbon ages have been calibrated to a conventional calendar timescale by SUERC using the University of Oxford Radiocarbon Accelerator Unit calibration program OxCal4 with reference to the IntCal13 atmospheric calibration curve. The calibrated date range is expressed at 95.4% confidence.

One of the sixteen samples, the Alder/Hazel/indeterminate charcoal from sample 6002, recovered from the fill (6015) of ditch [6014] in Trench 06, could not be dated due to insufficient carbon. The full results were of the radiocarbon dating program are shown in (Table 5.9):

Lab No	Sample No	Context No	Context description	Material/ species	Radiocarbon Age (BP)	$\delta^{13}C$ (‰)	Calibrated date (95.4% probability)
SUERC-94824 (GU55724)	1002	1017	Dark silty clay layer within centre of round house	Charred plant remains: Triticum spelta glume base	1925 ± 24	-23.7	24 – 129 calAD
SUERC-94825 (GU55725)	1002	1017	Dark silty clay layer within centre of round house	Charcoal: Alnus glutinosa round wood	1749 ± 24	-27.6	234 – 380 calAD
SUERC-94826 (GU55726)	2003	2016	Occupation layer	Charcoal: Alnus glutinosa	1696 ± 21	-27.2	258 – 403 calAD
SUERC-94827 (GU55727)	2003	2016	Occupation layer	Charcoal: Quercus round wood (2 years growth, no bark)	1916 ± 24	-25.9	27 – 132 calAD
SUERC-94828 (GU55728)	4002	4009	Primary fill of possible pit [4008]	Charcoal : Corylus avellana round wood	4982 ± 25	-25.9	3907 – 3697 calBC
SUERC-94829 (GU55729)	4002	4009	Primary fill of possible pit [4008]	Charcoal : Corylus avellana round wood	4994 ± 21	-24.9	3907 – 3706 calBC
SUERC-94830 (GU55730)	4003	4011	Fill of discrete feature [4012]	Charred plant remains : Corylus avellana nut-shell fragment	4992 ± 25	-24.2	3923 – 3702 calBC
SUERC-94834 (GU55731)	4003	4011	Fill of discrete feature [4012]	Charcoal : Corylus avellana	5026 ± 25	-24.1	3943 – 3713 calBC
GU55732	6002	6015	Single fill of ditch [6014]	Charcoal : Alnus/corylus twig fragments (x2) and indeterminate twig fragments (x3)	Failed due to insufficient carbon	N/A	N/A
SUERC-94835 (GU55733)	6002	6015	Single fill of ditch [6014]	Charcoal : Alnus glutinosa/Corylus avellana	667 ± 24	-25.8	1227 – 1390 calAD

Lab No	Sample No	Context No	Context description	Material/ species	Radiocarbon Age (BP)	$\delta^{13}C$ (‰)	Calibrated date (95.4% probability)
SUERC-94836 (GU55734)	6003	6028	Buried soil layer below upper windblown sand deposit (6002)	Charcoal : Leguminosae round wood	233 ± 24	-25.2	1640 calAD – present day
SUERC-94837 (GU55735)	6003	6028	Buried soil layer below upper windblown sand deposit (6002)	Charcoal : Leguminosae round wood	168 ± 24	-24.9	1664 calAD – present day
SUERC-94838 (GU55736)	6005	6013	Primary fill of ditch [6007]	Charred plant remains : Hordeum sp	193 ± 24	-23.9	1656 calAD – present day
SUERC-94839 (GU55737)	6005	6013	Primary fill of ditch [6007]	Charcoal : Corylus avellana	270 ± 24	-27.5	1521 – 1797 calAD
SUERC-94840 (GU55738)	8001	8005	Single fill of ditch [8004]	Charred plant remains : Corylus avellana nut-shell fragment	573 ± 24	-23.7	1308 – 1418 calAD
SUERC-94844 (GU55739)	8001	8005	Single fill of ditch [8004]	Charcoal : Alnus glutinosa/Corylus avellana (outermost 5 rings with bark)	651 ± 24	-28.1	1282 – 1392 calAD

Table 5.9 **Radiocarbon dating results**

The results reflect a very broad chronology from the Neolithic to present and generally correspond with the archaeology encountered within Excavation Areas 1 and 2. These results are discussed in detail below (paras. 6.2 and 6.3).

6 CONCLUSION

6.1 Introduction

The archaeological evaluation excavation at Dinas Dinlle comprised eight trenches and targeted key geophysical anomalies in an attempt to date and characterise aspects of the hillfort and immediate environs. Two trenches were located within the hillfort interior (Excavation Area 1) to target anomalies thought to represent possible roundhouses (Trench 01 – Trench 02), and six trenches in the field to the south (Excavation Area 2) were located to target anomalies though to represent potential enclosures, field systems and structures within the immediate environs of the hillfort (Trench 03 – Trench 08). The trenches confirmed the presence of substantial roundhouses within the hillfort, as well as later activity in the area to the south, whilst the resistivity survey to the east of Excavation Area 1 suggested further evidence of structural activity and localised disturbance. The recovery of Roman artefacts in the hillfort demonstrated continued occupation within this period and the identification of Neolithic pits, medieval pottery and an abandoned post-medieval farmstead reflected settlement and activity across a broader timeframe. No evidence was identified within the confines of the evaluation trenches in Excavation Area 2 to suggest the archaeological activity was associated with the hillfort or formed part of the nucleus to the settlement. All trenches were characterised by thick deposits of windblown sand and the significant impact on the local landscape and archaeology was clearly evident.

The recovered ecofacts and artefacts were sent for specialist assessment and analysis, including radiocarbon dating. These results are discussed further below.

6.2 Excavation Area 1

Whilst the trenches within the hillfort confirmed the presence of roundhouses and identified occupation layers and later disturbance, the radiocarbon dating results were informative but not conclusive. Two samples from occupation layer (1017) within the centre of the roundhouse in Trench 01 returned late Iron Age to late Roman dates, with the spelt wheat glume dated to 24 to 129 calAD and the alder charcoal to 234 to 380 calAD; no datable artefacts were recovered from the deposit to assist with further interpretation or suggest whether the earlier date represented re-deposited material. Trench 02 was similarly inconclusive, with two samples from occupation deposit (2016) returned dates with a similar timeline: a fragment of oak charcoal was dated 27 to 132 calAD, whilst alder charcoal returned a date between 258 to 403 calAD; it is also possible here that the earlier date represents re-deposited material from earlier phases of occupation. Artefacts within Trenches 01 and 2 included 2nd century AD Samian ware from a sealed deposit (1015) on the southern side of the roundhouse, 2nd century AD black-burnished ware from a later windblown deposit (1003) along with a 4th century AD jet bead from a necklace; later activity was represented by a post-medieval gunflint from a silt-rich deposit (1018) sealing the northern inner face of roundhouse wall. Artefacts from Trench 02 also included metal objects, comprising a folded lead strip from a windblown sand deposit (2005), a possibly Iron Age lead weight from a deposit on the north side of the trench (2010), a chronologically indistinct chisel from another deposit on the north side of the trench (2006) and a small hammer head from the fill of a possible ditch (2023). If the tools collectively are considered Iron Age in date then they represent earlier activity to that from Trench 01 and more importantly are seen as representing a nationally significant addition to the small number of Iron Age tools known from Wales. The hammer head in particular is a significant find, as it may be the first such Iron Age tool in Wales. A useful addition to the assemblage is a black-burnished ware rim sherd recovered in 2006, on top of a landslide at the base of the cliff below the hillfort. Whilst not in a sealed context, the sherd has been identified as a BB1 fabric, with the rim shape suggesting an early 4th century AD date (Gill Dunn *pers.comm.*). Whilst both trenches revealed evidence for activity at this part of the hillfort from the Iron Age onwards, the results emphasise the challenge of dating specific deposits within the confines of an evaluation trench and highlights the need for more dating from a wider excavation area to provide more certainty. The current results certainly demonstrate the continued occupation and use of the site over a prolonged period.

The Historic Environment Record Primary Number for the activity within the roundhouse is 92205 for Trench 01 and PRN 92234 for Trench 02.

6.3 Excavation Area 2

The six trenches in Excavation Area 2 (Trenches 03 to 08), located south of the hillfort, targeted anomalies though to represent multi-period activity including potential enclosures, field systems and structures within the immediate environs of the hillfort (Trenches 03 to 08). The trenches in Excavation Area 2 included multi-period domestic and agricultural activity (in Trench 03, 04 and 06), along with field boundary ditches consistent with the 1849 Llandwrog Tithe Award Map (Trenches 04, 05, 06, 07 and 08) and evidence of a former farm building (Trench 05). Radiocarbon dates were sourced from Trenches 04, 06 and 08. In Trench 04, Hazel charcoal recovered from the fill (4009) of a large pit [4008] at the western end of the trench returned two consistent Early Neolithic dates: 3907 to 3697 calBC and 3907 to 3706 calBC. Charred material recovered from the fill (4011) of a discrete feature [4012] cut into pit [4008] also returned two dates from the same period: 3943 to 3713 calBC from a sample of hazel charcoal, and the other, 3923 to 3702 calBC, on a charred hazelnut shell. Whilst these dates signify prehistoric activity much earlier than any activity on the hillfort, Trench 04 also revealed evidence of medieval activity, with three medieval potsherds recovered from the upper fill of pit [4008] (Context (4010)). The sherds were interpreted as mid-13th to 14th century Leinster Cooking Ware from Ireland Leinster Cooking Ware; there presence within a small group that was otherwise Neolithic suggests later intrusion, as well as signifying local medieval activity, supported elsewhere by 13th to 14th century radiocarbon date in Trench 06 and 13th to 15th century radiocarbon dates in Trench 08.

In Trench 06, radiocarbon dating was attempted on material recovered from the fills of two ditches, ditch [6007] at the centre of the trench (geophysical survey anomaly 45) and ditch [6014] to its east, and the buried soil deposit (6028) below the windblown sand (6002). All of the features in the trench were cut through (6002) and it was hoped that the dates would enable an understanding of the chronology of activities and events evident in the trench. Samples were taken from the primary fill of ditch [6007] and the base of the single fill of ditch [6014] to give the best chance of identifying when the ditches were initially cut and used. Charred barley recovered from the primary fill (6013) of ditch [6007] returned a broadly post-medieval or modern date of 1656 calAD – present day. Hazel charcoal from the same deposit returned a lower range of possible dates, 1521 – 1797 calAD, which suggests the primary filling of the ditch took place in the post-medieval period. One of the samples from the base of fill (6005), the single fill of ditch [6014], failed due to insufficient carbon however charred hazel from the same deposit returned a medieval date 1227 – 1390 calAD. The two dates from the buried soil layer (6028) below windblown sand (6002), both from fragments of charcoal from the legume family of plants, returned post medieval or modern dates 1640 calAD – present day and 1664 calAD – present day, which both appear to suggest that

buried soil had formed by the post-medieval or modern period, and to provide a broad post medieval or modern terminus post-quem for the sand inundation (6002) that covered it.This would suggest that the charred hazel in ditch [6014] is residual medieval material in a later, post-medieval or modern, ditch. However it is difficult to see how medieval material, which would have been buried by the post-medieval or modern sand inundation, eroded into the later ditch unless it had blown in from some distance away or it too had previously been incorporated into, and eroded out of, the buried soil (6028) that ditch [6014] was also cut through. The buried soil (6028), which had formed on another layer of windblown sand (6029) that represents an earlier inundation, may have also formed the ground surface in the medieval period and been inundated later. Given the lack of post-medieval or modern pottery in the ditch fill, another possibility is that the two charcoal samples recovered from the buried soil (6028), both of which are from Leguminosae round wood, are intrusive in this context, and may have been introduced by animals burrowing down from above through the soft sand. If this were the case, a medieval date for the primary silting of the ditch [6014] is still possible.

Trench 08, located just to the south of Trench 06, contained evidence for three ditches, only one of which [8004] was excavated and sampled. A charred hazelnut fragment from the base of single fill (8005) returned a medieval date, 1308 – 1418 calAD, as did Alder/Hazel charcoal from the same context which was dated to 1282 – 1392 calAD. During the excavation phase of the project, it was noted that ditch [8004] in Trench 08 had a characteristically similar brownish-grey single sandy fill (8005) to (6013) in ditch [6014] in Trench 06 to its north. Ditch [6014] appeared to be turning to towards the south as it exited Trench 06 and it was thought that ditch [8004] may be a continuation of [6014], and together they may form the northeastern corner of a relatively early previously unknown enclosure. The identification of exclusively medieval charcoal and charred plant remains in both ditches may lend further support to this interpretation, which, if it is the case, also adds to the argument in favour of the intrusive nature of the charcoal in buried soil (6028) in Trench 06.

No radiocarbon dating was undertaken for the remaining trenches: the activity in Trench 05 was clearly associated with a former post-medieval farmstead belonging to the Glynllifon Estate, as evidenced by the archaeology encountered and the material assemblage; Trench 07 was also interpreted as settlement and agricultural activity depicted on the 1849 Tithe Award Map.

The Historic Environment Record Primary Number for the Neolithic activity within Trench 04 is 92206;

The Historic Environment Record Primary Number for the Medieval pottery findpsot within Trench 04 activity within the roundhouse is 92207;

The Historic Environment Record Primary Number for the demolished farm building/post-medieval activity within Trench 05 is 92208;

The Historic Environment Record Primary Number for the medieval activity within Trench 06 is 92209.

The Historic Environment Record Primary Number for the post-medieval activity within Trench 07 is 92210.

The Historic Environment Record Primary Number for the medieval activity within Trench 08 is 92211.

6.4 Research Framework

The results from the evaluation excavation have made an important contribution to regional archaeology and to the national *Research Framework for the Archaeology of Wales*, through the provision of raw data and chronology.

For the *Research Framework for the Archaeology of Wales Version 03, Final Refresh Document February 2017: Neolithic and Earlier Bronze Age*, key research areas include:

- Settlement;
- Human Remains;
- Monuments;
- Raw material extraction and use; and
- Material Culture.

Whist the results from Trench 04 may not address any of these of these research areas, they provide an important contribution in identifying archaeology that is much earlier than the hillfort and it is likely that these pits indicate activity across a wider area. Further afield, Early Neolithic pits have also been identified during the excavations at Parc Cybi in Holyhead (Kenney, 2021), where the pits were interpreted as evidence of temporary occupation sites and also at Parc Cegin near Bangor (Kenney, 2008); at both sites, Early Neolithic buildings were also identified, signifying more substantial settlement.

For the *Research Framework for the Archaeology of Wales Version 02, Final Paper November 2014 and Draft 2016: Later Bronze Age and Iron Age*, key themes include:

- Building chronologies;
- Settlement evidence;
- Palaeobotanical evidence;
- Social change and social processes; and
- Climate change and the impact on resource utilisation.

The results for Trenches 01 and 02 clearly contribute to these themes, with the stratigraphic results strongly demonstrating settlement evidence, as well as the impact of climate change, both in terms of more recent coastal degradation as well as earlier sand inundation. The ecofacts provided some evidence of crop husbandry and the nature of the local environment, whilst the artefact assemblage from Trench 02 was a key chronological indicator of Iron Age activity, with the radiocarbon dating more reflective of the transition to the Roman period, as was the recovery of Roman period pottery.

For *The Research Framework for the Archaeology of Wales, Wales Version 03, Final Refresh Document March 2017: Roman Wales*, key themes include:

- Investigation of interaction between newcomers and indigenes;
- Impact of the Roman conquest on those communities who may still have utilised hillforts;
- Whether impact was harsh or benign, looking at artefact assessment;
- Further study of settlement patterns including enhanced environmental sampling during excavation to recover evidence of the Romano-British agricultural base.

The results from Trenches 01 and 02 demonstrate the continued used of the hillfort into the Roman period, as evidence by the radiocarbon dating and the domestic material assemblage, with evidence suggesting occupation into the 4th century AD. The evaluation excavation area was too limited in size to provide more detail on any structural changes or impact from this period and more investigation is required of a larger area. The results are, however, a strong indicator of the variety of valuable artefactual evidence that are likely present elsewhere on the site. Further investigation would also allow for more enhanced environmental sampling, which would allow the current results to be better understood and the occupation layers dated more precisely.

During the initial post-fieldwork stage, emphasis was placed on the examining the results from Excavation Area 2 in relation to *The Research Framework for the Archaeology of Wales, Wales Version 03, Final Refresh Document March 2017: Early Medieval*. The results from Trenches 04, 06 and 08, however, demonstrate that activity was later than initially expected and more indicative of activity from the 13th to 15th century AD. One of the key themes of the *Research Framework for the Archaeology of Wales Version 03, Final Refresh Document March 2017: Medieval* are *Rural settlement and field systems*, particularly:

- The location and distribution of settlement sites;
- The links between settlement type, tenure and social hierarchy;
- The wider environmental context of settlements in the agricultural landscape;
- The nature of the functioning agricultural landscape (including transhumance);
- The development of agricultural techniques, crops and livestock;
- The nature and development of structures within settlements; and
- Development of field systems and morphological relationship to tenure.

The results from Trenches 06 and 08 indicate the presence of medieval field systems, demonstrated through a combination of stratigraphy, ecofact analysis and radiocarbon dating, and also supported by the recovery of pottery from Trench 04. The framework document highlights the need for “continued collection of raw data, its analysis, and targeted

excavation of a variety of settlement types, combined with wider interdisciplinary studies to place settlements within their geographical and chronological contexts". Whilst the contribution of the results from these trenches to the framework is inherently limited due to the size of the areas sampled, but they make an important contribution in terms of providing new raw data and suggesting a chronology for settlement and use, as well as, through the pottery, maritime trade. Addressing the larger research questions would require a more detailed and expansive examination of the wider area.

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APPENDIX I

Gwynedd Archaeological Trust approved project design

CHERISH Project: Dinas Dinlle, Gwynedd

MAP2 Phase 3:

Post excavation Assessment for Potential of Analysis (G2608)

Written Scheme of Investigation

Prepared for the Royal Commission on the Ancient and Historical Monuments of Wales EU-funded CHERISH Ireland-Wales Project

October 2019

CHERISH
Newid Hinsawdd a Threftadaeth yr Arfordir
Climate Change and Coastal Heritage
Athrú Aeráide agus Oidhreacht Chultúrtha

CBHC RCAHMW
Comisiwn Brenhinol Henebion Cymru
Royal Commission on the Ancient and Historical Monuments of Wales

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

CHERISH Project: Dinas Dinlle

Written Scheme of Investigation for an Assessment of Potential for Analysis (MAP2 Phase 3) (G2608)

Prepared for CHERISH, RCAHMW, National Trust and Cadw

Contents

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

Name	Signature	Date

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has prepared a written scheme of investigation for a post-excavation assessment of potential for analysis as part of the EU-funded CHERISH Ireland-Wales Project. This will include an assessment of artefacts and ecofacts recovered from the targeted evaluation/excavation at the National Trust owned Dinas Dinlle hillfort and an area to the immediate south (Primary Reference Number 1570; Scheduled Monument CN048; NGR SH43705635; Figure 01).

The post-excavation will be undertaken as a phased process in accordance with guidelines specified in *Management of Archaeological Projects: MAP2* (English Heritage 1991), and the relevant guidelines from *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015). Five project phases are specified in MAP2:

- MAP2 Phase 1: Project Planning
- MAP2 Phase 2: Fieldwork
- MAP2 Phase 3: Assessment of Potential for Analysis
- MAP2 Phase 4: Analysis and Report Preparation
- MAP2 Phase 5: Dissemination

MAP2 Phases 1 and 2 have been completed (GAT Report 1499). The current written scheme of investigation specifically relates to the post-excavation assessment for potential for analysis to be undertaken as MAP2 Phase 3. The proposed methodology and nominated specialists are noted in Sections 3.1 and 3.2. The results will be used to inform the subsequent analysis, dating, report preparation and dissemination strategies that will be undertaken as part of MAP2 Phases 4 and 5. MAP2 Phase 4 will be used to synthesise and contextualise the results from the previous phases.

The post-excavation strategy will be monitored by RCAMHW, Cadw and The National Trust, who must approve the current written scheme of investigation as well as any subsequent reporting, prior to final issue.

Reference will also been made to the following guidelines:

- CHERISH Excavation 2019 Specification (CHERISH 2019).
- *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 the Ancient and Historical Monuments of Wales, 2015);
- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England, 2015);
- *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (Chartered Institute for Archaeologists 2014); and
- *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (Chartered Institute for Archaeologists 2014).

Gwynedd Archaeological Trust is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/A/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 post-excavation assessment will be undertaken from October 2019.

2 ARCHAEOLOGICAL RESULTS

The evaluation/excavation was undertaken in August 2019 as part of the EU-funded CHERISH Ireland-Wales Project and included targeted evaluation/excavation at Dinas Dinlle hillfort and an area to the immediate south (GAT Report 1499). The evaluation/excavation comprised targeted trenches and geophysical survey, and included public engagement and outreach. Evidence for two Iron Age roundhouses were identified within the hillfort, as well as later settlement and agricultural activity in the area to the south. Fragments of Roman pottery and metalwork were recovered, suggesting continued occupation of the hillfort and the local area. The prevalence of windblown sand was noted across the targeted areas, sealing archaeological activity and reflecting the impact of coastal change. The geophysical survey was located within the hillfort and suggested the presence of archaeology that could benefit from further investigation. Whilst evidence for Iron Age, Roman and later activity has been identified, detailed confirmation of these interpretations, and a full site analysis, will have to await the results of the post-excavation phase. It was recommended in the report that specialist assessment and analysis of selected artefacts and ecofacts was undertaken to enable further interpretation and contextualisation of the results.

2.1 Post-Excavation Aims and Objectives

Based on the results, the following aims and objectives will form a primary element in the post-excavation assessment and analysis strategy:

- Contextualising the Roman and Iron Age activity to understand the chronology, distribution and relationship between the known and suspected features. In addition, the pottery and flint fragments will be assessed for provisional dating and typology. One particular area of interest is the date range between the roundhouses originally identified in trench TR01 and TR02 in Excavation Area 01, alongside possible Roman (and earlier) settlement/agricultural activity in TR04 identified in Excavation Area 02.
- Contextualising the possible late prehistoric, Roman and medieval agricultural activity identified within TR03, TR04 and TR06 in Excavation Area 02.
- Contextualising the results of the remaining features on site. This will include the known post-medieval features, including the agricultural and boundary activity identified in TR04, TR05, TR06, TR07 and TR08 that appear to match on the Parish of Llandwrog in the County of Carnarvon 1849 Tithe Map (Figure 03).

Specific reference will be made to *A Research Framework for the Archaeology of Wales,* and the key areas of interest and research, including:

- *The Research Framework for the Archaeology of Wales Version 02, Final Paper November 2014 and Draft 2016: Later Bronze Age and Iron Age*. Key themes:
    - Building chronologies;
    - Settlement evidence;
    - Palaeobotanical evidence;
    - Social change and social processes;
    - Climate change and the impact on resource utilisation; and

- *The Research Framework for the Archaeology of Wales, Wales Version 03, Final Refresh Document March 2017: Roman Wales*. Key themes:
    - Investigation of interaction between newcomers and indigenes;
    - Impact of the Roman conquest on those communities who may still have utilised hillforts;
    - Whether impact was harsh or benign, looking at artefact assessment;

- Further study of settlement patterns including enhanced environmental sampling during excavation to recover evidence of the Romano-British agricultural base.

- *The Research Framework for the Archaeology of Wales, Wales Version 03, Final Refresh Document March 2017: Early Medieval*. Key themes:

  - Identification of potential early medieval sites/Confirmation of potential early medieval sites through fieldwork, trial excavation and the application of dating techniques;
  - Identification and analysis of environmental evidence from excavated samples and increased pollen sampling;
  - Improving understanding of the chronological framework for the period through the application of all available methods and increased use of radiocarbon dating, especially on multi-period sites

An interim report will be prepared for the MAP2/Phase 3 results, with further recommendations for analysis. The MAP2/Phase 4 report will contextualise the assessment results and any results from the analysis stage, including the radiocarbon dating. The MAP2/Phase 4 will be the final report and will also include thematic illustrations that will detail the distribution of period specific features and what that tell us about the site.

3 METHODOLOGY

3.1 Ecofact Assessment

A total of 15 ecofact samples were recovered during the evaluation/excavation at Dinas Dinlle. The primary aim of the ecofact assessment will be to recover charred macroplant remains for radiocarbon dating and to recover additional artefacts.

Sample No.	Context No.	Site Sub Division	Description of feature	Reason for sample
1001	1003	TR01	Sandy dark layer of windblown sand	Interpretation and dating
1002	1017	TR01	Dark silty clay layer within centre of round house	Interpretation and dating
2001	2006	TR02	Buried Soil	Interpretation and dating
2002	2019	TR02	Occupation layer, below (2013)	Interpretation and dating
2003	2016	TR02	Fill of a possible pit [2018]	Interpretation and dating
3001	3004	TR03	Buried soil	Interpretation and dating
4001	4007	TR04	Fill of terminus [4006]	Interpretation and dating
4002	4009	TR04	Primary fill of possible pit [4008]	Interpretation and dating
4003	4011	TR04	Fill of discrete feature [4012]	Interpretation and dating
6001	6010	TR06	Fill of [6009]	Interpretation and dating
6002	6015	TR06	Fill of [6014]	Interpretation and dating
6003	6028	TR06	Buried soil layer below upper windblown sand deposit (6002)	Interpretation and dating
6004	6030	TR06	Buried soil layer below lower windblown sand deposit (6029)	Interpretation and dating
6005	6013	TR06	Primary fill of ditch [6007]	Interpretation and dating
8001	8005	TR08	Fill of [8004]	Interpretation and dating

The ecofact assessment will be completed as a two stage process, based on the following methodology:

1. The bulk sample will be processed in house by GAT. This will consist of flotation and wet sieving using a 500 micron mesh to collect the residue (which collects more than the 1mm = 1000 micron), with the flot collected in a 250 micron mesh. The residues will be sorted to recover artefacts and non-floating ecofacts. Once sorted the residues will be discarded. The flots will be weighed, catalogued and examined for charred macroplant remains.
2. Recovered charred macroplant will be sent for specialist assessment to AOC Archaeology. The charred macroplant will be sieved using a 4mm, 2mm and 1mm system of stack sieves and subsequently examined under magnification (x10 and up to x100). Macroplant identifications will be completed confirmed using modern reference material and seed atlases stored at AOC Edinburgh. Taxonomic and nomenclature for plants will be based on Stace,C. 2010. *New Flora of the British Isles*. 3rd Edition. Cambridge University Press. Charcoal fragments 4mm and larger will be collected for species identification and recommendations will be made for any subsequent analysis and radiocarbon dating.

Any recommendations made for any subsequent analysis and radiocarbon dating will be defined in a MAP2 Phase 4 project design prepared by GAT.

3.2 Artefact Assessment

The artefacts will be assessed for form, function and provenance by GAT nominated specialists. If relevant, recommendations will be made for any further analysis as part of MAP2 Phase 4.

If any artefacts are recovered during the bulk sample processing that require assessment, GAPS will be informed of results and proposals for specialist assessment.

The ecofacts and artefacts from the evaluation stage have already been assessed and analysed as part of a separate post-excavation stage.

A photographic record will be completed for all diagnostic artefacts that will be used for both archiving and dissemination purposes. The photographs will be incorporated into the existing metadata, starting from archive reference number G2608_025.

