Llwyn yr Eos, Bodedern, Ynys Môn

Gwerthuso Archaeolegol / Archaeological Evaluation

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Llwyn yr Eos, Bodedern, Ynys Môn

Gwerthuso Archaeolegol / Archaeological Evaluation

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Golygfa cyn cychwyn Ffos 5 o'r gorllewin (cyfeirnod archif: G2736_001) /
Pre-commencement view of Trench 5 from the west (rchive reference: G2736_001)

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CRYNHODEB ANHECHNEGOL

Comisiynwyd Ymddiriedolaeth Archeolegol Gwynedd gan Ingram Property Development Limited i wneud gwerthusiad archeolegol (treialu cloddio) cyn datblygiad preswyl arfaethedig yn Llwyn yr Eos, Bodedern, Ynys Môn. Lleolwyd cyfanswm o bum ffos ar draws yr ardal ddatblygu i dargedu anomaleddau geoffisegol a nodweddu'r potensial archeolegol. Nodwyd gweithgarwch archeolegol mewn tri o'r ffosydd, gyda llinell lydan, ddwfn a llinell linellol lydan ond basach yn bresennol ar draws y tri. Dehonglwyd y rhain fel hen ffos ffin a draenen eang, sianel neu ffos. Nid yw mapio hanesyddol yn cynnwys unrhyw ffiniau yn lleoliad y nodweddion a nodwyd, sy'n awgrymu eu bod yn ffiniau cynharach a/neu nodweddion amaethyddol a byddai angen ymchwiliad mwy helaeth i ddehongli eu gwreiddiau ymhellach.

NON-TECHNICAL SUMMARY

Gwynedd Archaeological Trust was commissioned by Ingram Property Development Limited to undertake an archaeological evaluation (trial trenching) in advance of a proposed residential development at Llwyn yr Eos, Bodedern, Ynys Môn. A total of five trenches were located across the development area to target geophysical anomalies and characterise the archaeological potential. Archaeological activity was identified in three of the trenches, with a wide, deep linear and a wide but shallower linear present across all three. These have been interpreted as a former boundary ditch and a wide drain, channel or ditch. Historic mapping does not include any boundaries at the location of the features identified, suggesting they are earlier boundaries and/or agricultural features and it would require more extensive investigation to further interpret their origins.

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by Ingram Property Development Limited to undertake an archaeological evaluation (trial trenching) in advance of a proposed residential development at Llwyn yr Eos, Bodedern, Ynys Môn (NGR SH33277991; postcode: LL65 3SX; cf. Figure 1). The development area measured 0.7ha and was located to the east of existing housing at Lwyn yr Eos at the southern end of Bodedern village on Ynys Môn, within part of a field in previous use as pasture; the site footprint extended to the northern field boundary and westwards through to the existing residential road. The proposed development, under planning application FPL/2022/105, will include 9 new dwellings together with associated parking, access road and landscaping as detailed on RWE Ltd. Drawing No. 023/GA/001 (cf. Figure 2). The evaluation comprised 5No trenches and was completed during July 2022.

The evaluation was monitored by Gwynedd Archaeological Planning Service and undertaken in accordance with accordance with an approved written scheme of investigation (Appendix I). 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 was 46285. The evaluation was undertaken in accordance with the following guidance:

- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1 (The Welsh Archaeological Trusts, 2018);
- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015); and
- Standard and Guidance for Archaeological Field Evaluation (Chartered Institute for Archaeologists, 2020).
- Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2020); and
- Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (Chartered Institute for Archaeologists, 2020).