3.2.1 Pottery assessment

This will be completed by Roman pottery specialist Gill Dunn and include the following artefacts:

Find No.	Sub-Area	Context No.	Material	Description	Weight (g)	Context Description
1002	TR01	1015	Ceramic	1x fragment of Samian ware	4.8	From possible storm drain on Southern side of round house
2003	TR02	2006	Ceramic	1x Coarse Roman pottery sherd, side sherd	27	Dark silty sand layer with stones on north side of trench
2004	TR02	2010	Ceramic	1x Coarse Roman pottery sherd, possibly a lug	19	Silty sand layer on the north side of trench
2005	TR02	2010	Ceramic	1x Roman Black Burnished Ware	4	Silty sand layer on the north side of trench
2007	TR02	2010	Ceramic	2x piece of coarse Roman pottery	8	Silty sand layer on the north side of trench
2008	TR02	2010	Ceramic	1x Coarse Roman pottery sherd,	2	Silty sand layer on the north side of trench
2013	TR02	2006	Ceramic	3x Coarse Roman pottery sherds	6	Dark silty sand layer with stones on north side of trench
4005	TR04	4010	Ceramic	3x Coarse Roman pottery sherds, including a rim sherd.	14	Secondary fill of poss. pit [4008]

3.2.2 Lithic assessment

This will be completed by Gwynedd Archaeological Trusts' lithic specialist George Smith and include the following artefacts:

Find No.	Sub-Area	Context No.	Material	Description	Weight (g)	Context Description
1001	TR01	1003	Flint	Flint flake	1.9	Dark layer of wind-blown sand

3.2.3 Metallurgy assessment

This will be completed by Phil Parkes, a metallurgy specialist based at Cardiff University and include the following artefacts:

Find No.	Sub-Area	Context No.	Material	Description	Weight (g)	Context Description
2001	TR02	2005	Fe	1x pieces of possible lug brooch	14	Windblown sand
2006	TR02	2010	Pb	Possible lead trade weight	25	Silty sand layer on the north side of trench
2009	TR02	2023	Fe	Possible spearhead shaft	102	Silty sand fill of a possible ditch [2022]
2010	TR02	2006	Fe	1x pieces of unidentifiable metal object	57	Dark silty sand layer with stones on north side of trench

3.3 Reporting

Following completion of the stages outlined above, a draft report will be produced incorporating the following:

1. Non-technical summary (Welsh and English)
2. Introduction
3. Background
4. Methodology (including specialist methodology)
5. Results of Ecofact Assessment
6. Results of Artefact Assessment
7. Conclusions and recommendations for further analysis (MAP2 Phase 4)
8. Sources Consulted
9. Appendix I – Approved Project Design
10. Appendix II – Ecofact Assessment Report
11. Appendix III – Artefact Assessment Report Ecofact Assessment Report

3.4 Archiving

A full archive will also be prepared. A draft copy of the report will be sent to the regional curatorial archaeologist (GAPS) and to the client for review by the end of **February 2020**. Once approved, a final report will be submitted to all parties as well as the Historic Environment Record; the archive will be sent to the *Royal Commission for Ancient and Historic Monuments Wales (RCAHMW)*.

The following dissemination will apply:

1. A digital report will be provided to GAPS (draft report then final report).

2. A paper report plus a digital report will be provided to the regional Historic Environment Record, Gwynedd Archaeological Trust; this will be submitted within six months of report completion (final report only).

3. A digital report and archive (including photographic and drawn) data will be provided to *RCAHMW* (final report only). Submission of digital information to the Royal Commission on the Ancient and Historical Monuments of Wales shall be undertaken in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. Digital information will include the photographic archive and associated metadata.

4. A digital report(s) plus paper report(s) (if requested) will be provided to the client (draft report then final report).

5. It is proposed ultimately to publish a summary of the work in *Archaeology in Wales*, the journal for the Council of British Archaeology Wales. This will be undertaken as part of MAP2 Phase 5.

4 SOURCES CONSULTED

1. Campbell, G. Moffett, L. and Straker, V. 2011, Environmental Archaeology: A guide to the theory and practise of methods, from sampling and recovery to post-excavation (2nd edition).
2. Chartered Institute for Archaeologists, 2014, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.
3. Chartered Institute for Archaeologists, 2014, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives.
4. CHERISH Excavation 2019 Specification (CHERISH 2019).
5. Davidson, A., Davies, W., and Gray, M., March 2017. A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document: Medieval.
6. Davies, Dr. J.L., (with comments from Dr Edith Evans), 2017. A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document
7. Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1 (The Welsh Archaeological Trusts, 2018);
8. Guidelines for digital archives (Royal Commission on the Ancient and Historical Monuments of Wales, 2015);
9. Historic England, 1991, Management of Archaeological Project: MAP2.
10. Historic England, 2002, Environmental Archaeology: A guide to the theory and practise of methods, from sampling and recovery to post-excavation.
11. Historic England, 2015, Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide.
12. Pannett, Dr. A, February 2017. A Research Framework for the Archaeology of Wales Version 03, Final Refresh Document, Neolithic and Earlier Bronze Age.
13. Royal Commission on the Ancient and Historic Monuments of Wales, 2015, Guidelines for digital archives.

FIGURE 01

Trench and Resistivity Survey Location Map. Based on Ordnance Survey County Series 1:10000 Map Sheet SH45NW. Scale 1:2500 A4. © Crown Copyright. All Rights Reserved; licence number Al100020895.

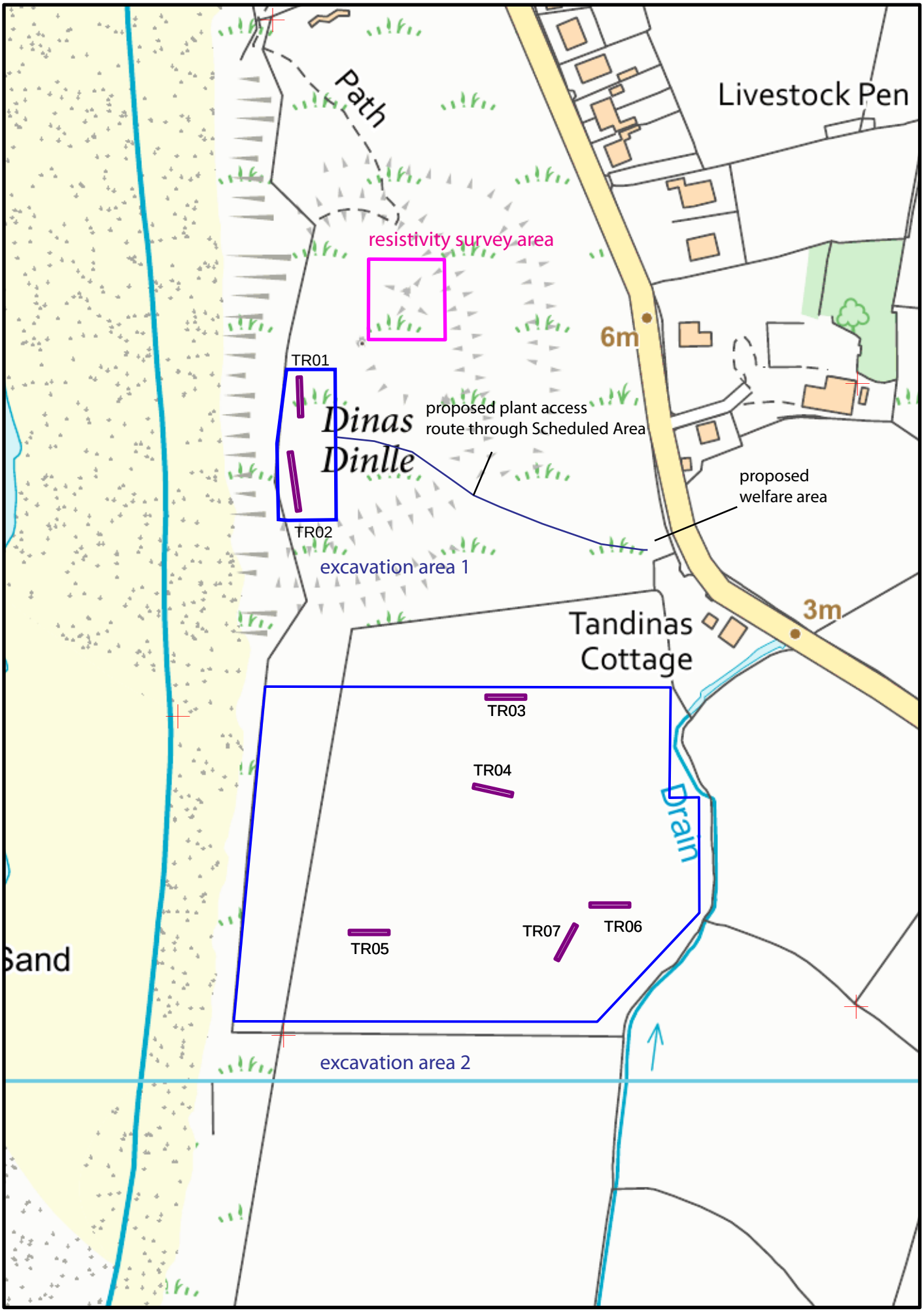

Figure 01: Trench and Resistivity Survey Location Map. Based on Ordnance Survey County Series 1:10000 Map Sheet SH45NW. Scale 1:2500 A4.

FIGURE 02

Trench and Resistivity Survey Location Map superimposed on Geophysical Magnetometer Survey interpretation plan (Hopewell, 2018: 09).

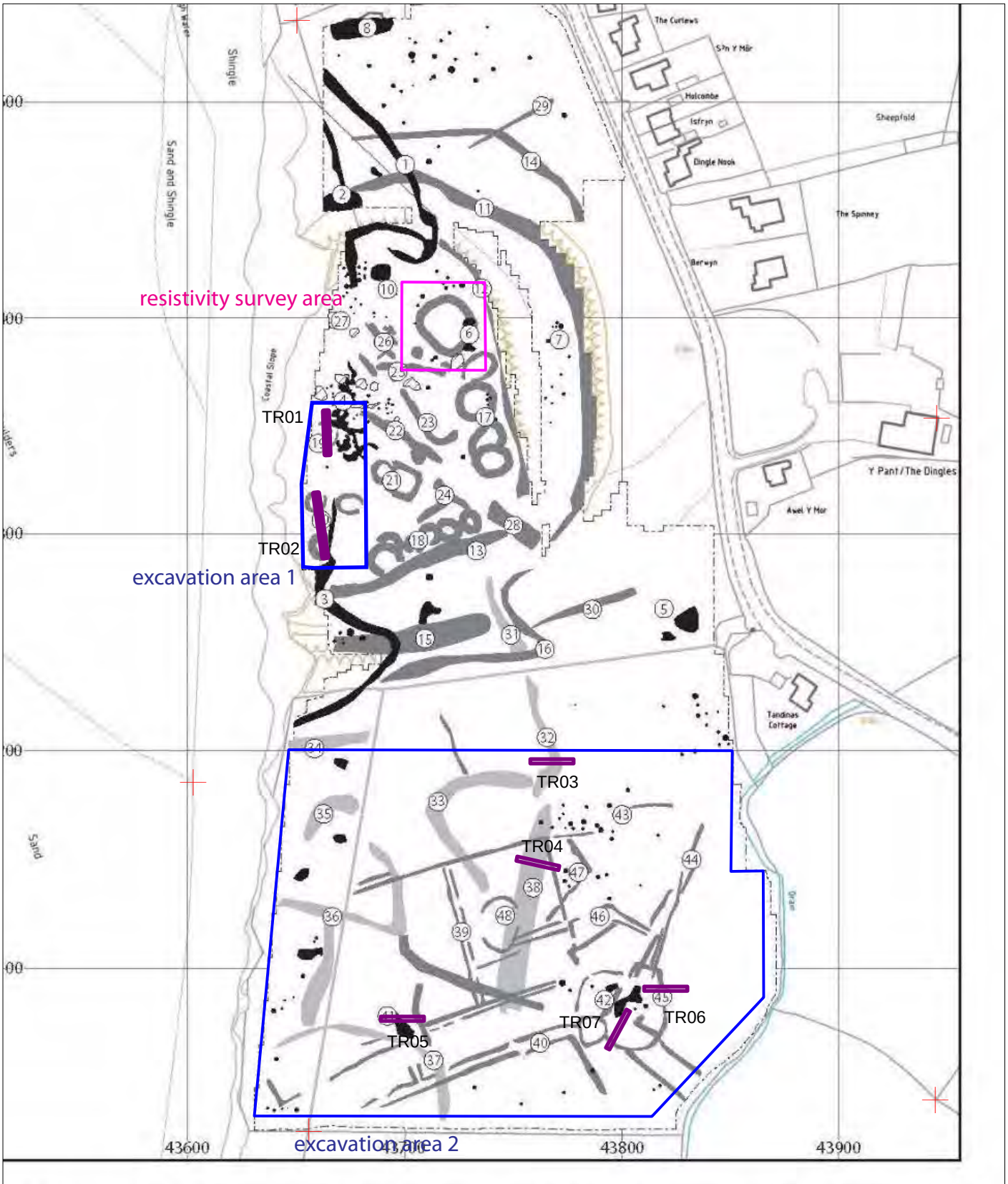

Figure 02: Trench and Resistivity Survey Location Map superimposed on Geophysical Magnetometer Survey interpretation plan (Hopewell, 2018: 09).

FIGURE 03

Tithe map 1849. The parish of Llandwrog in the County of Carnarvon (Llyfrgell Genedlaethol Cymru – The National Library of Wales); Scale 1:1000@A4

Gwynedd Archaeological Trust

Figure 03: Tithe Map 1849. The parish of Llandwrog in the County of Carnarvon

N

Date: 26/09/2019	
Author: CRY	TR01 Excavation trench with number
Office:	
Drawing: G2608/TITHE/REV01	© Llyfrgell Genedlaethol Cymru - The National Library of Wales
Scale: 1:1000@A4	

0 10 20
metres

APPENDIX II

Gwynedd Archaeological Trust photographic metadata

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1001	TR01	Post machining/pre-ex shot TR01		S	2x1m	MSL	07/08/2019	Gwynedd Archaeological Trust	
G2608_1002	TR01	Post machining/pre-ex shot TR01		N	2x1m	MSL	07/08/2019	Gwynedd Archaeological Trust	
G2608_1003	TR02	Post machining/pre-ex shot TR02	2002	N	2x1m	MSL	07/08/2019	Gwynedd Archaeological Trust	11
G2608_1004	TR02	Post machining/pre-ex shot TR02	2002	S	2x1m	MSL	07/08/2019	Gwynedd Archaeological Trust	
G2608_1005	TR02	Plan shot of stone deposit (2004) TR02 (no board)	2004 2003	E	1x1m	NG	09/08/2019	Gwynedd Archaeological Trust	
G2608_1006	TR02	Plan shot of stone deposit (2004) TR02 (with board)	2004 2003	E	1x1m	NG	09/08/2019	Gwynedd Archaeological Trust	
G2608_1007	TR02	Plan shot of stone deposit (2004) TR02 (with board)	2004 2003	S	1x1m	NG	09/08/2019	Gwynedd Archaeological Trust	
G2608_1008	TR02	Slot through tumble layer (with board)	2001 2002 2003 2004 2005	NW	1x1m	CF	12/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1009	TR02	Slot through tumble layer (without board)	2001 2002 2003 2004 2005	NW	1x1m	CF	12/08/2019	Gwynedd Archaeological Trust	
G2608_1010	TR02	Post machining shot (extension TR02)	2005 2006	NE	2x1m	CF	13/08/2019	Gwynedd Archaeological Trust	
G2608_1011	TR02	Post machining shot (extension TR02)	2005 2006	SW	2x1m	CF	13/08/2019	Gwynedd Archaeological Trust	
G2608_1012	TR01	Shot of tumble (1005) & inner facing RH wall [^1006]	1005 1006	W	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1013	TR01	Shot of tumble (1005) & inner facing RH wall [^1006] (no ID board)	1005 1006	W	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1014	TR01	Shot of tumble (1005) & inner facing RH wall [^1006]	1005 1006	S	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1015	TR01	Shot of tumble (1005) & inner facing RH wall [^1006]	1005 1006	S	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1016	TR01	Aerial shot (birdseye) for plan - tumble (1005) & [^1006]	1005 1006	W	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1017	TR01	Aerial shot (birdseye) for plan - tumble (1005) & [^1006]	1005 1006	W	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1018	TR01	Aerial shot (birdseye) for plan - tumble (1005) & [^1006]	1005 1006	E	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1019	TR01	Aerial shot (birdseye) for plan - tumble (1005) & [^1006]	1005 1006	E	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1020	TR01	Aerial shot (birdseye) for plan - tumble (1005) & [^1006]	1005 1006	E	2x1m	MSL	14/08/2019	Gwynedd Archaeological Trust	
G2608_1021	TR02	Post-ex shot of tumble layer (2004) - oblique shot	2004 2005	W	2x1m	CF	14/08/2019	Gwynedd Archaeological Trust	
G2608_1022	TR02	Post-ex shot of tumble layer (2004) - oblique shot	2004 2005	W	2x1m	CF	14/08/2019	Gwynedd Archaeological Trust	
G2608_1023	TR02	Post-ex shot of tumble layer (2004) - oblique shot	2004 2005	E	2x1m	CF	14/08/2019	Gwynedd Archaeological Trust	
G2608_1024	TR02	Post-ex shot of tumble layer (2004) - oblique shot	2004 2005	E	2x1m	CF	14/08/2019	Gwynedd Archaeological Trust	12
G2608_1025	TR02	Post-ex shot of tumble layer (2004) - oblique shot	2004 2005	S	2x1m	CF	14/08/2019	Gwynedd Archaeological Trust	
G2608_1026	TR01	Post-ex of wall and wall core [^1008] inner, (1004) core, outer [^1009]	1008 1004 1009	W	2x1m	PH	15/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1027	TR01	Post-ex of wall and wall core [^1008] inner, (1004) core, outer [^1009]	1008 1004 1009	W	2x1m	PH	15/08/2019	Gwynedd Archaeological Trust	
G2608_1028	TR01	Post-ex of wall and wall core [^1008] inner, (1004) core, outer [^1009]	1008 1004 1009	E	2x1m	PH	15/08/2019	Gwynedd Archaeological Trust	
G2608_1029	TR01	Post-ex of wall and wall core [^1008] inner, (1004) core, outer [^1009]	1008 1004 1009	E	2x1m	PH	15/08/2019	Gwynedd Archaeological Trust	
G2608_1030	TR01	Pre-ex shot of small wall [^1010] and silt layetr (1003)	1010 1003	W	2x1m	MSL	15/08/2019	Gwynedd Archaeological Trust	
G2608_1031	TR01	Pre-ex shot of small wall south side [^1010] and silty layer (1003	1010 1003	W	2x1m	MSL	15/08/2019	Gwynedd Archaeological Trust	
G2608_1032	TR02	General view of centre of trench after removal (2005) into sand (2010) and stony bank [^2007]	2010 2007	NW	2x1m	DH	19/08/2019	Gwynedd Archaeological Trust	13
G2608_1033	TR02	General view of centre of trench after removal (2005) into sand (2010) and stony bank [^2007]	2010 2007	W	2x1m	DH	19/08/2019	Gwynedd Archaeological Trust	
G2608_1034	TR02	General view of centre of trench after removal (2005) into sand (2010) and stony bank [^2007]	2010 2007	SW	2x1m	DH	19/08/2019	Gwynedd Archaeological Trust	14
G2608_1035	TR02	General view of centre of trench after removal (2005) into sand (2010) and stony bank [^2007]	2010 2007	N	2x1m	DH	19/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1036	TR01	Pre-ex shot of (1012) also showing [^1006] & (1005)	1006 1005 1012	S	2x1m	MSL	19/08/2019	Gwynedd Archaeological Trust	
G2608_1037	TR01	Pre-ex shot of (1012) also showing [^1008] & (1005)	1008 1012	N	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1038	TR02	Working shot showing sondage 08 (2006) mid-ex shot	2006	W	1x1m	DH	20/08/2019	Gwynedd Archaeological Trust	
G2608_1039	TR02	Working shot showing sondage 08 (2006) mid-ex shot (with board)	2006	W	1x1m	DH	20/08/2019	Gwynedd Archaeological Trust	
G2608_1040	TR01	Pre-ex shot showing layer (1013) & [^1007]	1003 1007	N	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1041	TR01	Outer facing stones of RH [^1007]	1007	N	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1042	TR01	Outer facing stones of RH [^1007]	1007	N	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1043	TR01	Outer facing stones of RH [^1007]	1007	N	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	05
G2608_1044	TR01	Shot of inner [^1006] and outfir [^1007] facing stones & rubble core (1011)	1011 1006 1007	W	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1045	TR01	Shot of inner [^1006] and outfir [^1007] facing stones & rubble core (1011)	1011 1006 1007	E	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	04
G2608_1046	TR01	Shot showing inner curving stones [^1006], rubble core (1011) and tumble (1005)	1006 1011 1005	E	1x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1047	TR01	Shot of inner facing curving RH wall [^1006] & Tumble (1005)	1005 1006	S	1x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	06
G2608_1048	TR01	Shot of inner facing curving RH wall [^1006] & Tumble (1005)	1005 1006	S	1x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1049	TR01	Shot of inner facing curving RH wall [^1006] & Tumble (1005)	1005 1006	S	1x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1050	TR01	Shot of inner facing wall of RH [^1008} & Tumble (1014)	1008 1014	N	1x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	08
G2608_1051	TR01	Shot of inner facing wall of RH [^1008} & Tumble (1014)	1008 1014	N	1x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1052	TR01	Shot of inner facing wall of RH [^1008} & Tumble (1014)	1008 1014	N	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1053	TR01	Shot of inner [^1008] and outer [^1009] wall of RH and inner core (1004)	1008 1009 1004	W	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1054	TR01	Shot of inner [^1008] and outer [^1009] wall of RH and inner core (1004)	1008 1009 1004	W	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	07
G2608_1055	TR01	Shot of inner [^1008] and outer [^1009] wall of RH and inner core (1004)	1008 1009 1004	E	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1056	TR01	Shot of inner [^1008] and outer [^1009] wall of RH and inner core (1004)	1008 1009 1004	E	2x1m	MSL	20/08/2019	Gwynedd Archaeological Trust	
G2608_1057	TR02	Section shot of stony surface (2011) & windblown sand (2005)	2011 2007 2005	W	1x1m	CF	20/08/2019	Gwynedd Archaeological Trust	
G2608_1058	TR02	Plan shot of stony layer/surface (2011)	2011 2007 2005	W	1x1m	CF	20/08/2019	Gwynedd Archaeological Trust	17
G2608_1059	TR02	Plan shot of stony layer/surface (2011) (wet conditions)	2011 2007 2005	W	1x1m	CF	20/08/2019	Gwynedd Archaeological Trust	
G2608_1060	TR02	Stone layer (2013) in sondage in TR02	2013	S	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1061	TR02	Stone layer (2013) in sondage in TR02	2013	S	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1062	TR02	Stone layer (2013) in sondage in TR02	2013	W	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1063	TR02	Stone layer (2013) in sondage in TR02	2013	W	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1064	TR01	Working shot of inner wall [^1008] sondage	1008	W	1x1m	JM	21/08/2019	Gwynedd Archaeological Trust	
G2608_1065	TR02	Cut [2014]	2014 2015	W	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1066	TR02	Cut [2014]	2014 2015	W	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1067	TR02	Cut [2014]	2014 2015	W	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1068	TR02	Cut [2014]	2014 2015	S	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1069	TR02	Cut [2014] section	2014 2015	W	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	18
G2608_1070	TR02	Cut [2014] section	2014 2015	W	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1071	TR02	Cut [2014] from baulk	2014 2015	E	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1072	TR02	Cut [2014] from baulk	2014 2015	E	1x1m	JK	21/08/2019	Gwynedd Archaeological Trust	
G2608_1073	TR01	Representative section of TR01	1001 1002 1012 1016 1017	E	2x1m	JM	21/08/2019	Gwynedd Archaeological Trust	01
G2608_1074	TR01	Representative section of TR01	1001 1002 1012 1016 1017	E	2x1m	JM	21/08/2019	Gwynedd Archaeological Trust	
G2608_1075	TR02	Pit [2018]	2018 2019 2020	N	1x1m	DH	21/08/2019	Gwynedd Archaeological Trust	
G2608_1076	TR02	Pit [2018]	2018 2019 2020	N	1x1m	DH	21/08/2019	Gwynedd Archaeological Trust	16
G2608_1077	TR01	Shot of inner face of RH [^1006] wall and silt around rubble (1018)	1006 1018	S	2x1m	MSL	22/08/2019	Gwynedd Archaeological Trust	03
G2608_1078	TR01	Shot of inner face of RH [^1006] wall and silt around rubble (1018)	1006 1018	S	2x1m	MSL	22/08/2019	Gwynedd Archaeological Trust	
G2608_1079	TR01	Portrait shot of curving RH wall (inner) [^1006] & silt on tumble (1018)	1006 1018	W	1x1m	MSL	22/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1080	TR01	Shot of small wall [^1010] outer wall of RH southern side [^1009] and gravel silt layer (1015)	1010 1009 1015	W	2x1m	MSL	22/08/2019	Gwynedd Archaeological Trust	02
G2608_1081	TR01	Sondage shot of small wall [^1010] outer wall of RH southern side [^1009] and gravel silt layer (1015)	1010 1009 1015	W	2x1m	MSL	22/08/2019	Gwynedd Archaeological Trust	10
G2608_1082	TR01	Shots of layer (1015) & walls [^1010] [^1009]	1015 1010 1009	W	2x1m	MSL	22/08/2019	Gwynedd Archaeological Trust	
G2608_1083	TR01	Shots of layer (1015) & walls [^1010] [^1009]	1015 1010 1009	W	2x1m	MSL	22/08/2019	Gwynedd Archaeological Trust	09
G2608_1084	TR02	Shot of sondage A with Rep.Sec	2006 2017 2025 2018 2022 2024	W	1x1m	DH	22/08/2019	Gwynedd Archaeological Trust	
G2608_1085	TR02	Shot of sondage A with Rep.Sec	2006 2017 2025 2018 2022 2024	W	1x1m	DH	22/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_1086	TR02	Shot of sondage B showing deposits (2001) (2002) (2012) (2013) [2014] (2015) (2016)	2001 2002 2005 2012 2013 2014 2015 2016	W	1x1m	CF	22/08/2019	Gwynedd Archaeological Trust	
G2608_1087	TR02	Shot of sondage B showing deposits (2001) (2002) (2012) (2013) [2014] (2015) (2016)	2001 2002 2005 2012 2013 2014 2015 2016	W	1x1m	CF	22/08/2019	Gwynedd Archaeological Trust	
G2608_1088	TR02	Shot of Sondage A with correct board	2006 2017 2025 2018 2022 2024	W	1x1m	DH	22/08/2019	Gwynedd Archaeological Trust	15
G2608_2001	TR03	Shot of trench post-machined		W	1x1m	JC	07/08/2019	Gwynedd Archaeological Trust	
G2608_2002	TR03	Shot of trench post-machined		E	1x1m	JC	07/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2003	TR07	Post-machine shot		NNE	2x1m	NMC	07/08/2019	Gwynedd Archaeological Trust	64
G2608_2004	TR07	Post-machine shot		SSW	2x1m	NMC	07/08/2019	Gwynedd Archaeological Trust	63
G2608_2005	TR07	Post-machine shot		SSW	2x1m	NMC	07/08/2019	Gwynedd Archaeological Trust	
G2608_2006	TR06	TR06 Post machining		E	2x1m	NMC	07/08/2019	Gwynedd Archaeological Trust	
G2608_2007	TR06	TR06 Post machining		W	2x1m	NMC	07/08/2019	Gwynedd Archaeological Trust	
G2608_2008	TR05	TR05 Post machining		E	2x1m	RE	07/08/2019	Gwynedd Archaeological Trust	
G2608_2009	TR05	TR05 Post machining		W	2x1m	GJ	07/08/2019	Gwynedd Archaeological Trust	
G2608_2010	TR05	TR05 Post machining		W	2x1m	GJ	07/08/2019	Gwynedd Archaeological Trust	
G2608_2011	TR07	Post-ex trench shot post-cleaning		SSW	2x1m	CRY	07/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2012	TR07	Post-ex trench shot post-cleaning		NNE	2x1m	CRY	07/08/2019	Gwynedd Archaeological Trust	
G2608_2013	TR07	NNE facing section of [7003] small pit	7003 7004	NNE	2x1m	CRY	08/08/2019	Gwynedd Archaeological Trust	66
G2608_2014	TR07	NNE facing section of [7003] small pit	7003 7004	NNE	2x1m	CRY	08/08/2019	Gwynedd Archaeological Trust	
G2608_2015	TR05	Pre-ex trench shots post-cleaning		E	2x1m	RE	08/08/2019	Gwynedd Archaeological Trust	35
G2608_2016	TR05	Pre-ex trench shots post-cleaning		W	2x1m	RE	08/08/2019	Gwynedd Archaeological Trust	
G2608_2017	TR07	ESE facing section of [7005] pit and pit [7007]	7005 7007	ESE	1x1m	CRY	08/08/2019	Gwynedd Archaeological Trust	
G2608_2018	TR07	ESE facing section of [7005] pit and pit [7007]	7005 7007	ESE	1x1m	CRY	08/08/2019	Gwynedd Archaeological Trust	67
G2608_2019	TR07	SSW facing section of [7005] pit	7005	SSW	1x1m	CRY	08/08/2019	Gwynedd Archaeological Trust	
G2608_2020	TR07	Plan shot of above	7005	SSW	1x1m	CRY	08/08/2019	Gwynedd Archaeological Trust	68