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

1.1 Aims and Objectives

The key aims and objectives were to:

- establish the date and nature of any archaeological remains identified within the evaluation area and assess their implications for understanding local historical development, in conjunction with the known archaeological record. There is known early medieval archaeology in the local area; and
- If no additional archaeological activity was identified, establish why this may be the case.
- To place the results in context, reference shall be made to *A Research Framework for the Archaeology of Wales*.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

There were no known archaeological assets within the proposed development site. The regional Historic Environment Record (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, Gwynedd LL57 2RT) describes Bodedern as a nucleated settlement formed largely to S of post road, possibly late 18th early 19th C in origin (Source: Primary Reference Number 17140 – Bodedern Character Area). Known archaeological assets with the wider area includes:

- Primary Reference (PRN) 2063: an early medieval cemetery of 114 extended inhumations comprising both long cists and unprotected dug graves, along with an enclosure ditch and possible earlier prehistoric activity in the form of post settings was identified and may be of prehistoric origin. The location is reputed to be the traditional site of Eglwys Edern (Longley & Richards, 2000). The site is located at NGR SH34158000, c.775m northeast of the proposed development (cf. Figure 6). An early medieval inscribed stone (PRN 5342) was removed from the site to Bodedern Church.
- Primary Reference (PRN) 6893: an early medieval inscribed stone. A slone slab inscribed with the single word MAILISI was recorded in 1801, in the wall of a barn on Pen Sieri Farm The stone was identified as a funerary memorial of the 5th or 6th century AD and would originally have stood as a monolithic pillar, marking the grave of the person commemorated in the inscription. The site is located at NGR SH34208000, c.875m northeast of the proposed development (cf. Figure 6).

The regional Historic Environment Record also lists several post-medieval structures within Bodedern (cf. Figure 1), including four nonconformist chapels (PRNs 7647 to 7651), the old police station (PRN 11618), Ardwyn House (PRN 65984) and St. Ederyn's Church (PRN 6909); St. Ederyn's Church has medieval origins, with remnants of medieval architecture preserved.

2.2 Historic Mapping

A brief examination of the First to Third Edition 25-inch Anglesey Ordnance Survey Map sheets XII.05, XII.06, XII.09 and XII.10, published in 1888, 1900 and 1924 respectively (cf. Figure 3), show the development area as an irregular shaped open field southeast of a local road that is little changed on modern mapping. The settlement activity at Bodedern is mostly concentrated around the crossroads to the north, with sporadic settlement along London Road that runs alongside the development area. During the twentieth century, settlement has increased along London Road, with additional housing estates and a new school (cf. Figure 1)

2.3 Geophysical Survey

A geophysical magnetometer survey of the proposed development site was completed for Ingram Property Development Limited by *TigerGeo* (Roseveare M.J., 2022). The survey identified strong magnetic anomaly interpreted as a probable ditch fill (Anomaly [1]), that measured up to 1.5 m in width and crossed the site in a straight line from roughly east to west. The survey suggested the anomaly appeared to turn slightly or maybe stop close to the eastern field boundary, but the report stated there was a sharp change in background magnetic texture at this location that could have affected detectability (*ibid.*). The report stated that broad and slightly tapering reduced field strength anomalies [2], [3], [4] and [5] seem likely to have an agricultural or drainage-related origin, perhaps fairly shallow and maybe within the topsoil; the anomalies are widest towards the north, c.4m to 5m in width, decreasing to c.3m wide southwards, although their form is less evident there due to greater background variation. Linear anomalies [6] and [7] were interpreted as typical of narrow ditch-type fills, possibly drainage related (*ibid.*).

3 METHODOLOGY

3.1 Introduction

The development site was located within an irregular shaped open field and the aim of the trial trenching was to identify and characterise the archaeological potential. The evaluation comprised 5No 20m x 2m trial trenches, which were positioned to characterise the archaeological potential of the development area and to investigate geophysical anomalies (cf. Figure 3).

Trench	Size	Orientation	Centre Point (NGR)	Rationale
01	30x2m	SSW-NNE	SH33257989	Characterise the archaeological potential of the development area and investigate geophysical anomaly [1] – possible field boundary.
02	30x2m	SSW-NNE	SH33287989	Characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [3] - possible field boundary and land drainage.
03	30x2m	SSW-NNE	SH33307987	Characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [4] - possible field boundary and land drainage.
04	30x2m	SW-NE	SH33287986	Characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [5] - possible field boundary and land drainage.
05	30x2m	SW-NE	SH33307993	Characterise the archaeological potential of the development area.