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2021	TR06	Trench 6 pre-ex	TR06	W	2x1m	NMC	08/08/2019	Gwynedd Archaeological Trust	45
G2608_2022	TR06	Trench 6 pre-ex	TR06	E	2x1m	NMC	08/08/2019	Gwynedd Archaeological Trust	
G2608_2023	TR06	Sulley [6003] pre-ex	6003 6004	ESE	1x1m	NMC	08/08/2019	Gwynedd Archaeological Trust	
G2608_2024	TR06	Linear stone deposit (6005) pre-ex	6005	NW	1x1m	NMC	09/08/2019	Gwynedd Archaeological Trust	
G2608_2025	TR06	Linear stone deposit (6005) pre-ex. No photo board	6005	NW	1x1m	NMC	09/08/2019	Gwynedd Archaeological Trust	
G2608_2026	TR07	SSW facing section of cut [7009] (no ID board)7009 7010		SSW	1x1m	JC	09/08/2019	Gwynedd Archaeological Trust	
G2608_2027	TR07	SSW facing section of cut [7009] (no ID board)7009 7010		SSW	1x1m	JC	09/08/2019	Gwynedd Archaeological Trust	69
G2608_2028	TR07	Plan of [7009] (no ID board)	7009 7010	SSE	1x1m	JC	09/08/2019	Gwynedd Archaeological Trust	
G2608_2029	TR06	Gulley [6003] showing section across	6003 6004	ENE	1x1m	NMC	09/08/2019	Gwynedd Archaeological Trust	51

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2030	TR06	NNW section ac5ross gulley 6003	6003 6004	NNW	1x1m	NMC	09/08/2019	Gwynedd Archaeological Trust	52
G2608_2031	TR07	Plan of [7009} (no ID board)	7009	NE	1x1m	JC	09/08/2019	Gwynedd Archaeological Trust	
G2608_2032	TR04	Post-machined view of Trench 4	TR04	W	2x1m	BMJ	12/08/2019	Gwynedd Archaeological Trust	
G2608_2033	TR04	Post-machined view of Trench 4	TR04	E	2x1m	BMJ	12/08/2019	Gwynedd Archaeological Trust	25
G2608_2034	TR03	Pre-excavation		E	2x1m	ROJ	12/08/2019	Gwynedd Archaeological Trust	
G2608_2035	TR03	Pre-excavation		E	2x1m	ROJ	12/08/2019	Gwynedd Archaeological Trust	19
G2608_2036	TR03	Pre-excavation		W	2x1m	ROJ	12/08/2019	Gwynedd Archaeological Trust	20
G2608_2037	TR07	Plan shot of pit [7003]	7003	NNE	1x1m	CRY	12/08/2019	Gwynedd Archaeological Trust	
G2608_2038	TR07	Plan shot of pit [7003]	7003	NNE	1x1m	CRY	12/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2039	TR07	Plan shot of pit [7003]	7003	NNE	1x1m	CRY	12/08/2019	Gwynedd Archaeological Trust	65
G2608_2040	TR07	Plan shot of natural hollow [7011]	7011	NNE	1x1m	ED	12/08/2019	Gwynedd Archaeological Trust	
G2608_2041	TR05	Pre-ex shot of [5003]	5003 5004	S	1x1m	SS	12/08/2019	Gwynedd Archaeological Trust	23
G2608_2042	TR03	Spread of stones (3005)	3005	S	1x1m	AMO	13/08/2019	Gwynedd Archaeological Trust	
G2608_2043	TR03	Spread of stones (3005)	3005	S	1x1m	AMO	13/08/2019	Gwynedd Archaeological Trust	
G2608_2044	TR06	Ditch pre-ex [6007]	6007 6008	NNW	1x1m	NMC	13/08/2019	Gwynedd Archaeological Trust	
G2608_2045	TR06	Ditch pre-ex [6007]	6007 6008	WSW	1x1m	NMC	13/08/2019	Gwynedd Archaeological Trust	
G2608_2046	TR03	S facing section of baulk and Slot 2	3001 3002 3003 3004 3005 3006	S	1x1m	AMO	13/08/2019	Gwynedd Archaeological Trust	

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G2608_2047	TR03	S facing section of baulk and Slot 2. Closer view	3001 3002 3003 3004 3005 3006	S	1x1m	AMO	13/08/2019	Gwynedd Archaeological Trust	
G2608_2048	TR03	S facing slot 1	3001 3002 3003 3004	S	1x1m	GS	13/08/2019	Gwynedd Archaeological Trust	
G2608_2049	TR07	Mid-ex shot of poss. bone filled pits		NNE	1x1m	CRY	13/08/2019	Gwynedd Archaeological Trust	
G2608_2050	TR07	ESE facing section of pit [7013]	7013 7014	ESE	1x1m	CRY	13/08/2019	Gwynedd Archaeological Trust	
G2608_2051	TR07	Plan of [7013] pit	7013	NNE	1x1m	CRY	13/08/2019	Gwynedd Archaeological Trust	70
G2608_2052	TR07	ESE facing section of pit [7013]	7013	ESE	1x1m	CRY	13/08/2019	Gwynedd Archaeological Trust	
G2608_2053	TR06	N facing section through gulley [6009]	6009 6010	N	1x0.5m	NMC	13/08/2019	Gwynedd Archaeological Trust	48
G2608_2054	TR06	Gulley [6009] mid-ex	6009 6010	W	1x1m	NMC	13/08/2019	Gwynedd Archaeological Trust	

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G2608_2055	TR07	Mid-ex poss. clawdd [^7015]	7015	ESE	1x1m	CRY	13/08/2019	Gwynedd Archaeological Trust	
G2608_2056	TR07	Mid-ex poss. clawdd [^7015]	7015	ESE	1x1m	CRY	13/08/2019	Gwynedd Archaeological Trust	74
G2608_2057	TR05	Mid-ex shot of [5003] showing small patch of burning within fill (5004)	5003 50047	SSE	2x1m	BMK	14/08/2019	Gwynedd Archaeological Trust	
G2608_2058	TR07	ESE facing aulki section [^7015]	7015	ESE	1x1m	CRY	14/08/2019	Gwynedd Archaeological Trust	
G2608_2059	TR07	Plan of above	7015	ESE	1x1m	CRY	14/08/2019	Gwynedd Archaeological Trust	
G2608_2060	TR04	Pre-ex photo of Trench 4 post clean-up	TR04	E	2x1m	BMJ	14/08/2019	Gwynedd Archaeological Trust	
G2608_2061	TR04	Pre-ex photo of Trench 4 post clean-up	TR04	W	2x1m	BMJ	14/08/2019	Gwynedd Archaeological Trust	26
G2608_2062	TR06	NNW facing section of ditch [6007]	6007 6008	WNN	1x1m	NMC	14/08/2019	Gwynedd Archaeological Trust	54
G2608_2063	TR06	Linear [6007] mid-ex	6007 6008	ENE	1x1m	NMC	14/08/2019	Gwynedd Archaeological Trust	53

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2064	TR06	NNE facing section through [6011] and (6005)	6005 6011	NNE	1x1m	NMC	14/08/2019	Gwynedd Archaeological Trust	
G2608_2065	TR06	[6011] and (6005) mid-ex	6005 6011	NNE	1x1m	NMC	14/08/2019	Gwynedd Archaeological Trust	
G2608_2066	TR05	S facing section throigh [5005]	5005 5006 5010	S	2x2m 1x1m	BMK	14/08/2019	Gwynedd Archaeological Trust	
G2608_2067	TR05	View of [5005]	5005 5006 5010	W	2x2m 1x1m	BMK	14/08/2019	Gwynedd Archaeological Trust	39
G2608_2068	TR05	View of north facing section through [5005]	5005 5006	W	2x2m	BMK	14/08/2019	Gwynedd Archaeological Trust	
G2608_2069	TR05	View of north facing section through [5005]	5005 5006 5010	N	2x2m	BMK	14/08/2019	Gwynedd Archaeological Trust	40
G2608_2070	TR05	View of north facing section through [5005]	5005 5006 5010	N	2x2m	BMK	14/08/2019	Gwynedd Archaeological Trust	
G2608_2071	TR05	View of [5005] from east	5005 5006 5010	E	2x2m 1x1m	BMK	14/08/2019	Gwynedd Archaeological Trust	
G2608_2072	TR06	Pre-ex of ditch [6014]	6014 6015	NW	1x1m	ET	15/08/2019	Gwynedd Archaeological Trust	

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G2608_2073	TR06	Pre-ex of ditch [6014]	6014 6015	NW	1x1m	ET	15/08/2019	Gwynedd Archaeological Trust	
G2608_2074	TR06	Pre-ex of ditch [6014]	6014 6015	NW	1x1m	ET	15/08/2019	Gwynedd Archaeological Trust	
G2608_2075	TR04	Pre-ex photo of poss. linear cut [4008]	4008 4009	E	1x1m	BMJ	15/08/2019	Gwynedd Archaeological Trust	28
G2608_2076	TR04	Pre-ex view of sandy terminus [4006]	4006 4007	S	1x1m 1x0.5m	BMJ	15/08/2019	Gwynedd Archaeological Trust	
G2608_2077	TR05	Post-ex view of ditch [5003] showing SSE facing section throug (5004)	5003 5004	SSE	1x1m 1x0.5m	BMK	15/08/2019	Gwynedd Archaeological Trust	38
G2608_2078	TR05	Post-ex view of ditch [5003] showing NNW facing section throug (5004)	5003 5004	NNW	1x1m 1x0.5m	BMK	15/08/2019	Gwynedd Archaeological Trust	
G2608_2079	TR06	Post-ex view of ditch also showing S section (6010)	6009	N	1x1 1x1m 1x1m	EP	15/08/2019	Gwynedd Archaeological Trust	
G2608_2080	TR06	Post-ex view of ditch also showing S section (6010)	6009	N	1x1 1x1m 1x1m	EP	15/08/2019	Gwynedd Archaeological Trust	
G2608_2081	TR06	Post-ex view of ditch also showing S section (6010)	6009	N	1x1 1x1m 1x1m	EP	15/08/2019	Gwynedd Archaeological Trust	

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G2608_2082	TR04	View of E facing section in Terminus [4006]	4006 4007	E	1x1m	BMJ	15/08/2019	Gwynedd Archaeological Trust	33
G2608_2083	TR03	S facing section west end of TR03	3001 3002 3003 3004 3006	S	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	21
G2608_2084	TR03	S facing section west end of TR03	3001 3002 3003 3004 3006	SW	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	
G2608_2085	TR03	S facing section west end of TR03	3001 3002 3003 3004 3006	SE	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	
G2608_2086	TR03	S facing section west end of TR03	3001 3002 3003 3004 3006	SW	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	
G2608_2087	TR03	S facing section west end of TR03	3001 3002 3003 3004 3006	SW	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	

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G2608_2088	TR05	Pre-ex view of [5001]	5001 5002	SSE	2x1m	BMK	19/08/2019	Gwynedd Archaeological Trust	
G2608_2089	TR08	Pre-ex shot of Trench 8	TR08	W	2x1m	AO	19/08/2019	Gwynedd Archaeological Trust	75
G2608_2090	TR08	Pre-ex shot of Trench 8	TR08	E	2x1m	AO	19/08/2019	Gwynedd Archaeological Trust	
G2608_2091	TR08	Pre-ex shot of cut [8004]	8004 8005	E	1x1m	NMC	19/08/2019	Gwynedd Archaeological Trust	77
G2608_2092	TR03	S facing section TR03 mid trench	3001 3002 3003	SW	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	
G2608_2093	TR03	S facing section TR03 mid trench	3001 3002 3003	S	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	
G2608_2094	TR03	S facing section TR03 mid trench	3001 3002 3003	SE	1x1m	AMO	19/08/2019	Gwynedd Archaeological Trust	
G2608_2095	TR04	Post-ex shot of possible ditch terminus [4006]	4006	S	1x1m	KM	19/08/2019	Gwynedd Archaeological Trust	
G2608_2096	TR04	Sondage cut into layer (4005) exposing orange natural (4015) similar to TR03	4005 4015 Sondage 4.1	S	1x1m	BMJ	19/08/2019	Gwynedd Archaeological Trust	

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G2608_2097	TR06	NW facing section throigh [6014] (no ID board)	6014	NW	1x1m	NMC	19/08/2019	Gwynedd Archaeological Trust	
G2608_2098	TR06	NW facing section throigh [6014] (no ID board)	6014	NW	1x1m	NMC	19/08/2019	Gwynedd Archaeological Trust	
G2608_2099	TR06	NW facing section throigh [6014]	6014	NW	1x1m	AO	20/08/2019	Gwynedd Archaeological Trust	50
G2608_2100	TR06	NW facing section throigh [6014]	6014	NW	1x1m	AO	20/08/2019	Gwynedd Archaeological Trust	
G2608_2101	TR06	NW facing section throigh [6014]	6014	SW	1x1m	AO	20/08/2019	Gwynedd Archaeological Trust	49
G2608_2102	TR04	View of roman pottery in linear [4008] in plan	SF05 4010 4008	E	1x0.08m	EAR	20/08/2019	Gwynedd Archaeological Trust	
G2608_2103	TR04	Close-up of roman pottery in linear [4008]	SF05 4010 4008	E	1x0.08m	EAR	20/08/2019	Gwynedd Archaeological Trust	30
G2608_2104	TR05	Post-ex view of section through [5001] ditch	5001 5002	SSE	1x1m	BMK	20/08/2019	Gwynedd Archaeological Trust	37
G2608_2105	TR05	Post-ex view of section through [5001] ditch	5001 5002	NNW	1x1m	BMK	20/08/2019	Gwynedd Archaeological Trust	

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G2608_2106	TR04	Post-ex of terminus [4006] and baulk section	4006	S	1x1m	EAR	20/08/2019	Gwynedd Archaeological Trust	34
G2608_2107	TR04	View of Sondage 4.2 in layer (4005)	4005 4015 Sondage 4.22	S	1x1m	EAR	20/08/2019	Gwynedd Archaeological Trust	27
G2608_2108	TR06	[6011] and stone (6005) following partial removing of (6016)	6005 6011 6016	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	61
G2608_2109	TR06	[6011] and stone (6005) following partial removing of (6016)	6005 6011 6016	NW	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2110	TR06	[6011] and stone (6005) following partial removing of (6016)	6005 6011 6016	W	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2111	TR06	[6011] and stone (6005) following partial removing of (6016)	6005 6011 6016	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2112	TR08	SW facing section through ditch [8004]	8004 8005	SW	1x1m	TAM	20/08/2019	Gwynedd Archaeological Trust	78
G2608_2113	TR08	SW facing section through ditch [8004]	8004 8005	NE	1x1m	TAM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2114	TR08	SW facing section through ditch [8004]	8004 8005	NE	1x1m	TAM	20/08/2019	Gwynedd Archaeological Trust	

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G2608_2115	TR06	N facing section of feature [6020] & [6018] with fills (6021) & (6019)	6018 6019 6020 6021	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	58
G2608_2116	TR06	Overview shot of features [6020] & [6018] with fills (6019) &)6021)	6018 6019 6020 6021	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	59
G2608_2117	TR06	Overview shot of features [6020] & [6018] with fills (6019) & (6021)	6018 6019 6020 6021	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2118	TR06	S facing section of linear feature [6018] with fills (6019)	6018 6019	S	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	60
G2608_2119	TR06	N facing section of feature [6022] with fills (6023)	6022 6023	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2120	TR06	Overview shot of feature [6022] after removal of fill (6023)	6022	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	57
G2608_2121	TR06	N facing section of feature [6024] with fills (6025)	6024 6025	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	56
G2608_2122	TR06	N facing section of feature [6024] with fills (6025)	6024 6025	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	

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G2608_2123	TR06	Overview shot of feature [6024] after removal of fill (6025)	6024	N	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2124	TR06	NW facing section of feature [6026] with fill (6027)	6026 6027	NW	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	55
G2608_2125	TR06	Overview shot of feature [6026] after partial removal of fill (6027)	6026 6027	NW	1x1m	KM	20/08/2019	Gwynedd Archaeological Trust	
G2608_2126	TR07	WNW facing section of linear [7018]	7018	ESE	1x1m 1x0.5m	SG	20/08/2019	Gwynedd Archaeological Trust	
G2608_2127	TR07	WNW facing section of linear [7018]	7018	ESE	1x1m 1x0.5m	SG	20/08/2019	Gwynedd Archaeological Trust	
G2608_2128	TR07	WNW facing section of linear [7018]	7018	ESE	1x1m 1x0.5m	SG	20/08/2019	Gwynedd Archaeological Trust	
G2608_2129	TR04	Mid-ex view of discreate feature (4011) in feature [4008] - Portrait	4011 4008	E	1x0.5m	BMJ	20/08/2019	Gwynedd Archaeological Trust	
G2608_2130	TR04	Mid-ex view of discreate feature (4011) in feaure [4008] - Landscape	4011 4008	E	1x0.5m	BMJ	20/08/2019	Gwynedd Archaeological Trust	
G2608_2131	TR06	NE facing section through [6011]	6005 6011	NE	1x1m	NMC	21/08/2019	Gwynedd Archaeological Trust	62

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2132	TR06	NE facing section through [6011]	6005 6011	NE	1x1m	NMC	21/08/2019	Gwynedd Archaeological Trust	
G2608_2133	TR07	Plan of ditches [7018] & [7020]	7018 7020	ESE	1x1m	CRY	21/08/2019	Gwynedd Archaeological Trust	73
G2608_2134	TR07	WNW facing baulk section of [7018]	7018	ESE	1x1m	CRY	21/08/2019	Gwynedd Archaeological Trust	
G2608_2135	TR07	Plan shot of ditches [7018] and [7020]	7018 7020	SSW	1x1m	CRY	21/08/2019	Gwynedd Archaeological Trust	71
G2608_2136	TR07	S facing section of ditch [7020]	7020	S	1x1m	CRY	21/08/2019	Gwynedd Archaeological Trust	72
G2608_2137	TR04	View of discreate feature (4011) in [4008]	4011 4008	NE	1x1m 1x05m	BMJ	21/08/2019	Gwynedd Archaeological Trust	29
G2608_2138	TR04	View of discreate feature (4011) in [4008]	4011 4008	E	1x1m 1x05m	BMJ	21/08/2019	Gwynedd Archaeological Trust	

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G2608_2139	TR03	S facing section of baulk	3001 3002 3004 3005 3008 3009 3010 3011 3012 3013	S	2x1m 1x0.5m	AMO	21/08/2019	Gwynedd Archaeological Trust	
G2608_2140	TR03	S facing section of baulk	3001 3002 3004 3005 3008 3009 3010 3011 3012 3013 3014 3015 3016	S	2x1m 1x0.5m	AMO	21/08/2019	Gwynedd Archaeological Trust	

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G2608_2141	TR03	S facing section of baulk	3001 3002 3004 3005 3008 3009 3010 3011 3012 3013 3014 3015 3016	S	2x1m 1x0.5m	AMO	21/08/2019	Gwynedd Archaeological Trust	
G2608_2142	TR03	S facing section of baulk	3001 3002 3004 3005 3008 3009 3010 3011 3012 3013 3014 3015 3016	E	2x1m 1x0.5m	AMO	21/08/2019	Gwynedd Archaeological Trust	
G2608_2143	TR05	N facing section of [5005] in trench baulk section	5005 5006	N	1x2m 1x0.5m	RE	21/08/2019	Gwynedd Archaeological Trust	42

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2144	TR05	View of excavated feature [5005] from the east	5005 5006 5010	E	1x2m 1x0.5m	RE	21/08/2019	Gwynedd Archaeological Trust	41
G2608_2145	TR05	View of S facing section of [5005] in rench baulk section	5005 5006 5010 5011	S	1x2m 1x0.5m	RE	21/08/2019	Gwynedd Archaeological Trust	
G2608_2146	TR05	Post-ex shot of Trench 05	5005 5006 5001 5002 5003 5004 5007	E	1x2m	RE	21/08/2019	Gwynedd Archaeological Trust	43
G2608_2147	TR05	Post-ex shot of Trench 05	5005 5006 5001 5002 5003 5004 5007	W	1x2m	RE	21/08/2019	Gwynedd Archaeological Trust	
G2608_2148	TR04	E facing section of poss. pit [4008] with feature [4012] and poss. linear terminus [4013]	4008 4009 4010 4011 4012 4013 4014	m	1x1 1x0.5m	BMJ	21/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2149	TR04	E facing section of poss. pit [4008] with feature [4012] and poss. linear terminus [4013]	4008 4009 4010 4011 4012 4013 4014	E	1x1m	BMJ	21/08/2019	Gwynedd Archaeological Trust	31
G2608_2150	TR04	View of poss. terminus, S facing section [4013]	4013 4014	S	1x0.5m	BMJ	21/08/2019	Gwynedd Archaeological Trust	32
G2608_2151	TR03	N facing section through (3005)	3001 3002 3003 3005 3016	N	1x1m	AMO	22/08/2019	Gwynedd Archaeological Trust	
G2608_2152	TR03	N facing section through (3005)	3001 3002 3003 3005 3016	N	1x1m	AMO	22/08/2019	Gwynedd Archaeological Trust	22
G2608_2153	TR03	View of stony area (3005)	3005 3016 3011	S		AMO	22/08/2019	Gwynedd Archaeological Trust	
G2608_2154	TR03	View of stony area (3005)	3005 3016 3011	S		AMO	22/08/2019	Gwynedd Archaeological Trust	
G2608_2155	TR03	View of stony area (3005)	3005 3016 3011	S		AMO	22/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2156	TR03	Stony area	3005 3016 3011	E		AMO	22/08/2019	Gwynedd Archaeological Trust	
G2608_2157	TR03	S facing section through (3005)	3001 3002 3003 3004 3005 3008 3009 3010 3011 3012 3013 3014 03015 3016	S		AMO	22/08/2019	Gwynedd Archaeological Trust	24
G2608_2158	TR03	N facing section through (3005)	3001 3002 3003 3005 30011 3016	N		AMO	22/08/2019	Gwynedd Archaeological Trust	
G2608_2159	TR03	N facing section through (3005)	3001 3002 3003 3005 3011 3016	NE		AMO	22/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2160	TR05	View of small sondage pit cut through (5007) revealing layer (5012) below	5007 5012		1x0.5m 1x0.2m	RE	22/08/2019	Gwynedd Archaeological Trust	36
G2608_2161	TR05	View of small sondage pit cut through (5007) revealing layer (5012) below	5007 5012	E	1x0.5m 1x0.2m	RE	22/08/2019	Gwynedd Archaeological Trust	
G2608_2162	TR06	Soil horizos (6028) & (6030) in sondage 6.1	6028 6029 6030 6002	SW	1x1m	NMC	22/08/2019	Gwynedd Archaeological Trust	
G2608_2163	TR06	Representative Section	6001 6002 6006	S	1x1m	NMC	22/08/2019	Gwynedd Archaeological Trust	46
G2608_2164	TR04	View of Trench 4, post-excavation, pre-backfill by machine (poss. working shot)	Sondage 4.1&2 4005 4006 4008 4013	E	2x1m	BMJ	22/08/2019	Gwynedd Archaeological Trust	
G2608_2165	TR04	View of Trench 4, post-excavation, pre-backfill by machine (poss. working shot)	Sondage 4.1&2 4005 4006 4008 4013	W	2x1m	BMJ	22/08/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2166	TR06	NW facing section of sondage 6.1	6014 6002 6028 6029 6030 6031	NW	1x1m	NMC	22/08/2019	Gwynedd Archaeological Trust	
G2608_2167	TR06	NW facing section of sondage 6.1	6014 6002 6028 6029 6030 6031	NW	1x1m	NMC	22/08/2019	Gwynedd Archaeological Trust	
G2608_2168	TR06	NW facing section of sondage 6.1	6014 6002 6028 6029 6030 6031	NW	1x1m	NMC	22/08/2019	Gwynedd Archaeological Trust	
G2608_2169	TR06	NW facing section of sondage 6.1	6014 6002 6028 6029 6030 6031	NW	1x1m	NMC	22/08/2019	Gwynedd Archaeological Trust	47
G2608_2170	TR08	N facing rep.sec of TR08	8001 80025 8003	N	1x1m	MSL	23/08/2019	Gwynedd Archaeological Trust	76

PHOTO RECORD NUMBER*	SITE SUB-DIVISION	DESCRIPTION*	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO*	DATE OF CREATION OF DIGITAL PHOTO*	ORIGINATING ORGANISATION	PLATE
G2608_2171	TR08	Linear [8006] Pre-ex	8006 8007	SW	1x1m	NMC	23/08/2019	Gwynedd Archaeological Trust	79
G2608_2172	TR08	Linear [8008] Pre-ex	8008 8009	NE	1x1m	NMC	23/08/2019	Gwynedd Archaeological Trust	
G2608_2173	TR08	Linears [8006] & [8008] Pre-ex	8006 8008 8007 8009	NE	1x1m	NMC	23/08/2019	Gwynedd Archaeological Trust	80

APPENDIX III

Gwynedd Archaeological Trust Context Register

Context No.	Site Sub Division	Description	Type	Initials	Date
1001	TR01	Topsoil	Layer	MSL	30/08/2019
1002	TR01	Wind-blown sand	Layer	MSL	31/08/2019
1003	TR01	Sandy darker layer	Layer	MSL	01/09/2019
1004	TR01	Wall core - Southern side	Deposit	MSL	02/09/2019
1005	TR01	Tumble stones - North side of TR	Deposit	MSL	03/09/2019
1006	TR01	Inner face of northern wall	Structure	MSL	04/09/2019
1007	TR01	Outer face of northern wall	Structure	MSL	05/09/2019
1008	TR01	Inner face of southern wall	Structure	MSL	06/09/2019
1009	TR01	Outer face of southern wall	Structure	MSL	07/09/2019
1010	TR01	Small wall? Possible storm drain. Southern side of TR	Structure	MSL	08/09/2019
1011	TR01	Wall core of northern RH wall	Deposit	MSL	09/09/2019
1012	TR01	Silty sandy layer within center of RH	Layer	MSL	10/09/2019
1013	TR01	Dark silty sand layer at northern end of trenth, north of outer facing wall [1007]	Layer	MSL	11/09/2019
1014	TR01	Wall tumble - inner wall face south side	Deposit	MSL	12/09/2019
1015	TR01	Dark silty gravel layer between outer RH wall (southern side) and small wall [1010]	Layer	MSL	13/09/2019
1016	TR01	Silty clayey sand layer within center of RH	Layer	MSL	14/09/2019
1017	TR01	Dark silty clay layer within center of RH	Layer/deposit	MSL	15/09/2019
1018	TR01	Silt deposit on Tumble (1005)	Deposit	MSL	16/09/2019
1019	TR01	Natural - Yellow gritty sand	Layer	MSL	17/09/2019
2001	TR02	Topsoil	Layer	CF	29/08/2019
2002	TR02	Wind-blown sand	Layer	CF	29/08/2019
2003	TR02	Gravel layer covering stone layer (2004)	Layer	CF	29/08/2019
2004	TR02	Stone layer	Layer	CF	29/08/2019
2005	TR02	Wind-blown sand	Layer	CF	29/08/2019
2006	TR02	Burial Soil	Layer	CF	29/08/2019