The trenches were located with a Trimble GPS unit. The trenches were opened and closed by a tracked mechanical excavator supplied by *Ingram Property Development Limited*. All fieldwork were completed in accordance with industry standards and the GAT Fieldwork Manual.

The trial trenching was undertaken during July 2022.

3.2 Fieldwork Methodology

All attendances and photographs were recorded using GAT pro-formas and included stratigraphic composition and depth. All archaeological features/deposits/structures encountered were manually cleaned and examined to determine extent, function, date and relationship to adjacent activity. The following excavation strategy was applied: 50% sample of each sub-circular feature, 25% sample of each linear feature (terminal ends and intersection points with other features were prioritised); discrete features were 100% excavated. Photographic images were taken using a digital SLR (Nikon D3100) camera set to maximum resolution (4,608 x 3,072) in RAW format and archived in TIFF format using Adobe Photoshop. A total of forty-eight photographic images were taken (archive reference numbers G2736_001 to G2737_048; cf. Appendix II for the photographic metadata).

3.3 Data Management Plan

The fieldwork data has been used as the basis for the physical and digital dataset archives and used to compile the project report. The physical archive has been stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset has been stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. There is no de-selected digital data.

External datasets for the regional HER and RCAHMW are as follows:

- HER: digital report (PDF format) and Event PRN summary (Microsoft Excel format); the report and dataset have been prepared in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- RCAHMW: a digital report (PDF format) and digital archive dataset have been prepared in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset includes:
    - Photographic metadata (Microsoft Access);
    - Photographic archive (TIFF format);
    - Project Information form (Microsoft Excel);
    - File Information form (Microsoft Excel) – Microsoft Word report text final;
    - File Information form (Microsoft Excel) – Photographic metadata (general);
    - File Information form (Microsoft Excel) – Adobe PDF report final; and
    - File Information form (Microsoft Excel) - Photographic metadata (detail).

3.4 Selection Strategy

As defined in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020) section 3.3.1, a project specific selection strategy and data management plan should be prepared. In support of this, the Chartered Institute for Archaeologist (CIfA), have stated that it is "widely accepted that not all the records and materials collected or created during the course of an Archaeological Project require preservation in perpetuity. These records and materials constitute the Working Project Archive which will be subject to Selection, in order to establish what will be retained for long-term curation". The aim of selection is to ensure that all the elements retained from the Working Project Archive for inclusion in the Archaeological Archive are appropriate to establish the significance of the project and support "future research, outreach, engagement, display and learning activities". Selection should be "focused on selecting what is to be retained to support these future needs, rather than deciding what can be dispersed" and can be qualified by a selection strategy, which details the project-specific selection process, agreed by all parties (including client and/or landowner), which will be applied to a Working Project Archive prior to its transfer into curatorial care as the Archaeological Archive.
The selection strategy takes into account:

- The aims and objectives of the project.
- The brief and/or Written Scheme of Investigation (WSI)).
- The Collecting Institution's collection policy and/or deposition guidelines.
- Local and regional research frameworks.
- Relevant thematic or period specific research frameworks.
- The project's Data Management Plan (DMP).
- Internal recording and reporting policies.
- Material-specific guidance documents.

The project specific selection strategy is reproduced as Appendix III.

4 RESULTS

4.1 Trench 1

Dimensions:

30.0m x 2.0m x 0.42m (l x w x d)

Orientation:

NNE to SSW

Description:

Trench 1 was located adjacent to the western field boundary (cf. Figure 3; Plate 5). The trench was located to characterise the archaeological potential of the development area and investigate geophysical anomaly [1], which had been interpreted in the *TigerGeo* report as a possible field boundary. Within the trench, the topsoil (Context (0101)) measured 0.20m in depth and comprised a mid-grey/brown sand/silt with moderate angular stone; this sealed a 0.20m thick subsoil (Context (0102)) that comprised a grey/yellow/brown sand/silt with moderate angular stone; this sealed the glacial horizon (Context (0103)), which was present at 0.40m below ground level and comprised a yellow/orange sand/clay (Plates 6 to 8). The geophysical anomaly was identified as a linear ditch (Context [0104]) that ran across the trench and was also present in Trenches 2 and 3. The ditch measured 1.40m in width and 0.50m in depth (cf. Figure 4; Plates 9 and 10) and was orientated NNE and SSW across the trench. The ditch was sealed by the subsoil and cut through the glacial horizon; it contained a single fill (Context (0105)) comprising a loose mid-orange/brown sand/silt that included moderate angular stone.

No artefacts or suitable ecofacts were recovered from the confines of the trench.

4.2 Trench 2

Dimensions:

30.0m x 2.0m x 0.42m (l x w x d)

Orientation:

NE to SW

Description:

Trench 2 was located to the east of Trench 1 (cf. Figure 3). The trench was located to characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [3], which had been interpreted in the *TigerGeo* report as possible field boundary and land drainage respectively. Within the trench, the topsoil (Context (0201)) measured 0.25m in depth and comprised a mid-grey/light brown silt/sand with occasional angular stone; this sealed a 0.20m thick subsoil (Context (0302)) that comprised a mid-yellow/brown sand/clay with moderate angular stone; this sealed the glacial horizon (Context (0303)), which was present at 0.35m below ground level and comprised a yellow/orange sand/clay (Plates 11 and 12), with patches of bedrock. Geophysical anomaly [1] was identified as a linear ditch (Context [0204]) that ran across the trench and was also present in Trenches 1 and 3. The ditch measured 1.60m in width and 0.39m in depth (cf. Figure 5; Plates 13 to 16) and was orientated NNE and SSW across the trench. The ditch was sealed by the topsoil and cut through the glacial horizon; it contained a single fill (Context (0205)) comprising a loose mid-orange/brown sand/silt/clay that included occasional angular stone of varying size.

A second linear feature (Context [0206]) ran across the trench appeared to continue into Trench 3 as Context [0305]. This feature measured 0.90m in width and 0.11m in depth (cf. Figure 5; Plates 17 to 19) and was orientated NNE and SSW across the trench. The ditch was sealed by the topsoil and cut through the glacial horizon; it contained a single fill (Context (0207)) comprising a loose mid-brown sand/silt that included occasional angular stone of small size. This may be associated with geophysical anomaly [3] but was quite wide for a land drain but also shallow for a boundary ditch.

A third feature (Context [0203]) (Plate 20) was determined to be non-archaeological.

No artefacts or suitable ecofacts were recovered from the confines of the trench.

4.3 Trench 3

Dimensions:

30.0m x 2.0m x 0.43m (l x w x d)

Orientation:

NW to SE

Description:

Trench 3 was located adjacent to Trench 2 towards the centre of the development area (cf. Figure 3; Plate 21). The trench was located to characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [4], which had been interpreted in the *TigerGeo* report as a possible field boundary and land drainage respectively. Within the trench, the topsoil (Context (0301)) measured 0.15m in depth and comprised a mid-grey silt/sand with very rare angular stone inclusions; this sealed the glacial horizon (Context (0202)), which was present at 0.25m below ground level and comprised an/orange sand/clay (Plates 22 and 23). Geophysical anomaly [1] was identified as a linear ditch (Context [0306]) that ran across the trench and was also present in Trenches 1 and 3. The ditch measured 1.60m in width and 0.42m in depth (cf. Figure 6; Plates 25 and 26) and was orientated NNW and SSE across the trench. The ditch was sealed by the subsoil and cut through the glacial horizon; it contained a single fill (Context (0308)) comprising a loose mid-orange/brown sand/silt/clay that included occasional angular stone of small size.

A second linear feature (Context [0305]) ran across the trench that was also present Trench 02 as Context [0206]. This feature measured 0.75m in width and 0.16m in depth (cf. Figure 6; Plates 27 and 28) and was orientated NNW and SSE across the trench, albeit with a slight curve in plan. The ditch was sealed by the subsoil and cut through the glacial horizon; it contained a single fill (Context (0307)) comprising a loose mid-orange/brown sand/silt/clay that included occasional angular stone of small size. This may be associated with geophysical anomaly [4] but was quite wide for a land drain but also shallow for a boundary ditch.