Context No.	Site Sub Division	Description	Type	Initials	Date
2007	TR02	Stone linear, below (2005)	Layer	CF	29/08/2019
2008	TR02	Voided		CF	29/08/2019
2009	TR02	Dark silty sand below (2005) on south side of [2007]	Layer	CF	29/08/2019
2010	TR02	Dark silty sand below (2005) on north side of [2007]	Layer	CF	29/08/2019
2011	TR02	Thin gravel lens between (2012) and (2013)	Layer	CF	29/08/2019
2012	TR02	Possible buried ploughsoil, same as (2013) + (2006)	Layer	CF	29/08/2019
2013	TR02	Possible buried ploughsoil, same as (2012) + (2006)	Layer	CF	29/08/2019
2014	TR02	Cut feature in Sondage B, unknown form + function	Cut	CF	29/08/2019
2015	TR02	Fill of feature [2014] in Sondage B	Fill	CF	29/08/2019
2016	TR02	Occupation layer, below (2013)	Layer	CF	29/08/2019
2017	TR02	Brown sand layer below (2006)	Layer	CF	29/08/2019
2018	TR02	Cut of a possible pit below	Cut	CF	29/08/2019
2019	TR02	Fill of a possible pit [2018]	Fill	CF	29/08/2019
2020	TR02	Fill of a possible pit [2018]	Fill	CF	29/08/2019
2021	TR02	Natural - brownish yellow clay	Layer	CF	29/08/2019
2022	TR02	Cut of a possible linear	Cut	CF	29/08/2019
2023	TR02	Fill of a possible linear [2022]	Fill	CF	29/08/2019
2024	TR02	Cut of a possible pit	Cut	CF	29/08/2019
2025	TR02	Fill of a possible pit [2024]	Fill	CF	29/08/2019
4001	TR04	Topsoil	Layer	BMJ	28/08/2019
4002	TR04	Subsoil	Layer	BMJ	28/08/2019
4003	TR04	Natural	Layer	BMJ	28/08/2019
4004	TR04	Aeolian layer - medium yellow sand	Layer	BMJ	28/08/2019

Context No.	Site Sub Division	Description	Type	Initials	Date
4005	TR04	Layer of medium brown cobbly sandy clay - plough soils?	Layer	BMJ	28/08/2019
4006	TR04	Cut of sandy terminus	Cut	BMJ	28/08/2019
4007	TR04	Fill of terminus [4006]	Fill	BMJ	28/08/2019
4008	TR04	Cut of possible pit at W end of TR04	Cut	BMJ	28/08/2019
4009	TR04	Primary fill of poss. pit [4008]	Fill	BMJ	28/08/2019
4010	TR04	Secondary fill of poss. pit [4008]	Fill	BMJ	28/08/2019
4011	TR04	Fill of discreate feature [4012]	Fill	BMJ	28/08/2019
4012	TR04	Cut of discreate feature in [4008]	Cut	BMJ	28/08/2019
4013	TR04	Truncated poss. linear/terminus	Cut	BMJ	28/08/2019
4014	TR04	Sandy fill of [4013]	Fill	BMJ	28/08/2019
4015	TR04	Layer of orange clay, poss. variable natural similar to TR03	Layer	BMJ	28/08/2019
5001	TR05	Cut of a small ditch	Cut	RE	29/08/2019
5002	TR05	Fill of ditch [5001]	Fill	RE	29/08/2019
5003	TR05	Cut of small ditch	Cut	RE	29/08/2019
5004	TR05	Fill of [5003]	Fill	RE	29/08/2019
5005	TR05	Cut of large pit filled with demolition rubble	Cut	RE	29/08/2019
5006	TR05	Main secondary fill of [5005] containing much domestic rubble	Fill	RE	29/08/2019
5007	TR05	Wind-blown sand	Layer	RE	29/08/2019
5008	TR05	Turf	Layer	RE	29/08/2019
5009	TR05	Plough soil	Layer	RE	29/08/2019
5010	TR05	Burnt clay patch, primary fill of [5005]	Fill	RE	29/08/2019
5011	TR05	Thin soil lens, primary fill of [5005]	Fill	RE	29/08/2019
5012	TR05	Buried soil layer below (5007)	Layer	RE	29/08/2019
6001	TR06	Topsoil in TR06	Layer	NMC	08/08/2019
6002	TR06	Upper aeolian (windblown) sand deposit	Layer	NMC	08/08/2019

Context No.	Site Sub Division	Description	Type	Initials	Date
6003	TR06	Cut of curvilinear gully, centre of TR06	Cut	NMC	08/08/2019
6004	TR06	Fill of [6003]	Deposit	NMC	08/08/2019
6005	TR06	Straight linear stone deposit in cut [6011]	Deposit	NMC	09/08/2019
6006	TR06	Ploughsoil in TR06	Layer	NMC	13/08/2019
6007	TR06	Broad NNW--SSE aligned straight linear ditch cut in centre of TR06	Cut	NMC	13/08/2019
6008	TR06	Upper fill of [6007]	Deposit	NMC	13/08/2019
6009	TR06	Cut of N-S aligned gully, E end of TR06	Cut	NMC	13/08/2019
6010	TR06	Fill of [6009]	Deposit	NMC	13/08/2019
6011	TR06	Cut of shallow ditch, W end of TR06	Cut	NMC	13/08/2019
6012	TR06	Secondary fill of ditch [6007]	Deposit	NMC	15/08/2019
6013	TR06	Primary fill of ditch [6007]	Deposit	NMC	15/08/2019
6014	TR06	Cut of NW-SE aligned ditch, E part of TR06	Cut	NMC	15/08/2019
6015	TR06	Fill of [6014]	Deposit	NMC	15/08/2019
6016	TR06	Brown silty sand matrix between stones (6005) in cut [6011]	Deposit	KM	20/08/2019
6017	TR06	Cut of small pit at N end of [6011]	Cut	KM	20/08/2019
6018	TR06	Narrow N-S aligned straight linear gullry, W end of TR06	Cut	NMC	20/08/2019
6019	TR06	Fill of [6018]	Deposit	NMC	20/08/2019
6020	TR06	Cut of pit / ditch terminus emerging from S baulk at W end of TR06	Cut	NMC	20/08/2019
6021	TR06	Fill of [6020]	Deposit	NMC	20/08/2019
6022	TR06	Cut of shallow pit / ditch terminus to the E of [6020]	Cut	NMC	20/08/2019
6023	TR06	Fill of [6022]	Deposit	NMC	20/08/2019
6024	TR06	Cut of shallow pit / ditch terminus in S baulk to the E of [6022]	Cut	NMC	20/08/2019
6025	TR06	Fill of [6024]	Deposit	NMC	20/08/2019

Context No.	Site Sub Division	Description	Type	Initials	Date
6026	TR06	Cut of shallow ditch to the E of [6024]	Cut	NMC	20/08/2019
6027	TR06	Fill of [6026]	Deposit	NMC	20/08/2019
6028	TR06	Buried soil layer below upper windblown sand deposit (6002)	Layer	EP	21/08/2019
6029	TR06	Lower aeolian (windblown) sand deposit below (6028)	Deposit	EP	21/08/2019
6030	TR06	Buried soil layer below lower windblown sand deposit (6029)	Layer	NMC	21/08/2019
6031	TR06	Glacial boulder clay	Deposit	NMC	21/08/2019
6032	TR06	Fill of pit [6017]	Deposit	NMC	21/08/2019
8001	TR08	Topsoil in TR08	Layer	RS	19/08/2019
8002	TR08	Ploughsoil in TR08	Deposit	RS	19/08/2019
8003	TR08	Aeolian (windblown) sand deposit	Deposit	NMC	19/08/2019
8004	TR08	Cut of NE-SW aligned straight linear ditch, E end of TR08	Cut	NMC	19/08/2019
8005	TR08	Fill of [8004]	Deposit	JAH	19/08/2019
8006	TR08	Cut of NE-SW aligned straight linear ditch, W end of TR08	Cut	JAH	19/08/2019
8007	TR08	Fill of [8006]	Deposit	JAH	19/08/2019
8008	TR08	Cut of NW-SE aligned straight linear ditch, W end of TR08	Cut	JAH	19/08/2019
8009	TR08	Fill of [8008]	Deposit	JAH	19/08/2019

APPENDIX IV

Gwynedd Archaeological Trust Ecofact Register

Sample No.	Context No.	Context Type	Purpose of Sample	No. of tubs	% of deposit sampled	Drawing No.
1.001	1003	Bulk	Ecofact analysis and dating	2		
1.002	1017	Bulk	Ecofact analysis and dating	1		
2.001	2006	Bulk	Ecofact analysis and dating	1		2.03
2.002	2019	Bulk	Ecofact analysis and dating	1		2.03
2.003	2016	Bulk	Ecofact analysis and dating	4		2.06
3.001	3004	Bulk	Ecofact analysis and dating	4		
4.001	4007	Bulk	Ecofact analysis and dating	3	50	4.01
4.002	4009	Bulk	Ecofact analysis and dating	3	20	4.06
4.003	4011	Bulk	Ecofact analysis and dating	1	50	4.06
6001	6010	Bulk	Ecofact analysis and dating	2		6007
6002	6015	Bulk	Ecofact analysis and dating	2		6003
6003	6028	Bulk	Ecofact analysis and dating	1		6007
6004	6030	Bulk	Ecofact analysis and dating	1		6007
6005	6013	Bulk	Ecofact analysis and dating	2		6006
8001	8005	Bulk	Ecofact analysis and dating	2		6001

APPENDIX V

Gwynedd Archaeological Trust Artefact Register

Find No.	Sub-Area	Context No.	Material	Description	Weight (g)	Context Description
1001	TR01	1018	Flint	Flint flake	1.9	Found within silt formed around the northern inner face RH wall tumble
1002	TR01	1015	Ceramic	1x fragment of Samian ware	4.8	From possible storm drain on Southern side of round house
1003	TR01	1003	Jet	1x Jet Bead	tbc	From Sandy darker layer
1004	TR01	1003	Ceramic	1 Dorset black-burnished ware plain-rimmed dish rim sherd. Trace of decoration just below the rim	4	Dark windblown sand deposit
2001	TR02	2005	Pb	1 x folded lead strip	14	Windblown sand
2002	TR02	Unstrat	Fe	1x pieces of Fe Object	5	Unstrat: Recovered by metal detector
2003	TR02	2006	Ceramic	1x pieces of Coarse Roman pottery sherd, side sherd	27	Dark silty sand layer with stones on north side of trench
2004	TR02	2010	Ceramic	1x pieces of Coarse Roman pottery sherd, possibly a lug	19	Silty sand layer on the north side of trench
2005	TR02	2010	Ceramic	1x pieces of Roman Black Burnished Ware	4	Silty sand layer on the north side of trench
2006	TR02	2010	Pb	Lead weight	25	Silty sand layer on the north side of trench
2007	TR02	2010	Ceramic	2x pieces of coarse Roman pottery	8	Silty sand layer on the north side of trench
2008	TR02	2010	Ceramic	1x pieces of coarse Roman pottery	2	Silty sand layer on the north side of trench
2009	TR02	2023	Fe	Tool- small hammer head?	102	Silty sand fill of a possible ditch [2022]
2010	TR02	2006	Fe	Tool - chisel / wedge-shaped tool	57	Dark silty sand layer with stones on north side of trench
2011	TR02	2015	Clay	3x pieces of burnt clay or daub	18	Dense stony fill of unknown cut feature [2014]
2012	TR02	2016	Clay	1x pieces of burnt clay or daub	14	Dark silty sand due to fine charcoal and flecks of burnt clay or daub
2013	TR02	2006	Ceramic	3x pieces of coarse Roman pottery	6	Dark silty sand layer with stones on north side of trench

Find No.	Sub-Area	Context No.	Material	Description	Weight (g)	Context Description
3001	TR03	3004	Lithic	5x heat affected (burnt) stone	574	Buried Soil
4001	TR04	Unstrat	Fe	2x pieces of iron objects	65	Unstrat: Recovered by metal detector in spoilheap
4002	TR04	4005	Glass	Base of blue-green post-med bottle	84	Layer of medium brown cobbly sandy clay - plough soils?
4003	TR04	4004	Ceramic	Post-med blue & white pottery	17	Aeolian layer - medium yellow sand
4004	TR04	4005	Lithic	Piece of struck flint - poss. by plough	8	Layer of medium brown cobbly sandy clay - plough soils?
4005	TR04	4010	Ceramic	3x coarse roman pottery sherds, including a rim sherd.	14	Secondary fill of poss. pit [4008]
5001	TR05	5006	Ceramic	x78 fragments of Buckley Ware Pottery	6395	Main secondary fill of [5005] containing much domestic rubble
5002	TR05	5006	Mortar	Building Mortar debris	475	Main secondary fill of [5005] containing much domestic rubble
5003	TR05	5006	Slate	Roofing Slate Fragment	2683	Main secondary fill of [5005] containing much domestic rubble
5004	TR05	5006	Fe	Shovel Blade	1095	Main secondary fill of [5005] containing much domestic rubble
5005	TR05	5006	Fe	Assorted metalwork fragments	2528	Main secondary fill of [5005] containing much domestic rubble
5006	TR05	5006	Glass	x6 fragments of bottle and x13 window glass	378	Main secondary fill of [5005] containing much domestic rubble
5007	TR05	5006	Ceramic	x34 glazed creamware , x11 transfer printed pottery sherds, x2 black ware, x4 clay pipes	302	Main secondary fill of [5005] containing much domestic rubble
5008	TR05	5006	Bone	x27 animal bone from food debris	242	Main secondary fill of [5005] containing much domestic rubble

Find No.	Sub-Area	Context No.	Material	Description	Weight (g)	Context Description
5009	TR05	5004	Ceramic	x26 buckley Ware Pottery	932	Fill of [5003]
5010	TR05	5004	Glass	Bottle glass sherds	57	Fill of [5003]
5011	TR05	5004	Fe	x7 metal objects	148	Fill of [5003]
5012	TR05	5004	Ceramic	x13 glazed creamware and transfer printed pottery sherds	130	Fill of [5003]
5013	TR05	5002	Ceramic	x18 buckley Ware pottery sherds	374	Fill of ditch [5001]
5014	TR05	5002	Ceramic	x3 sherds of glazed tablewares	5	Fill of ditch [5001]
5015	TR05	5002	Bone	Animal bone	2	Fill of ditch [5001]
5016	TR05	5002	Fe	Iron object	136	Fill of ditch [5001]
5017	TR05	5006	Cu	Button	3	Main secondary fill of [5005] containing much domestic rubble
6001	TR06	6001	Ceramic	1 x brown glazed post-med sherd, 1x frag of pipe bowl	16	Topsoil
6002	TR06	6021	Ceramic	3x frag of buckley ware	48	Upper aeolian (windblown) sand deposit
6003	TR06	6010	Fe	2x Fe mineralised objects	5	Cut of curvilinear gully, centre of TR06
6004	TR06	6016	Assorted	41x post-med pottery, 7x CBM, 2x Slate, 1x pipe stem, 2x coke	1604	Fill of [6003]
7001	TR07	Unstrat	Cu	Half Penny	9	Recovered from spoil heap with metal detector
7002	TR07	7008	Ceramic	2x white post-med pottery	2	Sand- light orange sand with iron panning
7003	TR07	7016	Ceramic	4x post-med pottery and piece of coke	12	Cut of small pit
7004	TR07	7006	Fe	4x metal objects	18	Fill of [7003] - charcoal inclusions
7005	TR07	7006	Ceramic	2x pieces of Buckleyware 3x blue-white post-med pot	28	Cut of small pit

Find No.	Sub-Area	Context No.	Material	Description	Weight (g)	Context Description
7006	TR07	7012	Ceramic	5x pieces of Buckleyware 3x pottery sherds 2x cbm 1x coke	108	Fill of [7005] - post-med pot & iron
7007	TR07	7001	Lithic	Plough struck beach flint	57	Cut of small pit/posthole
7008	TR07	Unstrat	Fe	9x Fe object	777	Unstrat: Recovered from spoil head by metal detector

APPENDIX VI

Reproduction of Eden Mapping Geophysical Survey Report GAT-19-DIN, August 2019

Dinas Dinlle
Llandwrog

Geophysical Survey

PN: GAT-19-DIN

August 2019

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Dinas Dinlle

Llandwrog

Geophysical Survey

August 2019

Project reference	**GAT-19-DIN**
On behalf of	**Gwynedd Archaeological Trust**
Report prepared by	**Nigel Barker BA, MA**
GAT ref	**G2608**

1 Contents

CAD Drawings: GAT-19-DIN

- Drawing GAT-19-DIN.01 (A3) Site Location & Survey Extents
- Drawing GAT-19-DIN.02 (A3) 1:400 Earth Resistance Data
- Drawing GAT-19-DIN.03 (A3) 1:400 Interpretation Drawing

2 Summary

This report presents the results of a geophysical survey undertaken at Dinas Dinlle Hillfort, Llandwrog, Gwynedd.

The earth resistance survey covered approximately 1,567m^2 centred on NGR SH 4371 5639, and included the location of a circular mound in the northeast corner of the hillfort's interior as well as a section of the eastern defensive rampart.

The survey detected high resistance readings over the mound as well as the section of defensive rampart. The rampart and the southern section of the mound both yielded very high values, possibly inferring the presence of a higher concentration of resistive materials such as stone infill. Part of the mound interior proved to be of average resistance that could suggest that the resistive material in this area could have been excavated out at some point.

Several additional weak and low resistance anomalies have also been identified within the data. All have insufficient characteristics within the limited survey area to be readily identified as archaeological, however their context within the hillfort interior does make it a possibility.

3 Introduction

A geophysical survey was commissioned by Gwynedd Archaeological Trust as part of the Climate Change and Coastal Heritage (CHERISH) project. CHERISH is a five-year project between the Royal Commission on the Ancient and Historical Monuments of Wales; the Discovery Program, Ireland, Aberystwyth University: Department of Geography and Earth Sciences and Geological Survey Ireland.

3.1 Location and land use

The survey area was located at Dinas Dinlle Hillfort, Llandwrog and measured approximately 1,567m^2 centred on NGR SH 4371 5639, encompassing the location of a circular mound in the northeast corner of the hillfort's interior as well as a section of the eastern defensive rampart. The hillfort is a scheduled monument (Ref: CN048) and is built on an isolated hill. The fort was defended by two earth ramparts that are visible from the south and east, but which have been lost to costal erosion to the seaward side. A Second World War 'Seagull Trench' is sited in the north of the fort that provided defence for the former RAF Llandwrog located nearby. The area stood as grassed pasture at the time of the survey.

3.2 Site history

The site has never formally excavated but sherds of Roman pottery have been recovered suggesting occupation in the 2nd and 3rd centuries AD. In the 20th century the monument was part of the Dinas Dinlle golf course and the 'seagull trench' was incorporated into the northern defences during the Second World War.

Two gradiometer surveys have previously been undertaken over the hillfort. The surveys identified several possible roundhouses and stony banks within the interior.

3.3 Geology and soils

The underlying geology of the site comprises Pleistocene / Quaternary landform assemblage and associated subsurface which is of national importance and is a designated Site of Special Scientific Interest (SSSI), due to its unique sequence of glacial deposits.

3.4 Dates and additional information

The earth resistance survey was undertaken on 13th August 2019, under fine weather conditions. The work was undertaken with the assistance of volunteers as part of an outreach strategy.

4 Field Methodology

4.1 Geomatic referencing

The data was collected over 20m x 20m survey grids that were established by Gwynedd Archaeological Trust using a Trimble GPS system. Surface flags were used to define the corner points of the grid and measuring tapes were used for heading and positional markers.

4.2 Technique:

4.2.1 Earth Resistance Survey

Earth resistance surveys are undertaken to locate buried archaeological features such as walls, cists and roads as well as graves and ditches under favourable ground conditions. The survey was practiced in accordance with Historic England (2008) Guideline No 1, *Geophysical survey in archaeological field evaluation*, and the Charted Institute for Archaeologists (2014), *Standard and guidance for archaeological geophysical survey*.

4.2.1.1 Instrumentation

A Geoscan Research RM15 twin array resistance meter was used to undertake the earth resistance survey.

4.2.1.2 Data Collection

The earth resistance data was collected over the pre-determined grid using measuring tapes. Readings were taken at 0.5m increments spaced on 1m traverses using a zig-zag collection method. The electrode separation was 0.5m using a 0.1ohm sensitivity. The 0.5m twin array can detect structures at a depth of 0.5 to 1m, with only the more substantial features showing up at greater depth.

4.2.1.3 Post-processing

The data collected by the instrument was imported into TerraSurveyor software. Processing was kept to a minimum to prevent the creation of artificial artefacts in the data with a basic interpolation added to make the data plot less pixelated.

4.2.1.4 Data presentation

The data was clipped at a narrow range to show weaker features and at a wider range to isolate very strong responses. Both are presented as 1:400 plots in drawing GAT-19-DIN.02.

5 Results

The interpretation of the earth resistance data is shown in drawing GAT-19-DIN.03.

5.1 High and very high earth resistance anomalies

High resistance anomalies are often interpreted as buried features which have a low conductivity or moisture content, such as stone walls, concentrations of rubble or compacted trackways and mounds.

Anomaly A is located in the northeast corner of the survey area and correlates with the position of the defensive earth rampart. The values of anomaly A are very high in comparison to the background mean and could infer a high concentration of resistive materials such as a possible rubble core incorporated within the bank.

Anomaly B is a large area of high resistance located in the centre of the data and corresponds to the position of the circular mound present on the surface. The high values could be from the compacted nature of the mound but may also infer the presence of

resistive materials such as stone. The resistance values become very high in the south of anomaly and are comparable to those of Anomaly A. It is therefore possible that there could be a higher accumulation of resistive materials in this area. It is also of note that the centre of Anomaly A can be seen to produce levels of resistance relative the background values, possibly suggesting that this area has been excavated out.

Elsewhere within the data, isolated responses with high resistance values are present that are likely to be associated with near surface stone deposits.

5.2 Weak earth resistance anomalies

Several weak linear and curvilinear anomalies were identified within the data; however, they have insufficient shape and form within the limited survey area for them to be readily identified as archaeological.

5.3 Low earth resistance anomalies

Low earth resistance anomalies are usually associated with buried features with an enhanced moisture level such as cut ditches, graves and pits.

Three linear anomalies of low earth resistance were identified in the southeast of the survey area. All three have similar values to the background mean therefore it is unclear if they are derived from cut features.

6 Conclusions

The earth resistance survey produced strong resistance anomalies over the circular mound as well as the section of defensive rampart. The section of rampart and the southern section of the mound both yielded very high values possibly inferring the presence of a higher concentration of resistive materials. The interior of the mound proved to be of average resistance suggestive that this area could have been excavated out at some point.

Several weak linear and curvilinear anomalies have also been identified within the data along with three low resistance linear features. All have insufficient characteristics within the limited survey area to readily identify them as archaeological, however their context within the hillfort interior does make it a possibility.

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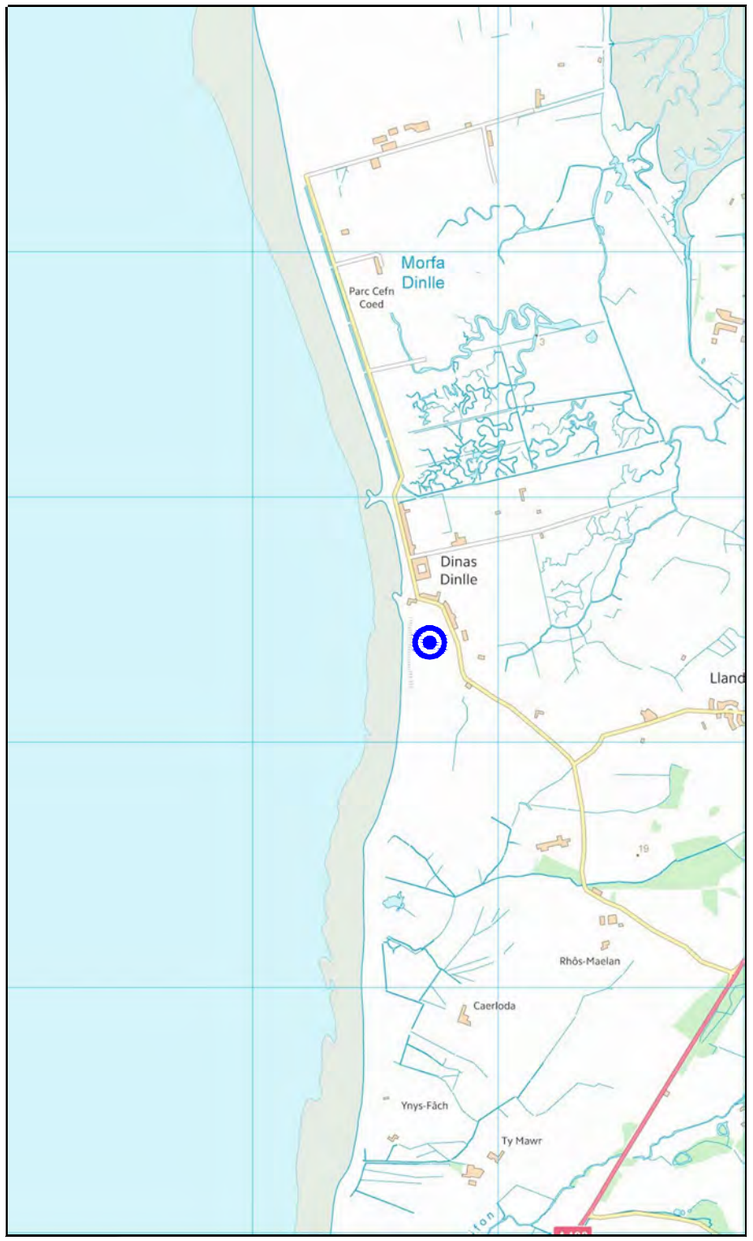

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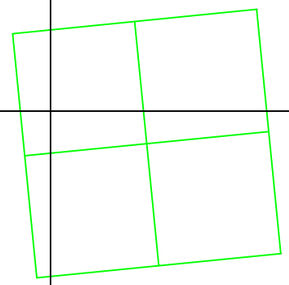

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56400.00

56300.00

43700.00

43800.00

SITE LOCATION

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Client Name

Gwynedd Archaeological Trust

Job Title

Dinas Dinlle

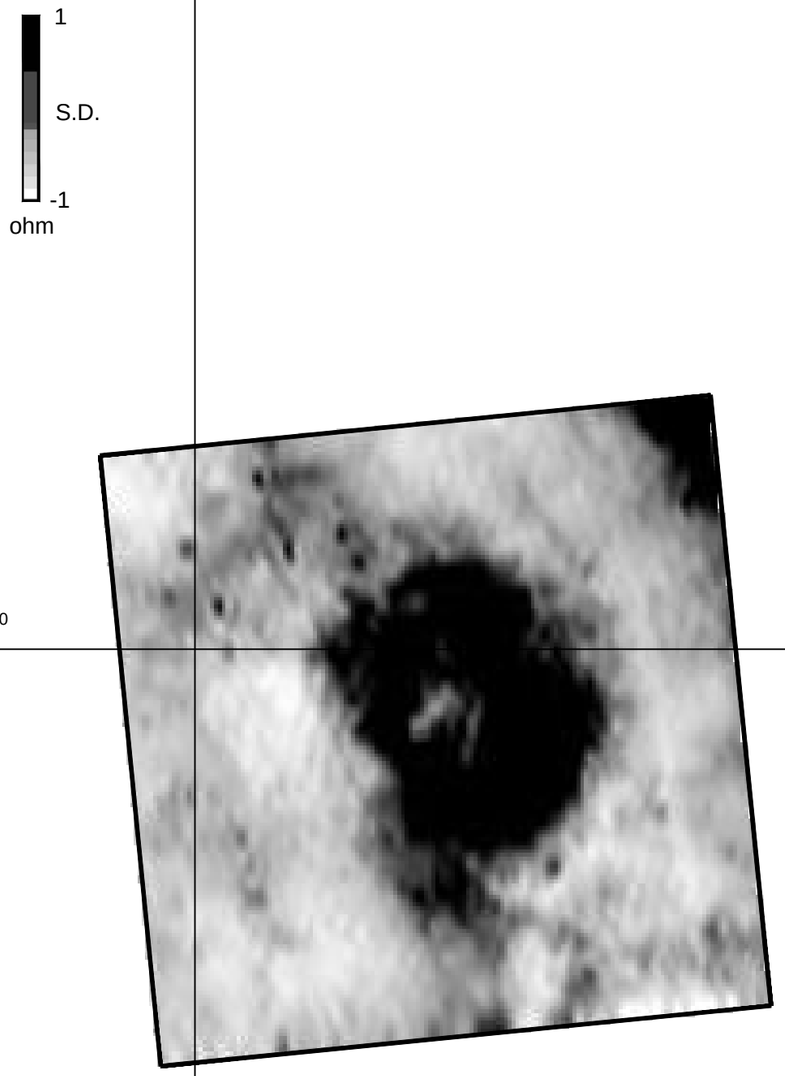
Drawing Title

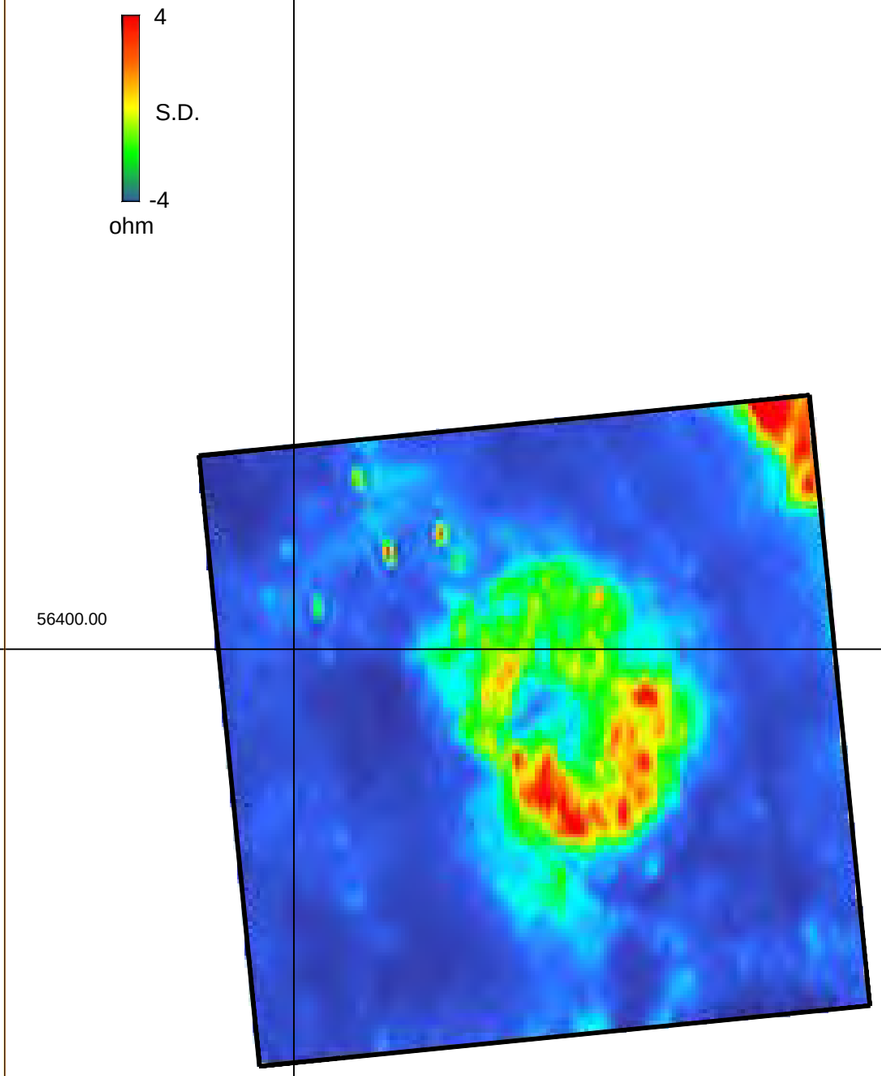
Site Location & Survey Extents

Scale	Drawn
As Shown	NB
Date	**Approved**
14/08/19	AP

Revision	Amendments		By	Checked

Project Number	Drawing No.	Revision	Status
GAT-19-DIN	01	A	Final





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Client Name

Gwynedd Archaeological Trust

Job Title

Dinas Dinlle

Drawing Title

Earth Resistance Data

Scale	Drawn
1:400 @ A3	NB
Date	**Approved**
14/08/19	AP

Revision	Amendments		By	Checked

Project Number	Drawing No.	Revision	Status
GAT-19-DIN	02	A	Final

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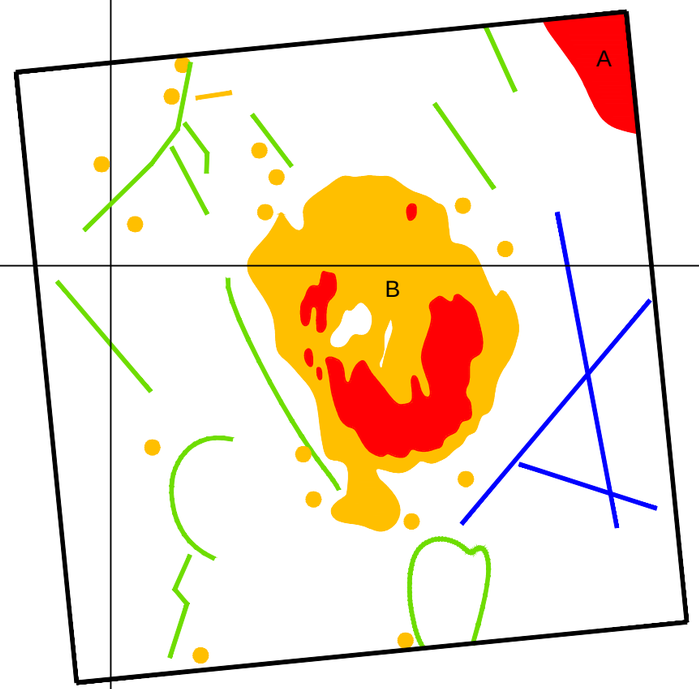

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Key

High earth resistance anomalies. Probably associated with buried stone features or materials with low moisture content.

Very high earth resistance anomalies. Probably associated with buried stone features or materials with low moisture content.

Weak earth resistance anomalies. Possibly associated with buried stone features or materials with low moisture content.

Low earth resistance anomalies. Possibly associated with ditches or conductive materials with enhanced moisture content.

Extent of earth resistance data.

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Drawing Title

Interpretation Drawing

Scale	Drawn
1:400 @ A3	NB
Date	**Approved**
14/08/19	AP

Revision	Amendments		By	Checked

Project Number	Drawing No.	Revision	Status
GAT-19-DIN	03	A	Final

APPENDIX VII

Reproduction of Ecofact Assessment Report, Oxford Archaeology, February 2020

CHERISH Project, Dinas Dinlle, Gwynedd, Wales

Palaeoenvironmental Assessment Report

February 2020

Client: Gwynedd Archaeological Trust

Issue No: 2019-2020/2062
OA Reference No: L11287
NGR: SH 4370 5635

oxfordarchaeology

Client Name:	Gwynedd Archaeological Trust
Document Title:	CHERISH Project, Dinas Dinlle, Gwynedd, Wales
Document Type:	Palaeoenvironmental Assessment Report
Report No.:	2019-2020/2062
Grid Reference:	SH 4370 5635
Invoice Code:	L11287
OA Document File Location:	X:\Environmental\External_Enviro_projects\GAT_Project\G2608_Dinas_Dinlle_flots
Issue No:	1
Date:	12th February 2020
Prepared by:	Marta Golebiewska (Palaeoenvironmental Assistant) Denise Druce (Environmental Project Officer)
Checked by:	Rachel Newman (Senior Executive Officer)
Approved for Issue by:	Rachel Newman (Senior Executive Officer)
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CHERISH Project, Dinas Dinlle, Gwynedd, Wales

Palaeoenvironmental Assessment Report

by Marta Golebiewska and Denise Druce

Contents

Summary

Archaeological excavations carried out at Dinas Dinlle Hillfort, Gwynedd (NGR SH 4370 5635), in August 2019, by Gwynedd Archaeological Trust (GAT), included a programme of sampling for the recovery of palaeoenvironmental remains. Following the processing of 14 samples by GAT, Oxford Archaeology North was commissioned to carry out a palaeoenvironmental assessment, which included the identification of suitable material for radiocarbon dating and any recommendations for further archaeobotanical analyses. The results of the assessment showed that the samples contained frequent to abundant identifiable charcoal fragments, and, in a few cases, abundant charred plant remains. The range of cereal types recovered, however, suggests there is a risk that at least some of the material may originate from medieval/post-medieval occupation of the site. Although little additional information would be gained by further analysis of the charred plant remains, further analysis of the charcoal, as an aid to investigating fuel-use, may be warranted if representative fragments were directly dated.

Acknowledgements

Oxford Archaeology would like to thank Gwynedd Archaeological Trust in for commissioning the project and for providing information. Denise Druce and Marta Golebiewska carried out the palaeoenvironmental assessment of the plant remains and charcoal, and wrote the report. Rachel Newman edited the report and provided quality assurance.

1 INTRODUCTION

1.1 Background

1.1.1 Excavations carried out by Gwynedd Archaeological Trust in August 2019, at Dinas Dinlle Iron Age hillfort, Gwynedd, north-west Wales (NGR SH 4370 5635), included a programme of sampling for the recovery of palaeoenvironmental remains. Some 14 flots (Table 1), from previously processed samples, were sent to Oxford Archaeology North for the assessment of their potential for further analyses, and for providing material for radiocarbon dating.

Sample No	Context No	Site Sub Division	Description of feature
1001	1003	Trench 01	Sandy darker layer of windblown sand
1002	1017	Trench 01	Dark silty clay layer within centre of roundhouse
2001	2006	Trench 02	Buried soil
2002	2019	Trench 02	Occupation layer, below (2013)
2003	2016	Trench 02	Fill of a possible pit [2018]
3001	3004	Trench 03	Buried soil
4001	4007	Trench 04	Fill of terminus [4006]
4002	4009	Trench 04	Primary fill of possible pit [4008]
4003	4011	Trench 04	Fill of discrete feature [4012]
6002	6015	Trench 06	Fill of [6014]
6003	6028	Trench 06	Buried soil below upper windblown sand deposit (6002)
6004	6030	Trench 06	Buried soil below lower windblown sand deposit (6029)
6005	6013	Trench 06	Primary fill of ditch [6007]
8001	8005	Trench 08	Fill of [8004]

Table 1: Samples from Dinas Dinlle subjected to palaeoenviromental assessment

1.2 Laboratory methodology

1.2.1 The flots were scanned using a Leica stereo-microscope, and any plant material, including fruits, seeds, chaff, tubers, charcoal and wood fragments, was quantified, provisionally identified, and assessed, following Historic England guidelines (English Heritage 2011). Other remains, such as coal/heat-affected vesicular material (havm), were also quantified. The presence of modern contaminants, such as modern roots and seeds, was also noted. Quantification is based on a score of 1 to 4, where 1 = rare (one to five items), 2 = frequent (6-25), 3 = common (26-100), 4 = abundant (>100 items). Nomenclature of the plant remains follows Stace (2010).

1.2.2 Identifiable charcoal fragments, larger than 2mm in size, were quantified and identified where possible. The presence of any charcoal fragments from short-lived

wood species was noted, as was the presence of other charred material, such as Poaceae (grass) stems or tuber fragments, as these would provide suitable material for radiocarbon dating in the absence of any seeds/fruits. Due to their anatomical similarities, some groups of trees cannot be differentiated. Hawthorn-type (Maloideae), for example, may include hawthorn, whitebeam, apple and pear. Similarly, the *Prunus* species (referred to as blackthorn-type in the text) are difficult to differentiate, and so too are alder (*Alnus glutinosa*) and hazel (*Corylus avellana*) if preservation is poor. Wood taxonomy follows Hather (2000).

1.3 Archiving

1.3.1 The flots, and any paperwork generated during the palaeoenvironmental assessment, will be lodged with the main site archive managed by Gwynedd Archaeological Trust.

2 ASSESSMENT RESULTS

2.1 Charred plant remains

2.1.1 The results of the palaeoenvironmental assessment are presented in Table 2. Preservation was primarily through charring, although samples contained frequent uncharred seeds, which are likely to be modern contaminants. Most of the samples contained at least some charred cereal grains, and although preservation was variable, most were identifiable to type. Windblown sand layer (1003) and deposit (2016), from possible pit [2018], contained the largest cereal assemblages, with common wheat (*Triticum* sp), barley (*Hordeum* sp), and possible oat (*cf Avena* sp). Several of the wheat grains from layer (1003) were squat and plump, possessing characteristics consistent with a free-threshing variety of wheat such as bread wheat (*Triticum aestivum*) (Jacomet 2006). This same layer also produced one or two possible rye (*Secale cereale*) grains.

Sample no	Context no	Feature	Flot Vol (ml)	Charred Plant Remains	Charcoal >2mm	Radiocarbon dating potential
1001	*1003*	Windblown sand	100	Grains (3): *cf Triticum aestivum, Secale cerale, Hordeum* sp and other *Triticum* (glumed), indeterminate grains. Chaff (2): *Triticum spelta* glumes*, Avena* sp awns. Weed seeds (1): *Polygonum aviculare, Rumex* sp, *Carex* sp	(3/4) mostly diffuse porous taxa, including Maloideae, *Prunus* sp, *Alnus/Corylus*, frequent *Quercus* sp, rare *Fraxinus excelsior,* roundwood and other	Yes, glumed *Triticum* or *Triticum spelta* glumes. *Secale cereal* grain for archaeobotanical interest
1002	*1017*	Occupation layer within roundhouse	10	Grains (1): indeterminate. Chaff (1): *Triticum spelta* glume bases, stem fragments	(3) mostly *Quercus* sp, a few diffuse porous taxa, including *Alnus/Corylus* and roundwood	Yes, charred roundwood
2001	*2006*	Buried soil	20	Grains (1): indeterminate. Chaff (1): *Triticum spelta* glume bases, stem fragment. Weed seeds (1): small Fabaceae	(2) *Quercus* sp	Yes, but old wood effect
2002	*2019*	Occupation layer	5	Grains (1): *Triticum* sp, indeterminate Chaff (1): *Triticum spelta* glume bases	(3) *Quercus* sp	Yes, but old wood effect
2003	*2016*	Possible pit [2018]	70	Grains (3): *Triticum* sp, *Hordeum* sp, *cf Avena* sp, indeterminate. Chaff (2): small culm fragments, culm nodes, *Triticum spelta* glumes. Weed seeds (2): small Fabaceae, *Rumex* sp, *Carex* sp, *Persicaria lapathifolia, Polygonum* sp, *Erica* sp, *Plantago lanceolata and others*. Other (1): tuber	(4) mostly *Quercus* sp, frequent roundwood	Yes, *Triticum spelta* glumes, or charred roundwood
3001	*3004*	Buried soil	100	Grains (1): indeterminate. Weed seeds (1): small Fabaceae, *cf Persicaria* sp, culm fragment, unknown charred item	(3) mostly diffuse porous taxa, *cf* Maloideae, *Alnus/glutinosa*, *Prunus* sp, roundwood, few *Quercus* sp	Yes, diffuse porous charcoal (though taphonomy uncertain)
4001	*4007*	Terminus [4006]	50	Unknown charred items, possibly indeterminate grains	(2) *Quercus* sp	Yes, but old wood effect
4002	*4009*	Primary fill of possible pit [4008]	50	Chaff (1): *Triticum spelta* glume	(2) mostly *Alnus/Corylus*, rare *Quercus* sp	Yes, *Alnus/Corylus* charcoal if deposit secure
4003	*4011*	Feature [4012]	70	Grain (1): *Triticum* sp. *Corylus avellana* nut-shell fragments	(3/4) mostly *Quercus* sp, few diffuse porous taxa including *Alnus/Corylus*	Yes, *Corylus avellana* nut-shell

Sample no	Context no	Feature	Flot Vol (ml)	Charred Plant Remains	Charcoal >2mm	Radiocarbon dating potential
6002	*3015*	Fill of 6014	10	Small culm fragments	(2) mostly *Alnus/Corylus* but poorly preserved	Yes, *Alnus/Corylus* charcoal if deposit secure
6003	*6028*	Burial soil	5	-	(3) *Quercus* sp, diffuse porous taxa including Maloideae, roundwood	Yes, roundwood if secure context
6004	*6030*	Buried soil	<5	Tuber fragment	(2) *Quercus* sp, a few diffuse porous taxa including Maloideae	Yes, but old wood effect, and if context secure
6005	*6013*	Primary fill of ditch [6007]	50	Grains (2): *Hordeum* sp, *Avena* sp, indeterminate. Weed seeds (1): small Fabaceae, small culm fragments	(3) mostly *Quercus* sp, a few diffuse porous taxa including *Alnus/Corylus* and others	Yes, *Hordeum* sp if context secure
8001	*8005*	Fill of 8004	5	Grain (1): indeterminate. Weed (1): *Rumex* sp. *Corylus avellana* shell fragments, small culm fragments	(3) mostly diffuse porous taxa including *Alnus/Corylus* (poorly preserved), a few roundwood including a fragment with bark and rare *Quercus* sp fragments	Yes, if context secure

Note: Quantification is based on a score of 1 to 4, where 1 = rare (one to five items), 2 = frequent (6-25), 3 = common (26-100), 4 = abundant (>100 items)

Table 2: Archaeobotanical assessment results

2.1.2 Cereal chaff is dominated by spelt wheat (*Triticum spelta*) glume bases. Other cereal chaff included culm (stem) nodes and fragments, and oat awn fragments. Several charred weed seeds/fruits were also recovered, being most numerous in the richer cereal assemblages. The charred weed seeds/fruits included small pea (Fabaceae), knotgrass (*Polygonum aviculare)*, *dock (Rumex* sp), sedge (*Carex* sp), pale persicaria (*Persicaria lapathifolia),* and ribwort plantain (*Plantago lanceolata*). A single possible heath (*Erica* sp) seed was recovered from deposit (2016), pit [2018]. In addition, two of the deposits, (4011) and (8005), contained rare hazelnut shell (*Corylus avellana*) fragments.

2.2 Charcoal

2.2.1 The majority of the flots contained common to abundant identifiable charcoal fragments. The deposits appeared to be dominated by either oak (*Quercus* sp) or diffuse porous (mostly short-lived) taxa, including hawthorn-type (Maloideae), blackthorn-type (*Prunus* sp) and alder/hazel (*Alnus glutinosa/Corylus avellana*). Ash (*Fraxinus excelsior*) was also recovered from deposit (1003).

2.3 Discussion and potential

2.3.1 Quantities of charred plant remains were small in most of the deposits from Dinas Dinlle, and would provide only limited data for crop husbandry and the local environments. Two of the excavated features, layer (1003), and possible pit (2018), produced relatively rich cereal assemblages, although they comprise types more in common with medieval/post-medieval cultivation in Britain (Moffett 2006), rather than earlier periods. It would appear that north Wales is no exception to this, since thirteenth-century drying-kiln deposits from Rhuddlan, Clywd, for example, produced mixed crops of rye, barley, bread wheat and oat (Quinnell and Blockley 1994).

2.3.2 Although rare examples of free-threshing wheat have been discovered at other late prehistoric sites in north Wales, such as the Iron Age site discovered during the construction of the Pwllheli to Blaenau Ffestiniog pipeline (Treasure 2016), its presence alongside oat and rye at Dinas Dinlle suggests it is likely to be intrusive.

2.3.3 The spelt chaff, from several of the deposits of Dinas Dinlle, is, however, a variety of wheat more consistent with the period of occupation of the hillfort, which is assumed to have been first occupied during the Iron Age. The small quantities perhaps suggest its presence as scattered floor debris. The Iron Age site discovered during the construction of the Pwllheli to Blaenau Ffestiniog pipeline produced a large concentration of cereal grains (113 grains/litre) and some chaff, and although emmer wheat was dominant, the other cereals included spelt wheat and barley (*ibid*).

2.3.4 The charred weed seed assemblages from Dinas Dinlle provide tentative evidence for the presence of rough/waste grassland and heathland (Stace 2010). Given the possible mixed nature of the remains, however, it calls into question which period they originate from. Indeed, a similar situation arises with the charcoal, as although several of the features produced common to abundant identifiable fragments, dominated by either oak or diffuse porous taxa such as alder or hazel, without direct dating the period from which it originates remains uncertain.

2.3.5 Although many of the charred plant remains and charcoal should provide suitable material for radiocarbon dating, given the evidence for possible modern contamination, careful consideration would be required in the selection of samples for dating. For example, spelt glumes or glumed wheat may be the safer option from features/layers considered to be contemporary with the hillfort. Conversely, however, it would be good practice to date either a free-threshing or rye grain to establish firmly the period of their cultivation. Indeed, an Iron Age date for either (though doubtful for rye), may be significant.

2.3.6 In conclusion, although little additional information would be gained by further analysis of the charred plant remains, further analysis of the charcoal, as an aid to investigating fuel-use, may be warranted if representative fragments were directly dated.

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APPENDIX VIII

Reproduction of Roman Pottery Assessment Report, Gill Dunn, December 2019

Roman ceramic material from Dinas Dinlle

(Project G2608)

Catalogue of material

Tr1 (1003) Sa no 1001
One rim sherd of a Dorset black-burnished ware plain-rimmed dish. Trace of decoration just below the rim. *Terminus post quem* of early-mid second century.
Weight 4g

Tr1 (1015) SF1002
Rim sherd of samian ware dish or bowl. Very weathered with the majority of the slip missing. Slip only present on the internal surface and below the beaded rim on the external surface.
Weight 4.8g

Tr2 (2006) SF2003
One body sherd in a coarse, soft oxidised fabric. Quartz-rich fabric with red oxide inclusions. Very weathered. Probably from a jar or bowl. Weight 27g

Tr2 (2006) SF2013
Three fragments of ceramic material – probably not pottery but building material. Quartz and red oxide inclusions. Weight 6g

Tr2 (2010) SF2004
One rim sherd of a coarse oxidised flanged bowl. Very weathered. Quartz, red oxide and mica inclusions. Weight 19g

Tr2 (2010) SF2005
One body sherd of a Dorset black-burnished ware vessel. Some cross-hatching decoration is visible which suggests a date of AD 120+. It is not possible to determine the vessel form.
Weight 4g

Tr2 (2010) SF2007
Two fragments of ceramic material, probably not pottery but building material as any precise form is indeterminate due to the size and condition of the material. Weight 8g

Tr2 (2010) SF2008
One fragment of coarse oxidised quartz-rich ceramic. Very abraded. Indeterminate as to whether it is a pottery sherd or a fragment of building material. Weight 2g

The sherds from Tr4 (4010) SF4005 are of medieval date. One rim and two body sherds of a jar, possibly a cooking pot. The fabric has multi-mineral rock fragments including granite, mica and possibly feldspar. Possibly a mid-Wales gritty ware but provenance will need checking. Weight 14g

Summary

A total of eleven Roman ceramic fragments was recovered, weighing 74.8g, only five of which, weighing 58.8g, can be positively identified as vessel fragments.

The majority of the material is in a poor abraded condition resulting in any surface treatment or decoration being lost, and in the case of the samian sherd, the slip is worn. The exceptions to this are the two black-burnished ware sherds which are less abraded and the decoration is relatively clear.

The coarse oxidised wares and the samian are dated to the second century and the black-burnished ware has a *terminus post quem* of AD 120.

The material comes from:

Wind blown layer of sand (1003): 1 sherd weighing 4g

Possible storm drain on southern side of round house (1015): 1 fragment weighing 4.8g

Silty sand layer with stones on north side of trench (2006): 4 fragments weighing 33g

Silty sand layer on north side of trench (2010): 5 fragments weighing 33g

G. Dunn
December 2019

APPENDIX IX

Reproduction of Medieval Pottery Assessment Report, Julie Edwards, January 2020

Three sherds of pottery from excavations at Dinas Dinlle, Gwynedd GAT2608 Tr. 04 (4010) Small Find <4005>

Introduction

The three joining sherds (10g; EVEs 6%) of pottery are from the rim (radius c. 110 mm) and neck of a thin-walled vessel that appears to have been a jar. The pottery was initially thought to be Roman and sent to Gill Dunn for identification who suggested it may be medieval.

Methodology

The surfaces and broken edges of the pottery fragments were partly obscured by soil, the pieces were therefore gently washed with water taking care not to damage the surfaces which are quite soft.

The pottery has been examined by eye and at x20 magnification and this report has been prepared in accordance with *A Standard for Pottery Studies in Archaeology* (MPRG 2016). Form terminology employs terms recommended by the Medieval Pottery Research Group (MPRG 1998).

Condition

The surfaces and broken edges of the sherds are slightly worn and part of the rim edge is abraded but otherwise they are not in a particularly poor condition.

Description

The pieces are in an oxidised red earthenware. The edge of the rim is everted and slightly unevenly finished suggesting it has not be been wheel thrown. A small area of sooting or burning survives on the rim edge. No trace of glaze can be seen on these pieces and there does not appear to be any decoration on the exterior or interior of the sherds, there are some surface incisions and indentations along the rim edge (visible at x10 magnification)but the edge is abraded and it is not clear whether they are the remains of intentional decoration. Black/gold mica inclusions can been seen protruding the surfaces creating a glittery effect. Other rock inclusions give the rim a rough feel and this appears to be due to surface abrasion of the clay that has left some of the inclusions partly standing proud of the this surface, this was evident before washing.

Fabric description

Colour: the core is a pale grey in places fading to a pale red with the exterior margins being slightly redder in places, surfaces are a pale red.

Hardness: the fabric is soft.

Feel: rough

Texture/Fracture: irregular

Inclusions: moderately abundant and sorted igneous rock inclusions that are coarse and very coarse in size (1.25 mm - 2 mm), angular and sub-angular in shape in shape (these rock fragments appear to consist of quartz, feldspar and mica and are probably granite); moderate black/gold mica (this is

biotite) up to 2 mm in length and 0.5- 1 mm across; sparse coarse fragments of feldspar (c. 3 mm x 1.75 mm); sparse medium sub-rounded quartz (up to 0.5 mm). Fine clay matrix with very fine moderate abundant black/red flecks (iron?).

Surfaces are smooth with moderate flecks of mica.

Discussion

The overall appearance and method of manufacture suggests that the pottery is broadly medieval in date. The shape and presence of burning/sooting on the rim suggests that the vessel may have been used for cooking or heating food or liquid. There are no diagnostic features that can be used to suggest a provenance but the inclusions point to an area where granite is present, although a glacial erratic source cannot be ruled out.

North Devon and Cornwall are two such areas where handmade wares with granite-derived fabrics were produced (Allan *et al* 2018) although published fabric descriptions (Brown et al 2006, Allan 1984) do not exactly match the pieces from Dinas Dinlle *e.g.* North Devon medieval coarsewares in production from the 12th century (Brown *et al* 2006, 271). The North Wicklow/Leinster area is one of the Irish sources for pottery with granite-derived fabrics *e.g.* Leinster cooking ware which is handmade and examples are known with decoration on the rim edge (Sandes 2012, 466-468, fig 7.3:27 nos. 13583 and 13435), although published fabric descriptions refer to muscovite rather than biotite mica inclusions (McCutcheon 2006, 85 and 155). Leinster Cooking Ware was in use mainly in the mid-13th - 14th centuries but it has been found in mid-12th century deposits in Waterford (Sandes 2012, 466). Wares with a similar range of inclusions have also been found in excavations in Carlisle which have a potential source in Cumbria (McCarthy and Brooks, 1988, 221).

Whilst there is some granite in North Wales it is not in areas associated with pottery production.

Considering the coastal location of the site and the maritime connections around the Irish Sea and along the west coast of Britain a source in such relatively distant areas is quite possible.

Further work

It is recommended that the piece is drawn and that thin-section analysis should be undertaken to confirm the identification of the inclusions and to identify the potential geological source that may indicate where the pottery was made.