A third feature (Context [0304]) (Plate 27) was determined to be non-archaeological.

No artefacts or suitable ecofacts were recovered from the confines of the trench.

4.4 Trench 4

Dimensions:

30.0m x 2.0m x 0.5m (l x w x d)

Orientation:

WNW to ESE

Description:

Trench 4 was located adjacent to the southern field boundary; it was relocated 7m to the southeast of the original proposed location due to the proximity of an overhead powerline (cf. Figure 3; Plate 29). The trench was located to characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [5] which had been interpreted in the *TigerGeo* report as a possible field boundary and land drainage respectively. Within the trench, the topsoil measured 0.20m in depth and comprised a mid-grey/brown silt/sand with occasional angular stone; this sealed a 0.10m thick subsoil that comprised a mid-yellow/brown sand/clay with rare angular stone; this sealed the glacial horizon, which was present at 0.30m below ground level and comprised a yellow clay (Plates 30 to 32). The geophysical anomalies were not identified within the confines of the trench; this was likely due to the repositioning of the trench.

No artefacts or suitable ecofacts were recovered from the confines of the trench.

4.5 Trench 5

Dimensions:

25.0m x 2.0m x 0.42m (l x w x d)

Orientation:

E to W

Description:

Trench 5 was located adjacent to the northern field boundary (cf. Figure 3; Plate 33); the western end of the trench was shortened due to the presence of an overhead powerline. The trench was located to characterise the archaeological potential of the development area. Within the trench, the topsoil measured 0.15m in depth and comprised a mid-grey silt/sand with very rare angular stone inclusions; this sealed a 0.20m thick subsoil that comprised a mid-yellow/brown sand/clay with moderate angular stone; this sealed the glacial horizon, which was present at 0.35m below ground level and comprised a yellow/orange sand/clay (Plates 34 to 36).

No archaeological activity, artefacts or suitable ecofacts were identified within the confines of the trench.

5 CONCLUSION

Gwynedd Archaeological Trust was commissioned by Ingram Property Development Limited to undertake an archaeological evaluation (trial trenching) in advance of a proposed residential development at Llwyn yr Eos, Bodedern, Ynys Môn. A total of five trenches were located across the development area to target geophysical anomalies and characterise the archaeological potential. The development area was characterised by thin topsoil and subsoil, with a shallow glacial horizon that also included some bedrock. The geophysical anomalies were identified in three of the trenches, with a wide, deep linear and a wide but shallower linear present across all three. The former has initially been interpreted as a boundary ditch, with the latter either a wide drain, channel or ditch. In all cases, stratigraphy was limited to a single fill, with no visible evidence to suggest natural or artificial infilling or stages of infilling; no artefacts or suitable ecofacts were recovered to assist with further interpretation. The current available historic mapping, including the 1840 Bodedern Parish Tithe Map and the later Ordnance Survey County Series maps, do not include any boundaries at the location of the features identified, suggesting they are earlier boundaries and/or agricultural features. The lack of datable artefacts or ecofacts makes it difficult at present to determine anything further and it would require more extensive investigation of the development area to further interpret their provenance.

6 SOURCES CONSULTED

1. English Heritage, 1991, Management of Archaeological Projects
2. English Heritage, 2015, Management of Research Projects in the Historic Environment (MoRPHE). Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (Version 1.1)
3. Longley, D. & Richards, A., 2000, Early Medieval Burial in Gwynedd. Gwynedd Archaeological Trust Report 350.
4. Longley, D., 2001, The Removal of the MAILISI Stone from Pen Sieri, Llanfaelog, to Trecastell. Gwynedd Archaeological Trust Report 420
5. Roseveare M.J., 2022. Land Adjacent to Llwyn Yr Eos, Bodedern, Ynys Mon Geophysical Survey Report. TigerGeo Project code: EEA211.
6. Royal Commission on Ancient and Historic Monuments of Wales 2015 Guidelines for digital archives
7. Standard and Guidance for Archaeological Field Evaluation (Chartered Institute for Archaeologists, 2020).
8. Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2020).