Julie E C Edwards

January 2020

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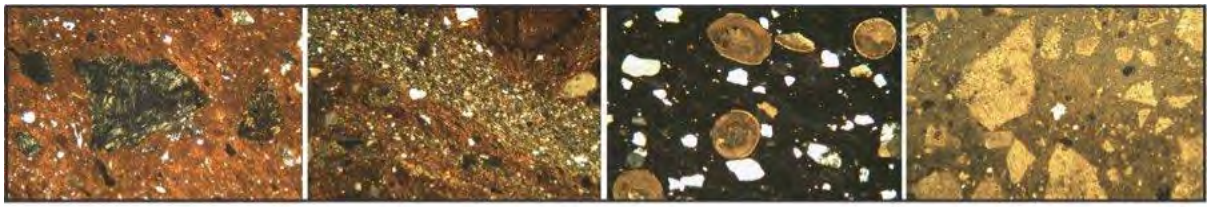
APPENDIX X

Petrographic Analysis of a Medieval Sherd, Dr. Patrick Sean Quinn, November 2020



Petrographic Analysis Medieval sherd from Dinas Dinlle Iron Age Hillfort, Wales, UK

Patrick Sean Quinn - 26 November 2020

Client

Bethan Jones, Gwynedd Archaeological Trust, Craig Beuno, Ffordd y Garth, Bangor, Gwynedd, LL57 2RT, Wales

Background, Sample Materials and Aims of Analysis

Thin section petrographic analysis has been undertaken on a sherd of suspected Medieval pottery from a field near Dinas Dinlle Iron Age Hillfort, Gwynedd, Wales in order to characterise its composition and technology and investigate its provenance.

Methodology

The sherd was prepared as a standard 30 µm petrographic thin section using a modification of the standard geological technique (Quinn 2013, p. 23-33). It was then examined under the polarising light microscope and characterised in terms of its raw materials and manufacturing technology. The composition of the sherd was compared to the local and regional geology, as well as with analyses of contemporaneous sherds from possible sources in the British Isles. Photomicrographs of the prepared thin section are presented in Figure 1.

Results

The Medieval sherd in characterised in thin section by sparse coarse weathered inclusions deriving from plutonic igneous rock and abundant silt-sized quartz dominated inclusions within a non-calcareous clay matrix cut by occasional linear voids (Figure 1). The larger sand-sized igneous-derived inclusions reach up to 2mm in diameter and have an equant and more elongate shape and an angular to sub-rounded profile. They include mineral inclusions of quartz, polycrystalline quartz, weathered orthoclase and microcline feldspar, biotite mica and muscovite mica as well as rock fragments containing combinations of these. The latter are mostly too small and weathered to permit detailed characterisation and classification, however, they appear to have come from some sort of granitic igneous rock due the presence of quartz, micas and alkali feldspar. One such inclusion contains some myrmekite (Figure 1D), which seems to confirm this interpretation. Another small fragment contains a reddish brown crystal that could be tourmaline or oxidised amphibole. The latter, if correct, could indicate an acidic-intermediate source. The sparse granitic inclusions are much larger

than the more abundant silt sized inclusions, giving the fabric a bimodal grain size distribution. This could be taken to indicate that the ceramic paste was tempered. The silt sized inclusions are dominated by angular quartz with few opaques and rare muscovite mica and feldspar. They were intrinsic within a fine well-sorted silty clay source. The clay matrix of the sherd is non-calcareous with occasional natural darker streaking. It is optically active and red coloured, suggesting that the sherd was fired <850°C in an oxidising atmosphere. The sherd is moderately porous due to the presence of some large elongate voids that most likely formed during drying and/or firing.

Discussion

The petrographic analysis of the Dinas Dinlle sherd in this report confers the interpretation of Edwards (n.d.) that it contains granite-derived inclusions. The low abundance of these and their altered nature means that thin section petrography has not added significantly to their characterisation in hand specimen, save that they contain muscovite mica and myrmekite, and that they were added as temper. Dinas Dinlle is situated on Ordovician sedimentary strata, however, granitic bedrock occurs in several places in North Wales, the nearest of which is the Twt Hill Granite Pluton near Caernarfon a few miles from the site (Howells 2007). This is described as a small fine-grained, leucocratic intrusive body (Mcilroy and Horak 2006), though it is not possible to distinguish between this and other possible light coloured granitic sources based on the nature of the inclusions in the sherd. Glacial till covers large areas of North Wales, including Gwynedd and this could also be a source of granite material for use as pottery temper. The use of granitic temper has been proposed for prehistoric and later pottery in the north of England and the Midlands (e.g. Freestone and Middleton, 1991; Knight, 1992; Knight *et al.* 2003; Wardle, 1992; Vince, 2005; Ixer and Vince, 2009; Quinn 2013b, 2014, 2017; Cootes and Quinn 2017). In several studies (e.g. Ixer and Vince 2009) the igneous material is likely to have derived from glacial deposits due to the absence of granitic bedrock in the area in which the pottery was found. With this in mind, the type of temper material used in the manufacture of the ceramic sample could have been acquired close to Dinas Dinlle.

Despite the availability of granite bedrock not far from the site and the probable occurrence of granite clasts within superficial glacial deposits, Edwards (n.d.) considers it unlikely that the Medieval pot was produced in North Wales to the site, due to the absence of evidence for Medieval pottery production in this area. She suggests several possible areas where handmade wares with granite-derived fabrics were produced including North Devon, Cornwall, Cumbria and the North Wicklow/Leinster area of Ireland, based on previous studies by Allan (1984), Allan et al. (2018), Brown et al (2006), McCarthy and Brooks (1988), McCutcheon (2006) and Sandes (2012). As Edwards (n.d.) comments, the published fabric descriptions of Brown et al (2006) on North Devon medieval coarse wares from the 12th century do not match the Dinas Dinlle sherd as there is no specific mention of granitic rock inclusions. Granite fragments are reported in Medieval pottery from Exeter by Allan (1984, p. 32, 33, 75, 247). Unfortunately, it is not possible based on the evidence provided to link these to the sample in this report and in several cases they occur alongside other inclusion types such as sedimentary and metamorphic rock that is not present here. The Leinster Cooking Ware mentioned by Edwards (n.d.) appears to contain granite (Cleary 2006.

p. 155), though Sandes (2012, p. 466) reports it as being micaceous. The source of this material is likely to be the Leinster Granite. This is composed of granite-granodiorite (Luecke 1981), which might very tentatively be taken to match the inclusions in the Dinas Dinlle sherd on the account of possible amphibole. The Medieval pottery found in excavations in Carlisle with a potential source in Cumbria do not seem to contain granite (McCarthy and Brooks, 1988, 221) so can be ruled out as a match.

Location of Scientific Samples and Access

The thin section analysed in this report has been archived at the Institute of Archaeology, University College London. These can be accessed and studied for comparative purposes by arrangement with the authors.

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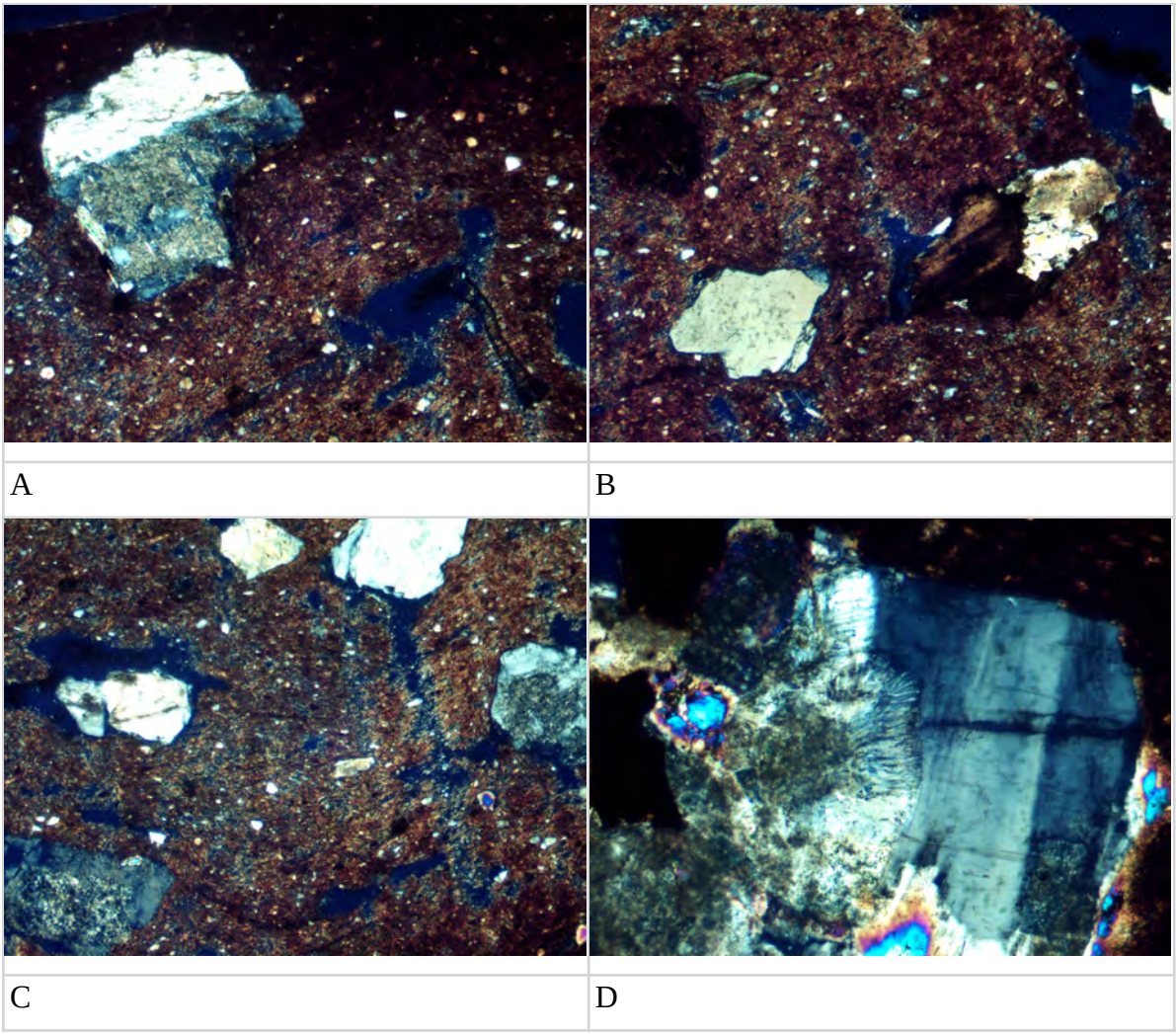


A	B
C	D

Figure 1. Thin section photomicrographs of Medieval sherd from Dinas Dinlle Iron Age Hillfort, Wales, UK, analysed in this report. Images taken in crossed polars. Image width = 2.9 mm, except D = 1.45 mm. Colourful interference colours in D are quartz that is >0.03mm in thickness.

APPENDIX XI

Reproduction of Lithic Assessment Report, George Smith, October 2019

GAT DINAS DINLLE EXCAVATION 2019, G2608

LITHICS

SF1001 Flint flake

Flint, mid-grey. A small, broad, thick chip struck by heavy impact. 12mm x 13mm x 4mm.

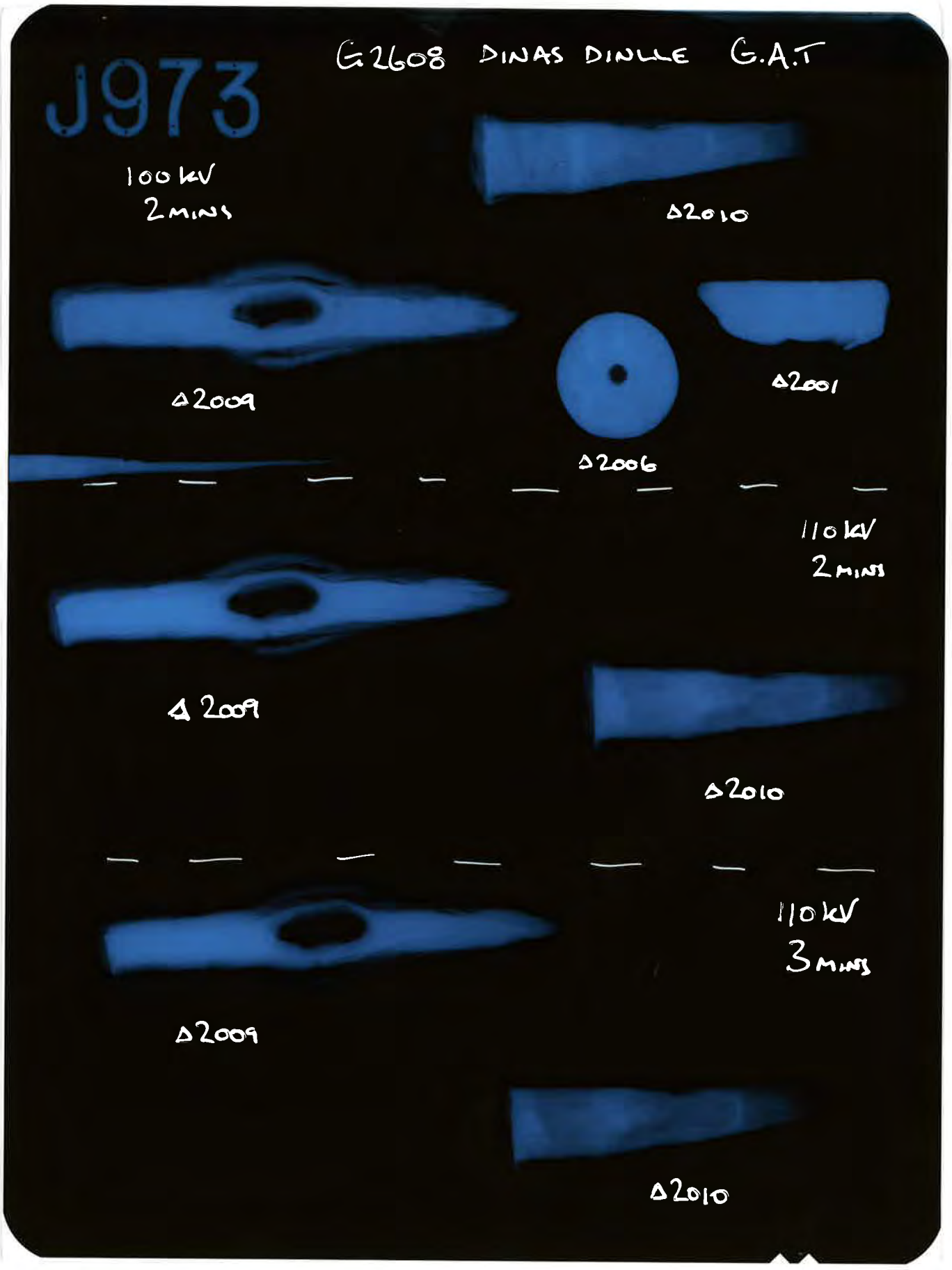
Fresh with no weathering although found in a natural wind-blown sand, This suggests it may not be an ancient artefact. Roughly trimmed on both edges creating a sub-rectangular shape, so this is likely to be a gunflint, made locally.

George Smith

01/10/2019

APPENDIX XII

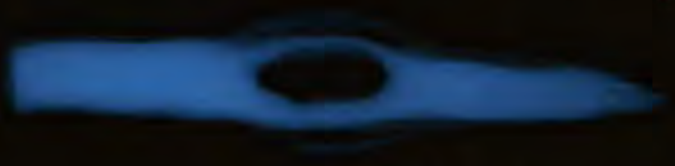
Reproduction of Metal Work X-Ray Report, Phil Parkes, January 2019


J973
G2608 DINAS DINLLE G.A.T
100 kV
2 MINS
Δ2010
Δ2009
Δ2001
Δ2006
110 kV
2 MINS
Δ2009
Δ2010
110 kV
3 MINS
Δ2009
Δ2010

K009

G2608 DINAS DINLLE G.A.T

110kV
2 MINS



Δ2009

Δ2010

TURN THROUGH
90°

TURN THROUGH
90°

Δ2009

Δ2010

X-ray and assessment of finds, GAT Site 2608, Dinas Dinlle

Notes

Objects from excavations at GAT Site 2608, Dinas Dinlle were received for x-raying and assessment. The finds are in a sound condition with no visible signs of post-excavation corrosion. Finds were x-rayed using a Faxitron 43805 cabinet system. X-ray films were digitised using an Array Corporation 2905 Laser Film Digitiser. Below are comments on information provided by the x-rays and recommendations for any further conservation. Recommendations are based on visual interpretation of the x-ray and the possibilities of revealing further details or defining features to aid identification. Objects have been packaged with silica gel in order to maintain a low relative humidity and reduce corrosion rates. The silica gel should be regenerated by heating at 100-110ºC in an oven if it starts to turn green.

Find / context number	X-ray number	Notes	Further work?
Δ 2001	J973	Folded lead strip / sheet, x-ray unable to penetrate fully.	Object is stable, no further work required.
Δ 2006	J973	Lead weight, x-ray unable to penetrate fully.	Object is stable, no further work required.
Δ 2009	J973 / K009	Tool – small hammer head?	Could be cleaned to remove corrosion to define shape, but x-ray may show enough information for finds analysis.
Δ 2010	J973 / K009	Tool – small chisel / wedge-shaped tool.	Could be cleaned to remove corrosion to define shape, but x-ray may show enough information for finds analysis.

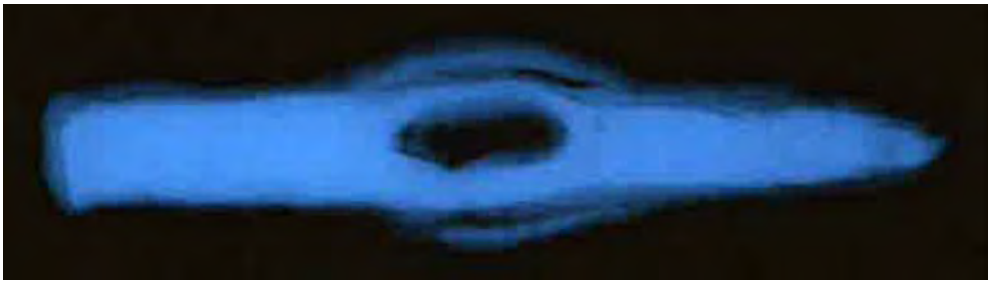
Phil Parkes
3/1/20

APPENDIX XIII

Reproduction of Metal Work Assessment Report, Jörn Schuster, May 2020

ARCHÆOLOGICAL small FINDS

DINAS DINLLE IRON AGE HILLFORT LLANDWROG NEAR CAERNARFON ASSESSMENT REPORT OF METAL SMALL FINDS



for

Gwynedd Archaeological Trust

AsF Report: 0043.01
May 2020

www.smallfinds.org.uk

DINAS DINLLE IRON AGE HILLFORT LLANDWROG NEAR CAERNARFON ASSESSMENT REPORT OF METAL SMALL FINDS

Prepared for
Gwynedd Archaeological Trust
Craig Beuno
Ffordd y Garth
Bangor
Gwynedd LL57 2RT

by
Jörn Schuster

AsF Report: 0043.01
May 2020

DOI: ###

Front cover image: Hammer (SF2009) found in fill 2023 of possible ditch 2022 in Trench 2

T 01963 371536 E info@smallfinds.org.uk

1. Introduction

ARCHÆOLOGICALsmallFINDS (AsF) was commissioned by Gwynedd Archaeological Trust to provide an assessment report for a small assemblage of metalwork found during archaeological investigations carried out in the course of the CHERISH project at an Iron Age Hillfort in Dinas Dinlle, Llandwrog near Caernarfon (Gwynedd Archaeological Trust Project Number G 2608). The objects were recovered from a roundhouse in Trench 02 within the hillfort in the summer of 2019.

2. Methodology

The objects were examined visually and, where required, with hand lenses (x4, x8 magnification). Basic type identifications such as 'hammer' or 'chisel' were recorded. Broad period dates attributed to the finds are based on the intrinsic dates of the finds established by comparison to known parallels and typologies. Some conservation and cleaning of the iron objects has been carried out, and X-radiographies (prepared by Phil Parkes) of all iron objects aided identification of further details where necessary. Object identification, measurements, including weight, and detailed descriptions as well as contextual details were entered into an Excel spreadsheet (available in the archive). Recommendations for mineral remains analysis, additional x-raying and conservation treatment (cleaning/ stabilisation/ reconstruction) as well as illustration have been considered and, where deemed necessary, noted in the spreadsheet.

3. Quantification and Provenance

The assemblage comprises four objects, including items made of iron and lead or lead alloy (Table 1). The objects were recovered from four contexts in trench 2.

Table 1. Number of objects per material and context.

Context	Iron	Lead
2001		Strip
2006		Weight
2009	Hammer	
2010	Chisel	
Total	**2**	**2**

4. The Small Finds Assemblage

The four objects comprise a folded strip fragment and a weight made of lead as well as an iron hammer and a chisel.

Lead strip SF2001 might have been a fragment folded in order to remelt it in a crucible. The discoid weight SF2006 weighs approximately 24.9g and may thus have been intended to be an ounce or 1/12 of a "Celtic" pound (Anderson in Anderson *et al.* 2001, 117), rather than conforming to the Roman standard with a heavier ounce of 27.288g (Chantraine 1961, sp 620).

The hand-hammer SF2009 has an elongated, oval eye, which is a feature typical of Iron Age and post-Roman hand-hammers (Henning 1991, 73–4). Its weight of less than 100g suggests that it had been used for more delicate work. The dimensions of small chisel SF2010 suggest that it could have been used as a hot chisel. Its basic morphology is chronologically indistinct.

5. Potential of the Assemblage

Although of very limited size, the assemblage has significant potential to contribute to the functional and chronological analysis of the activities carried out at the site, as well as the socio-economic and technological links of its inhabitants. Further analysis of the lead weight and the two iron tools will allow confirmation of their identification, providing a more secure date. Assuming the Iron Age date of the contexts from which the objects were recovered is confirmed during analysis, the assemblage is a nationally significant addition to the small number of Iron Age tools known from Wales. Regionally, a poker is known from Tre'r Ceiri Hillfort, less than 14km along the coast to the southwest of the site, and two iron tongs were found as part of the metalwork hoard at Llyn Cerrig Bach on Anglesey, c. 25km to the northwest. While there is one other chisel from Tywn-y-Gaer hillfort in Gwent (Fell 1990, 497), the Dinas Dinlle hammer appears at present to be the first such tool form an Iron Age context in Wales.

6. Recommendations for further Work

A report for publication should be prepared, expanding upon the results of the assessment, involving additional literature research, in order to place the objects within their regional and wider environment. It is recommended that the hammer is cleaned in order to provide a better understanding of its working faces. All objects should be illustrated for publication.

7. Archive

The archive will be deposited at National Museum of Wales. A spreadsheet and digital scans of all x-radiographs will be made available online at https://independent.academia.edu/JoernSchuster

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APPENDIX XIV

Reproduction of Jet Bead Assessment Report, Hilary Cool, December 2019

A jet bead from Dinas Dinlle (G2608)

H.E.M. Cool

Report submitted to Gwynedd Archaeological Trust December 2019

The small jet bead from context 1003 most probably belongs to the late Roman period. The use of jet to make beads was commonest at that point and the use of bevels to produce a diamond and triangle faceted pattern used on beads in a variety of materials is also a feature of that period. On this little bead the angles are rounded from the polishing rather than sharp but the diamond pattern is clearly visible.

Jet beads with this pattern which are very similar in size to the Dinas Dinlle bead were found on a necklace with an inhumation at Kelvedon, Essex attributed to the first half of the fourth century (Rodwell 1988, 76 fig. 61 no. 4). The form also occurred on the multi-strand jet necklace worn by the possible *gallus* at Catterick (Bell and Thompson 2002, 177 Type 10, fig. 315). Again this burial is likely to belong to the fourth century so a similar date can be suggested for the one from this excavation.

Long square-sectioned bead. Jet. Rounded angles bevelled to produce a long diamond shape on each face. Length 5mm, width 2.5mm, perforation diameter 1.5. Tr. 1 (1003) <1001>.

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APPENDIX XV

Reproduction of Radiocarbon Dating Results, SUERC, October 2020

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

19 October 2020

Laboratory Code	SUERC-94824 (GU55724)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	1017
Sample Reference	1002
Material	Charred plant remains : Triticum spelta glume base
$\delta^{13}C$ relative to VPDB	-23.7 ‰
Radiocarbon Age BP	1925 ± 24

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.

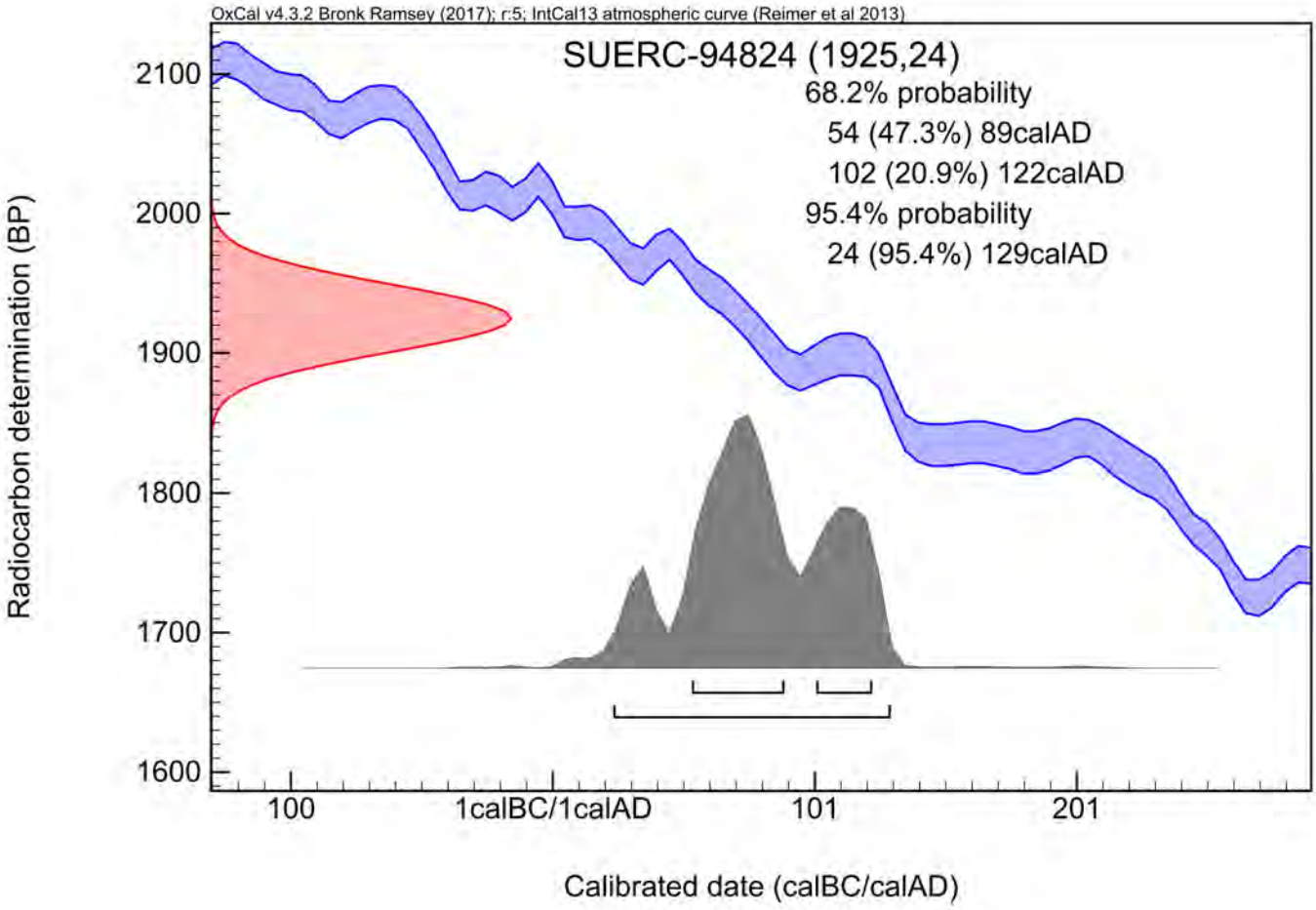
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 : E. Dunbar



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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94825 (GU55725)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	1017
Sample Reference	1002
Material	Charcoal : Alnus glutinosa round wood
$\delta^{13}C$ relative to VPDB	-27.6 ‰
Radiocarbon Age BP	1749 ± 24

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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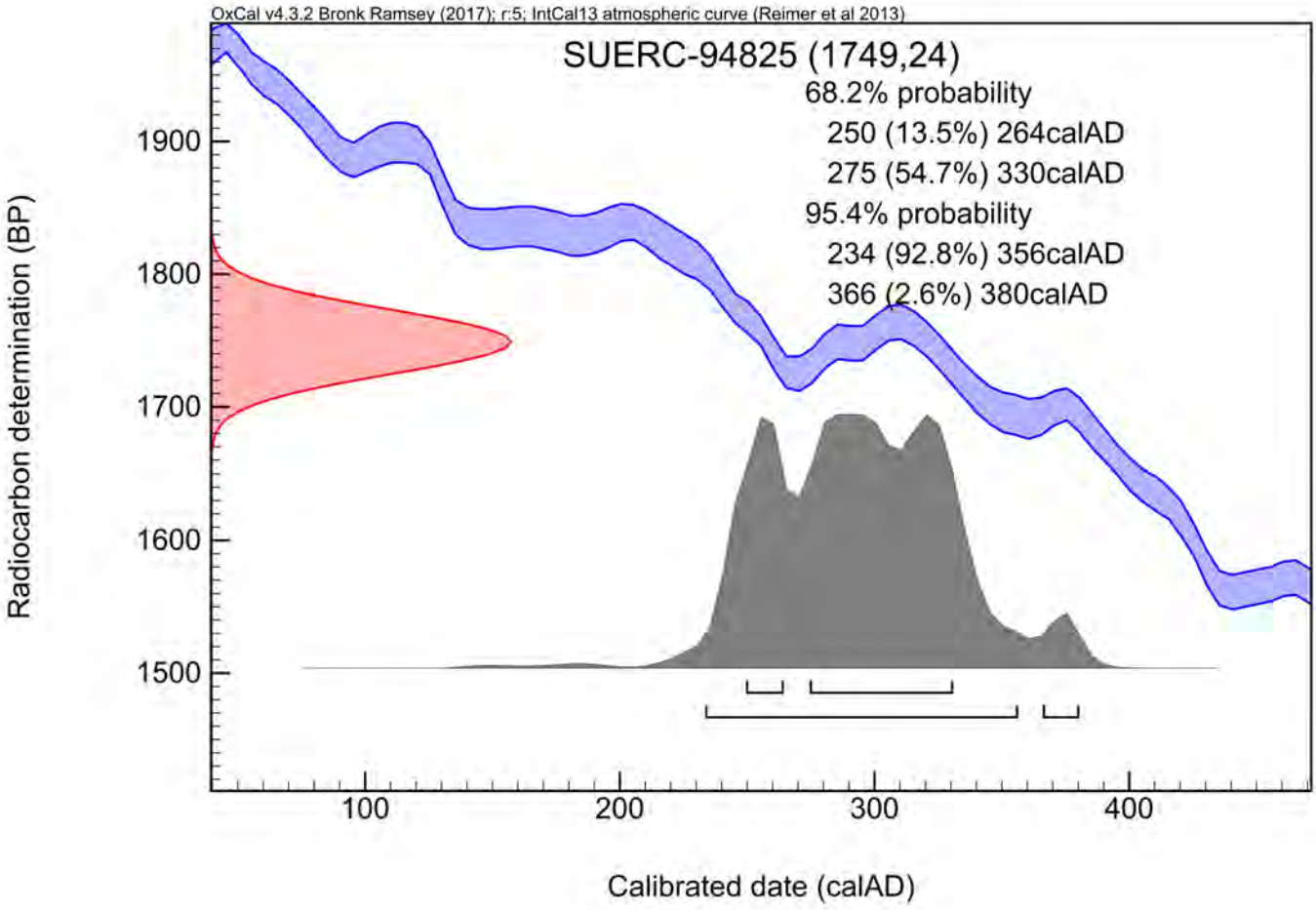
Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94826 (GU55726)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	2016
Sample Reference	2003
Material	Charcoal : Alnus glutinosa
$\delta^{13}C$ relative to VPDB	-27.2 ‰
Radiocarbon Age BP	1696 ± 21

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.

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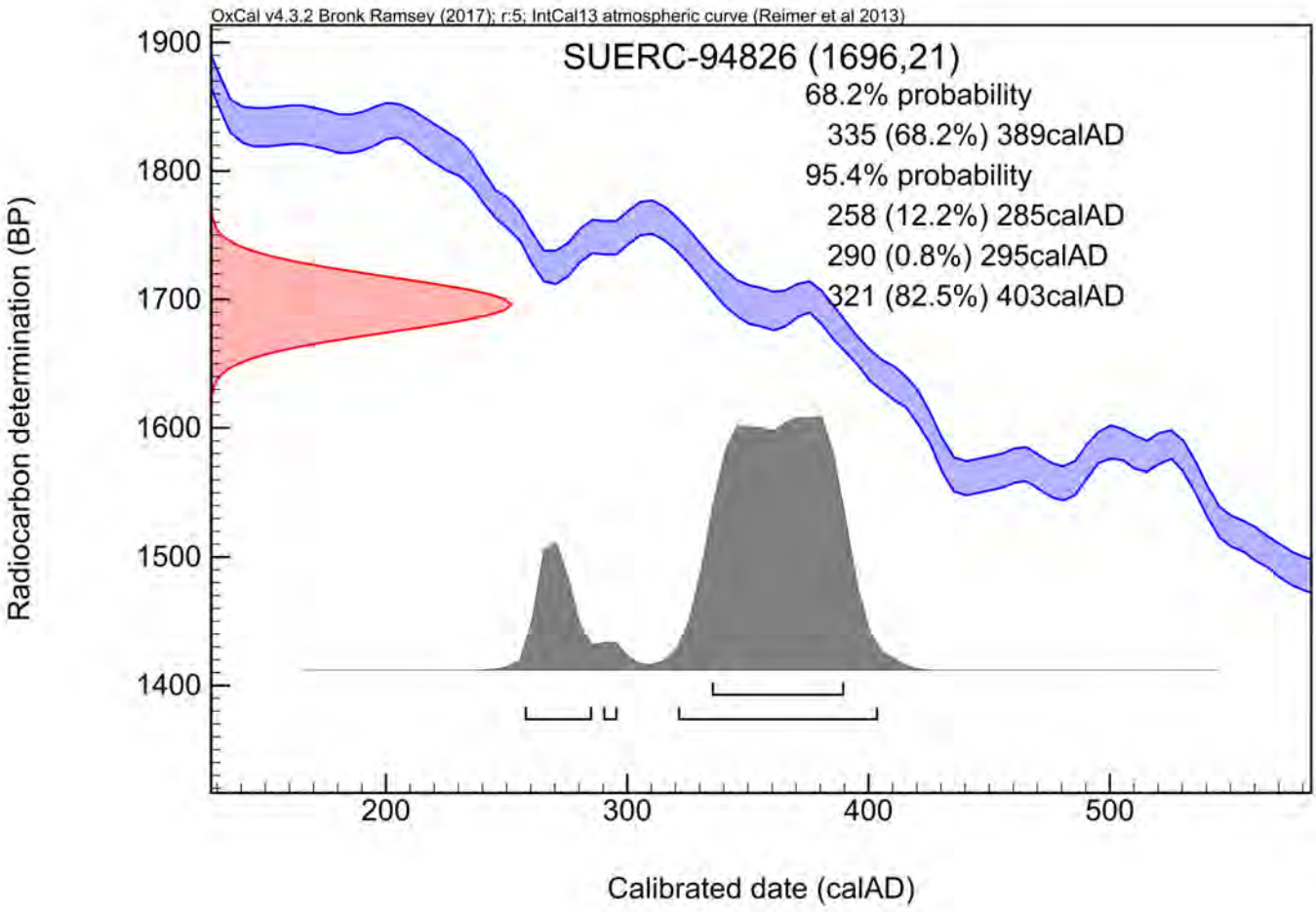
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 atmospheric calibration curve†

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94827 (GU55727)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	2016
Sample Reference	2003
Material	Charcoal : Quercus round wood (2 years growth, no bark)
$\delta^{13}C$ relative to VPDB	-25.9 ‰
Radiocarbon Age BP	1916 ± 24

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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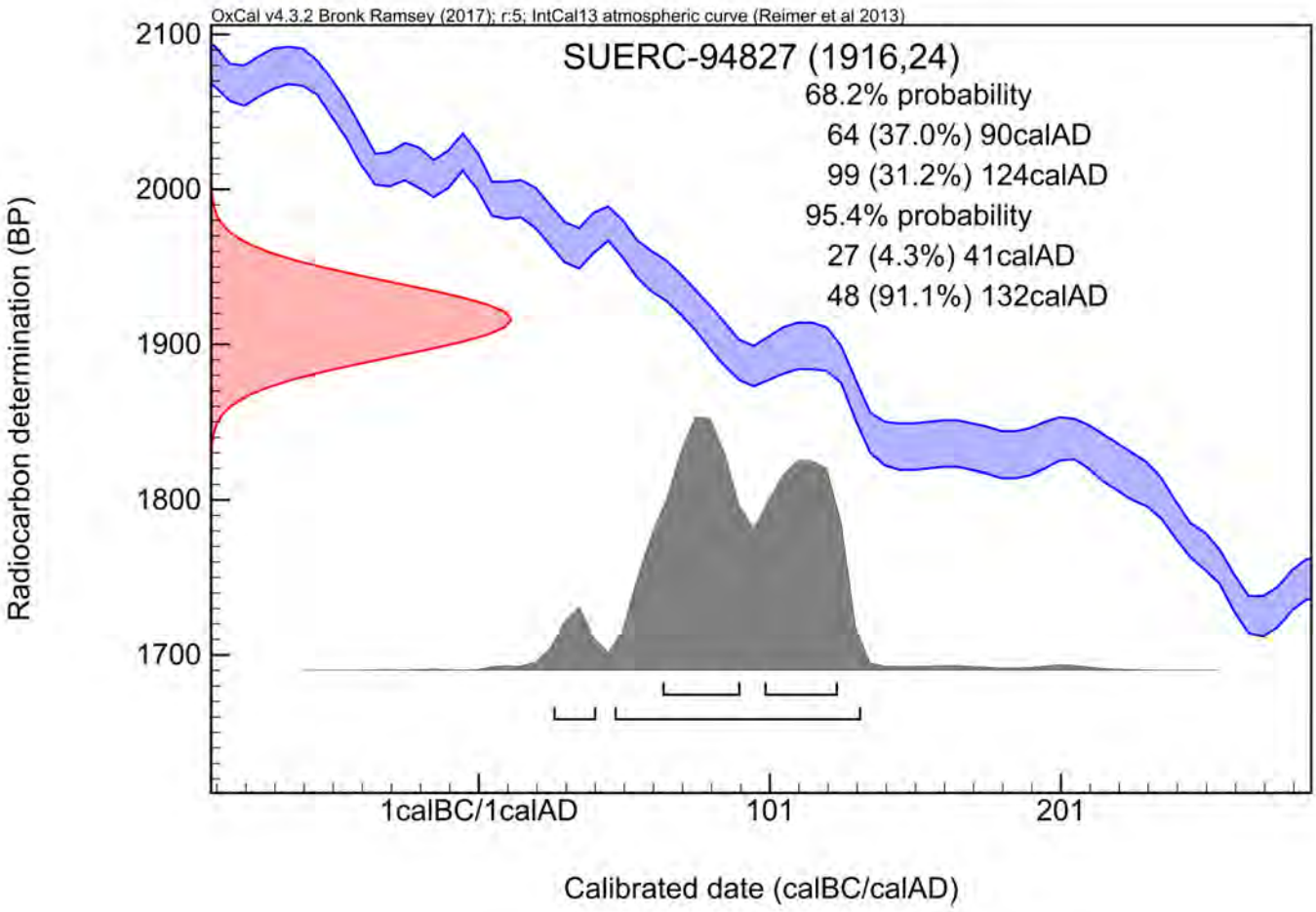
Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 atmospheric calibration curve†

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

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94828 (GU55728)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	4009
Sample Reference	4002
Material	Charcoal : Corylus avellana round wood
$\delta^{13}C$ relative to VPDB	-25.9 ‰
Radiocarbon Age BP	4982 ± 25

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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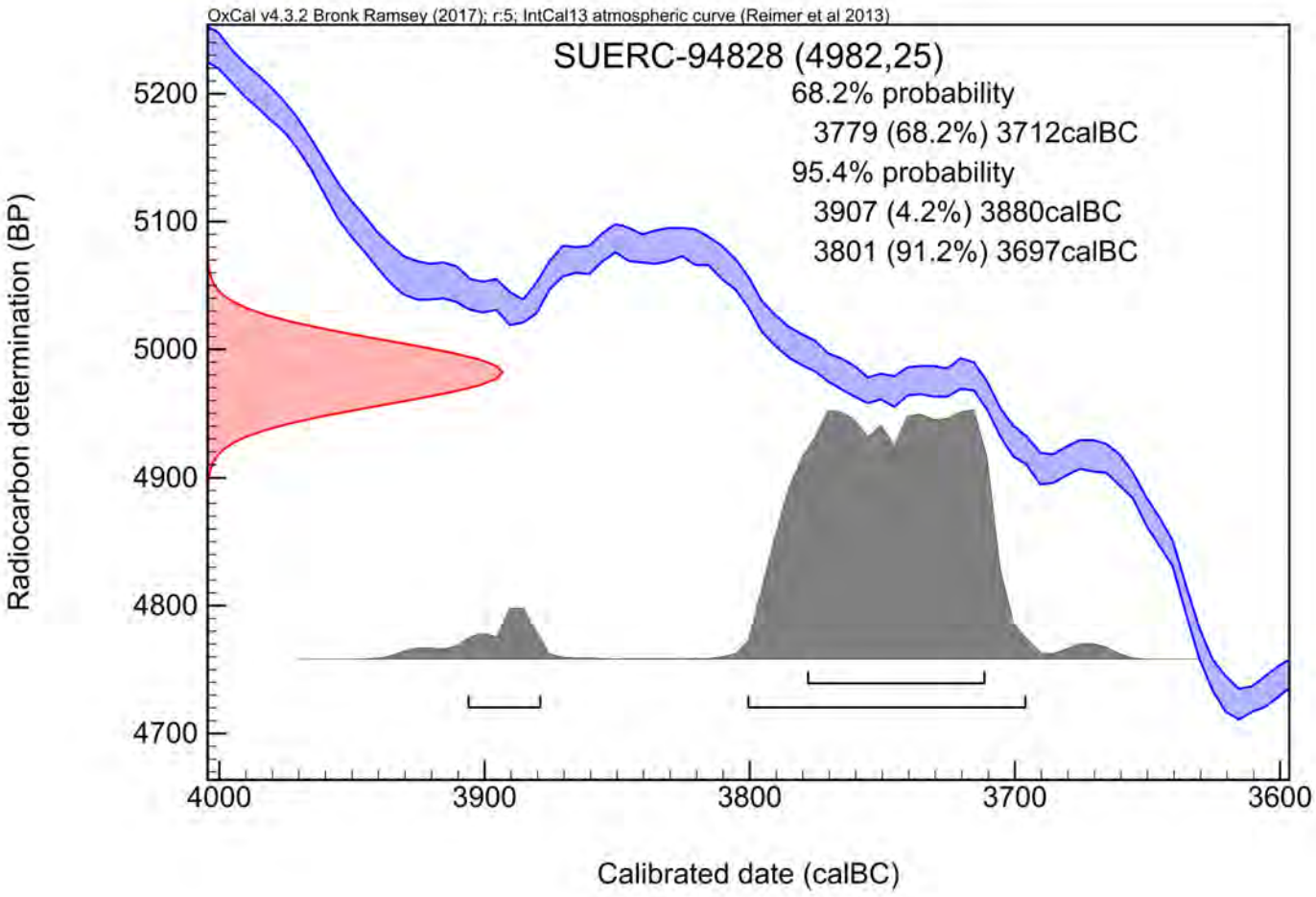
Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94829 (GU55729)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	4009
Sample Reference	4002
Material	Charcoal : Corylus avellana round wood
$\delta^{13}C$ relative to VPDB	-24.9 ‰
Radiocarbon Age BP	4994 ± 21

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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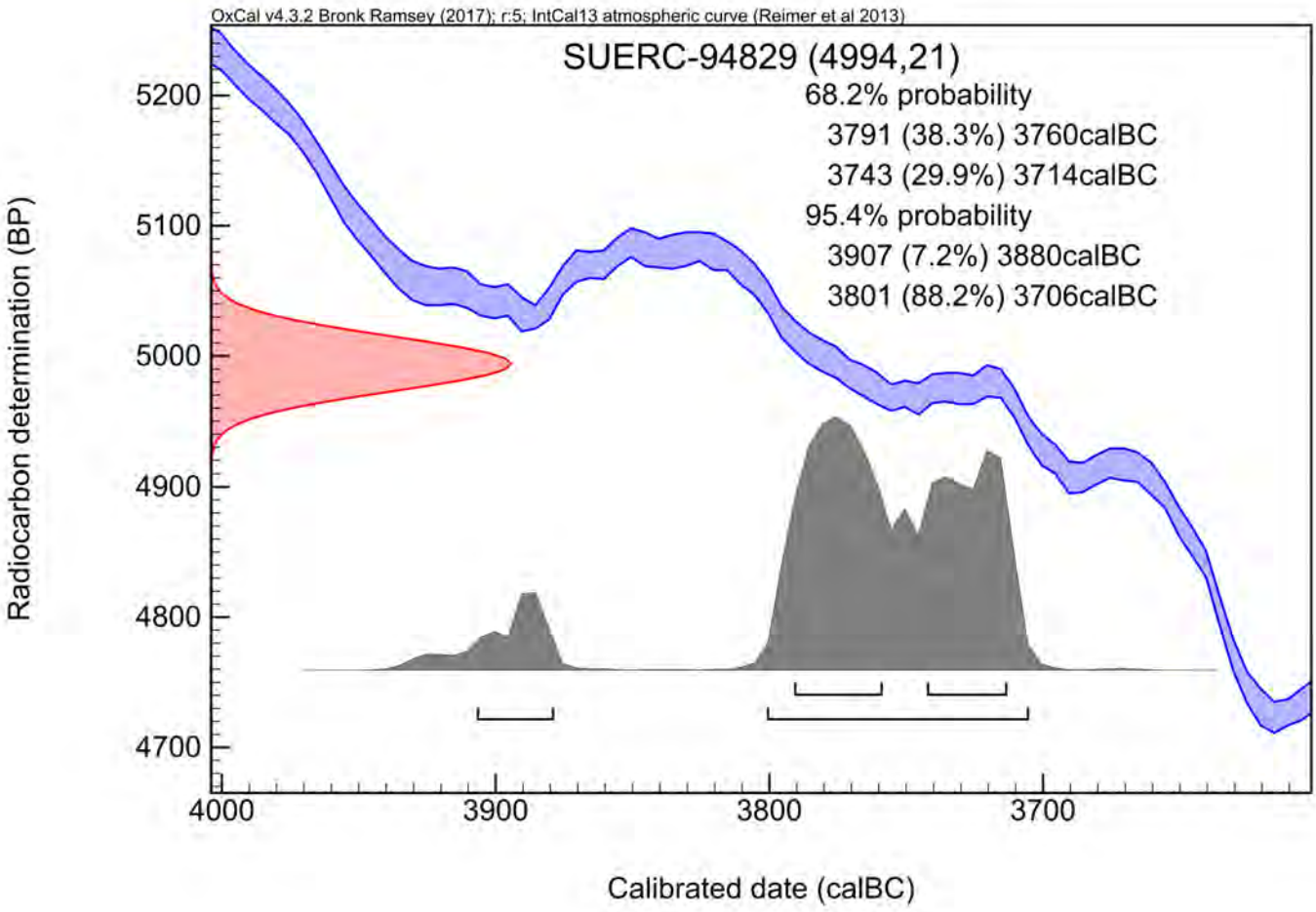
Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94830 (GU55730)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	4011
Sample Reference	4003
Material	Charred plant remains : Corylus avellana nut-shell fragment
$\delta^{13}C$ relative to VPDB	-24.2 ‰
Radiocarbon Age BP	4992 ± 25

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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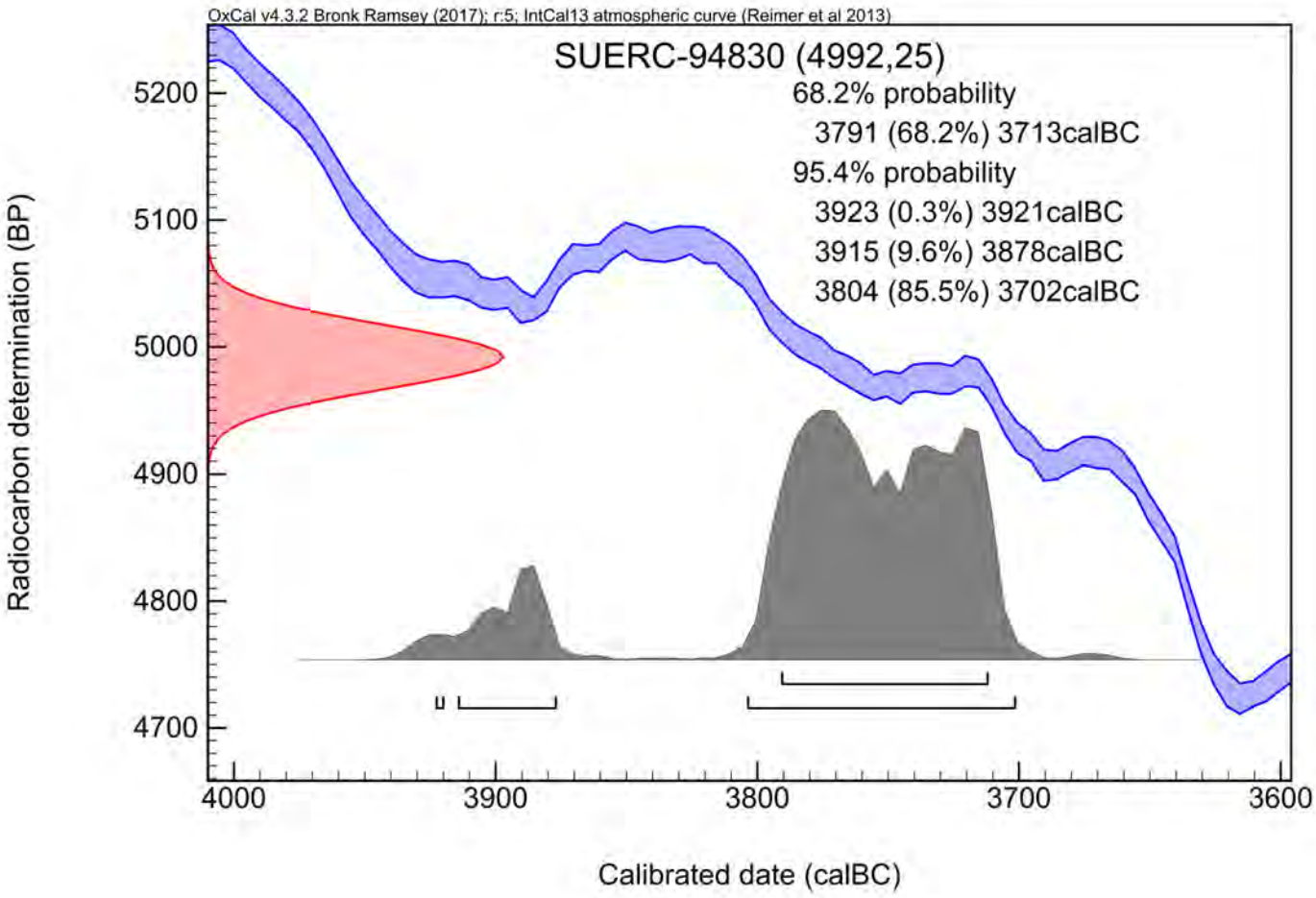
Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94834 (GU55731)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	4011
Sample Reference	4003
Material	Charcoal : Corylus avellana
$\delta^{13}C$ relative to VPDB	-24.1 ‰
Radiocarbon Age BP	5026 ± 25

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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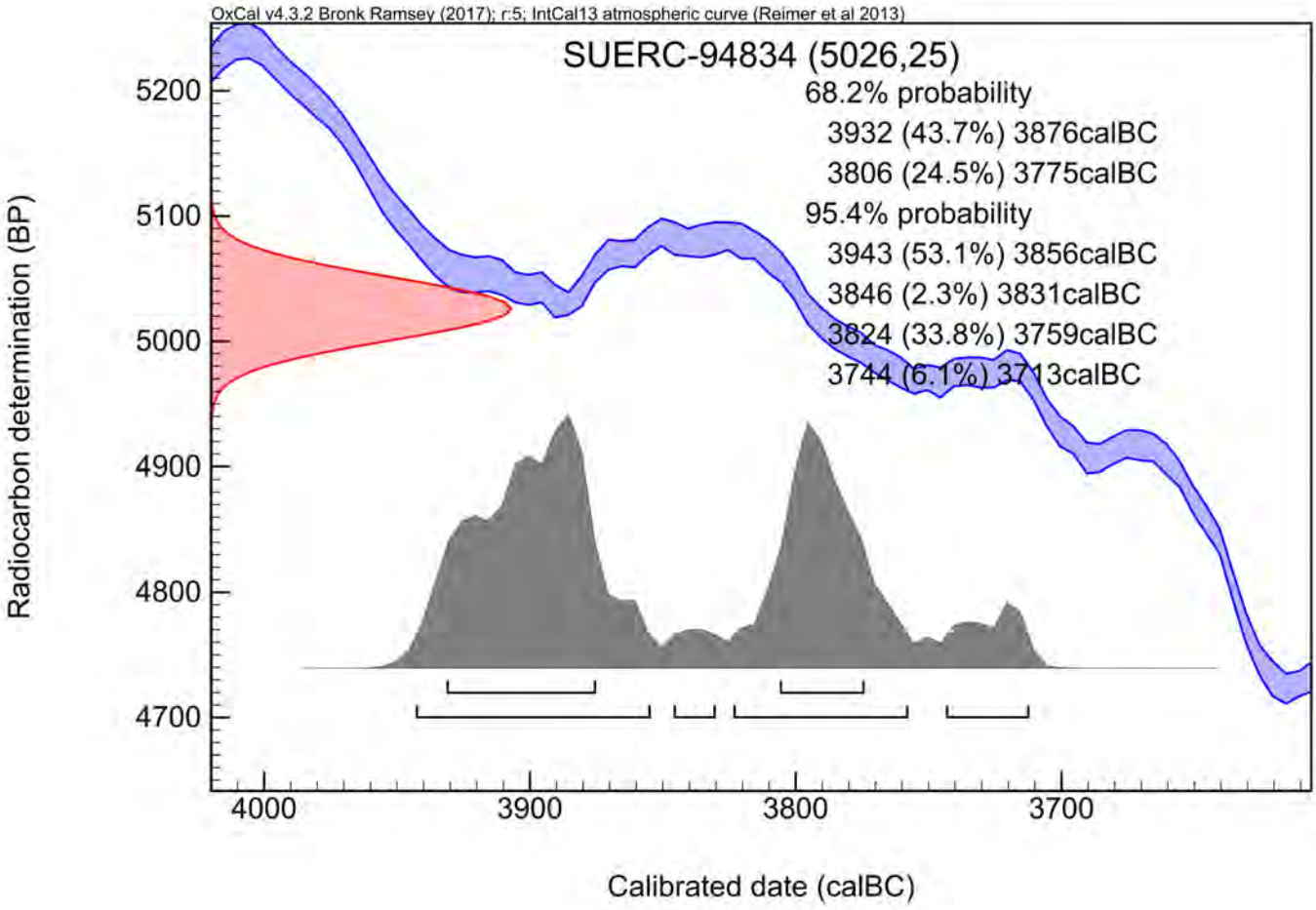
Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	GU55732
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	6015
Sample Reference	6002
Material	Charcoal : Alnus/corylus twig fragments (x2) and indeterminate twig fragments (x3)
Result	Failed due to insufficient carbon.

N.B. Any questions directed to the laboratory should quote the GU coding given above.

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.

Checked and signed off by : E. Dunbar

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94835 (GU55733)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	6015
Sample Reference	6002
Material	Charcoal : Alnus glutinosa/Corylus avellana
$\delta^{13}C$ relative to VPDB	-25.8 ‰
Radiocarbon Age BP	667 ± 24

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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Conventional age and calibration age ranges calculated by :

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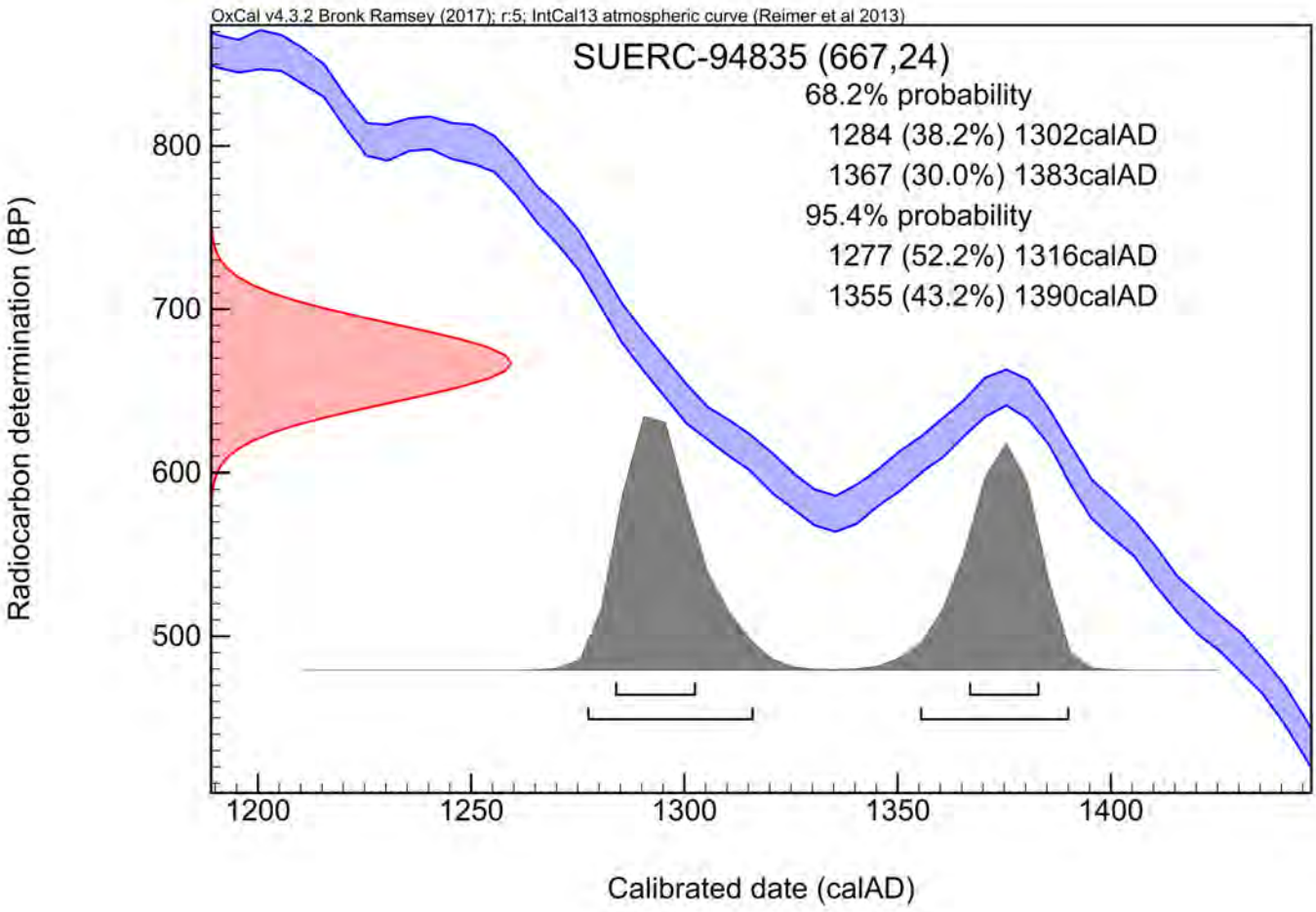

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94836 (GU55734)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	6028
Sample Reference	6003
Material	Charcoal : Leguminosae round wood
$\delta^{13}C$ relative to VPDB	-25.2 ‰
Radiocarbon Age BP	233 ± 24

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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Conventional age and calibration age ranges calculated by :

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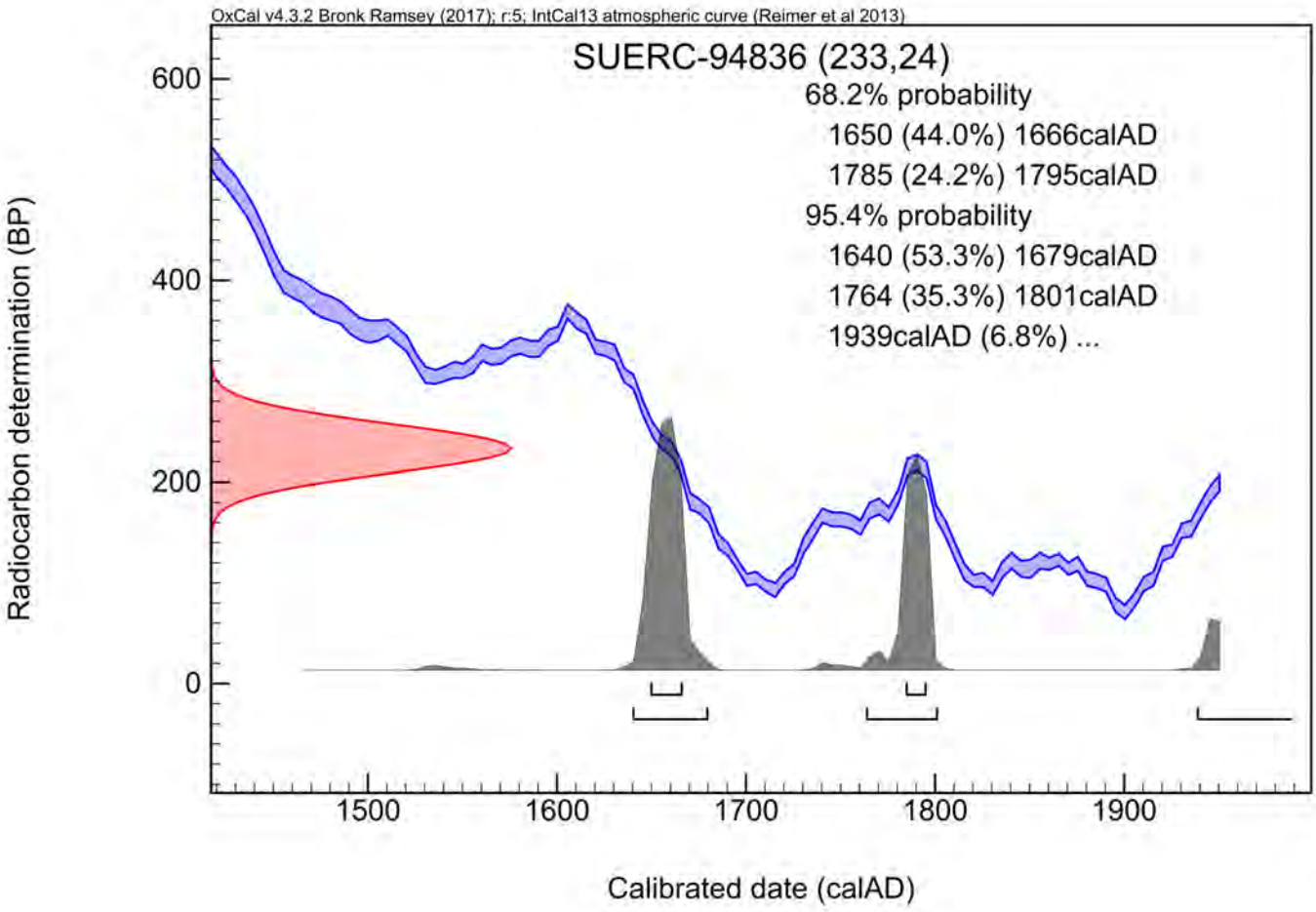

The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94837 (GU55735)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	6028
Sample Reference	6003
Material	Charcoal : Leguminosae round wood
$\delta^{13}C$ relative to VPDB	-24.9 ‰
Radiocarbon Age BP	168 ± 24

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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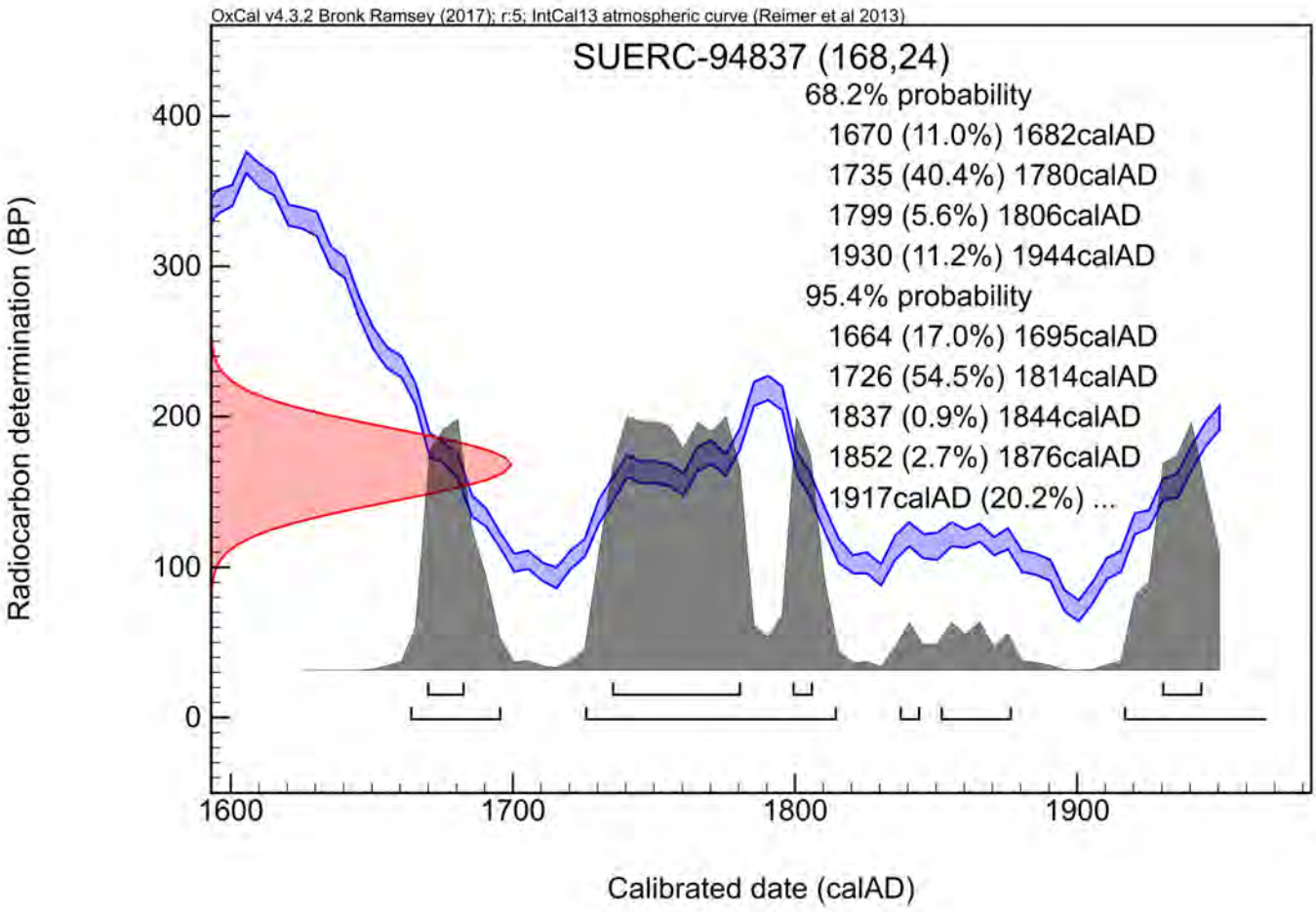
Conventional age and calibration age ranges calculated by :

Checked and signed off by : E. Dunbar



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 IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94838 (GU55736)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	6013
Sample Reference	6005
Material	Charred plant remains : Hordeum sp
$\delta^{13}C$ relative to VPDB	-23.9 ‰
Radiocarbon Age BP	193 ± 24

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.

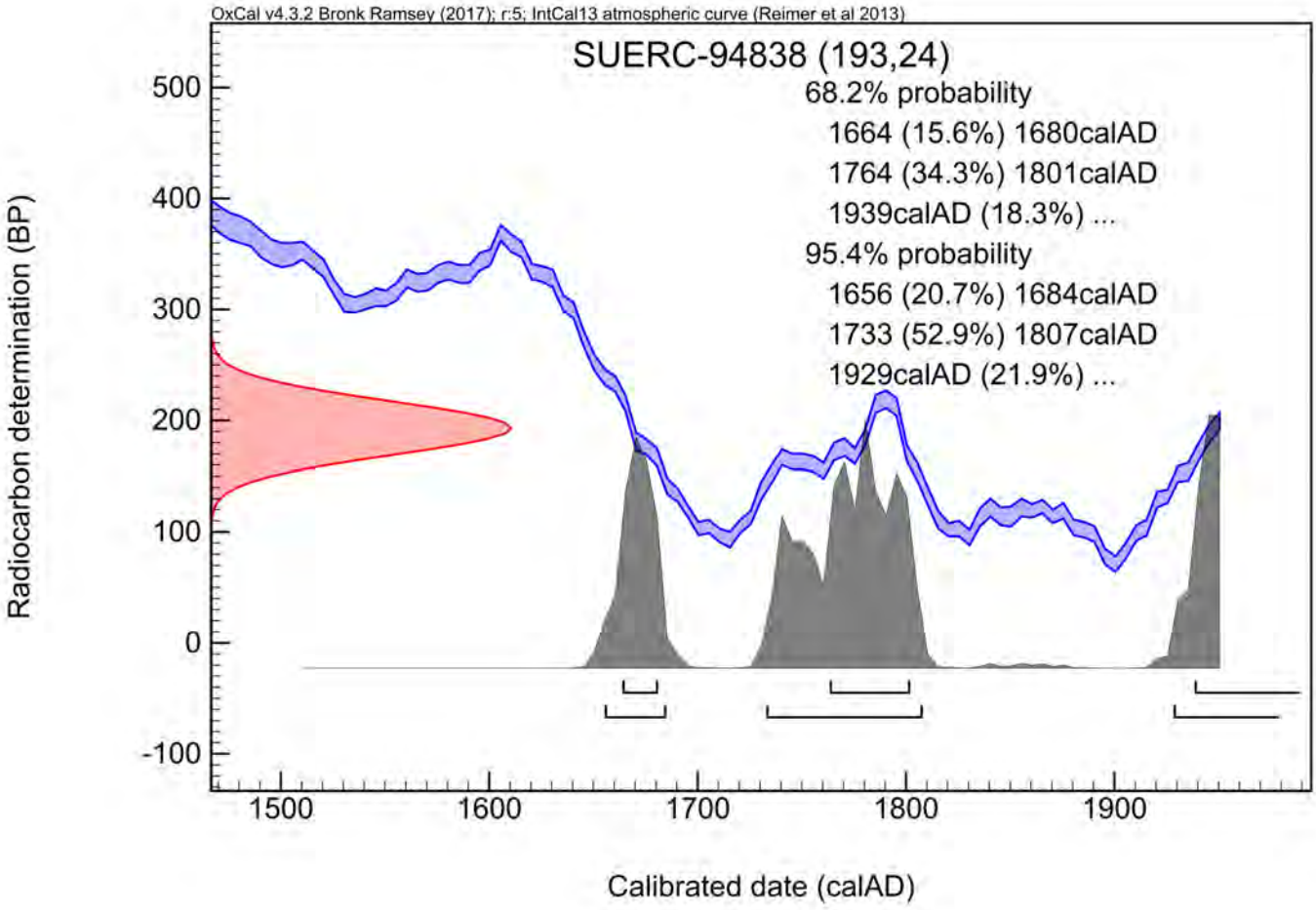
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 : E. Dunbar



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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94839 (GU55737)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	6013
Sample Reference	6005
Material	Charcoal : Corylus avellana
$\delta^{13}C$ relative to VPDB	-27.5 ‰
Radiocarbon Age BP	270 ± 24

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.

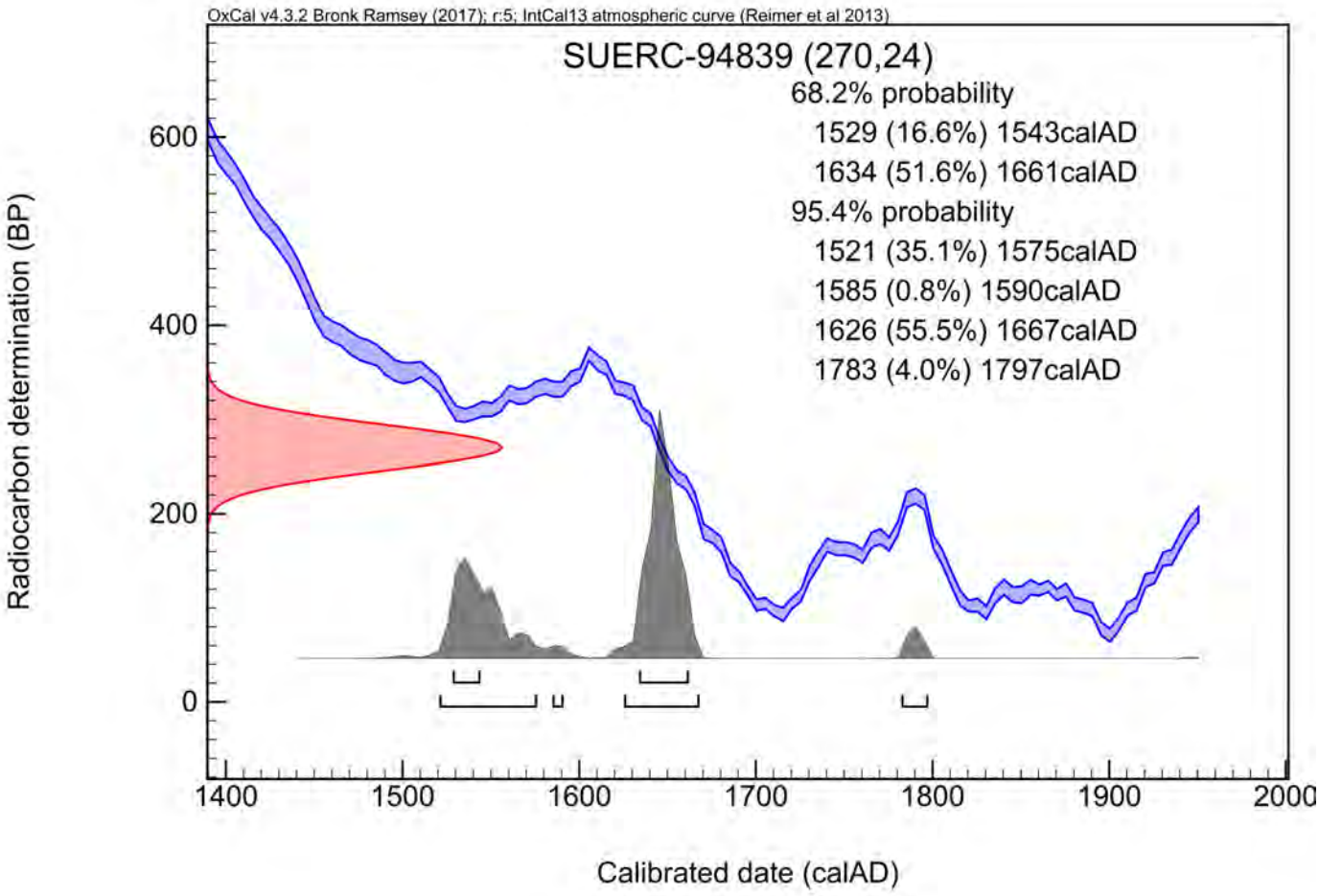
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 : E. Dunbar



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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94840 (GU55738)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	8005
Sample Reference	8001
Material	Charred plant remains : Corylus avellana nut-shell fragment
$\delta^{13}C$ relative to VPDB	-23.7 ‰
Radiocarbon Age BP	573 ± 24

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.

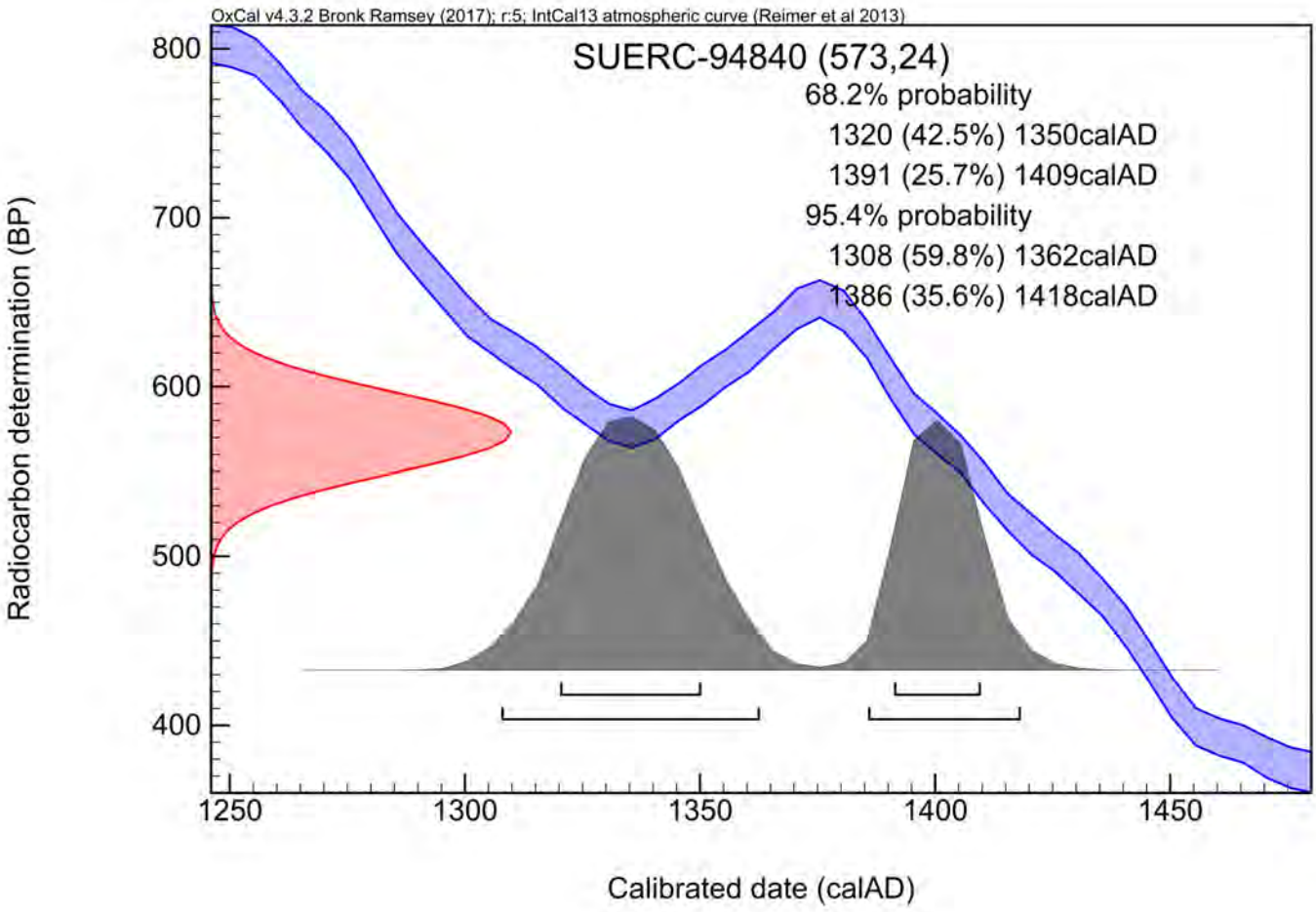
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 : E. Dunbar



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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

19 October 2020

Laboratory Code	SUERC-94844 (GU55739)
Submitter	Bethan Jones Gwynedd Archaeological Trust Craig Beuno Ffordd y Garth Bangor Gwynedd LL57 2RT
Site Reference	G2608_Dinas Dinlle
Context Reference	8005
Sample Reference	8001
Material	Charcoal : Alnus glutinosa/Corylus avellana (outermost 5 rings with bark)
$\delta^{13}C$ relative to VPDB	-28.1 ‰
Radiocarbon Age BP	651 ± 24

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.

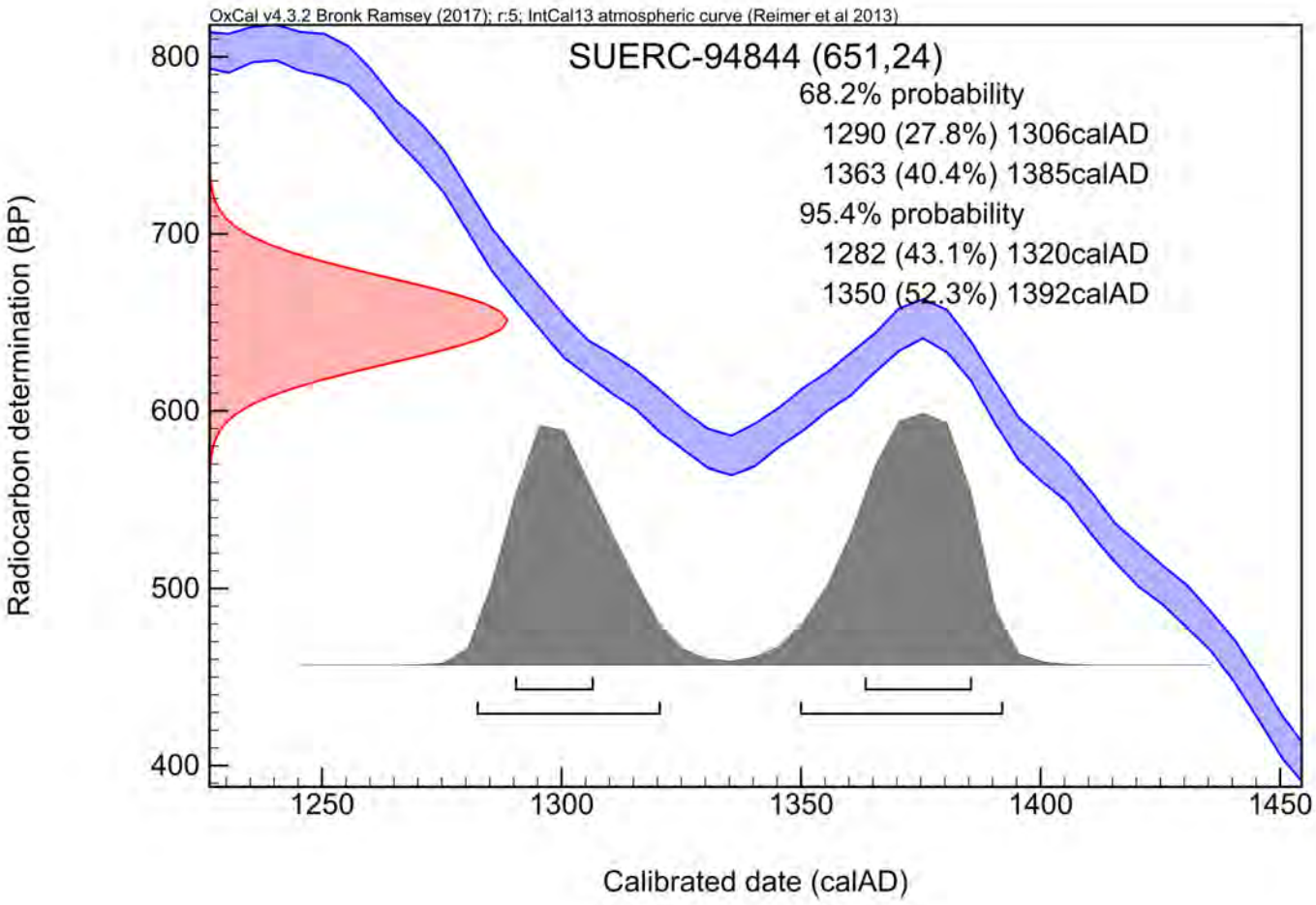
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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 : E. Dunbar



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 IntCal13 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. (2013) *Radiocarbon 55(4) pp.1869-87*

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