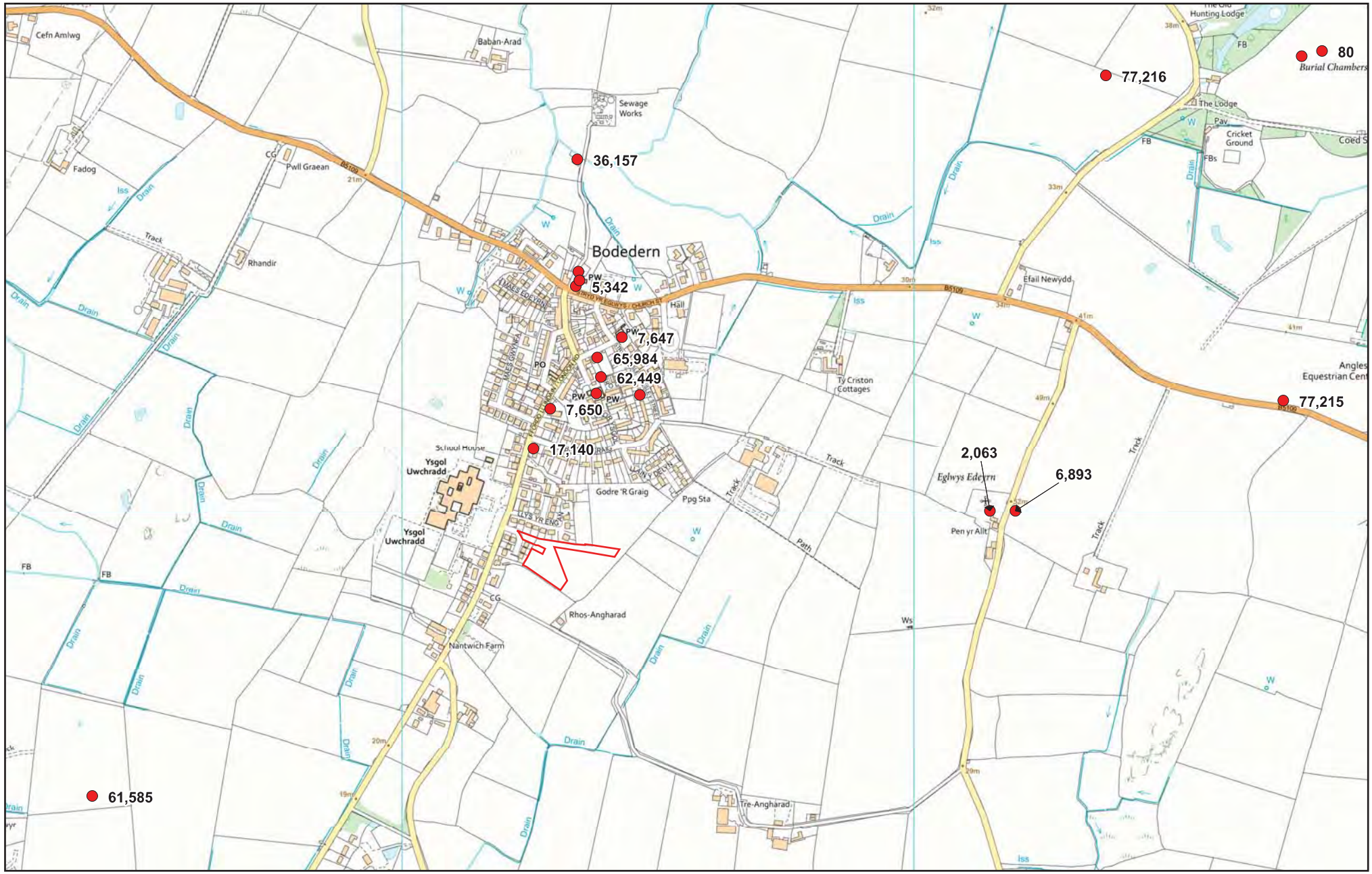


Figure 01: Location Map detailing development area (in red) and local archaeological assets. Scale: 1 to 10000@A4.

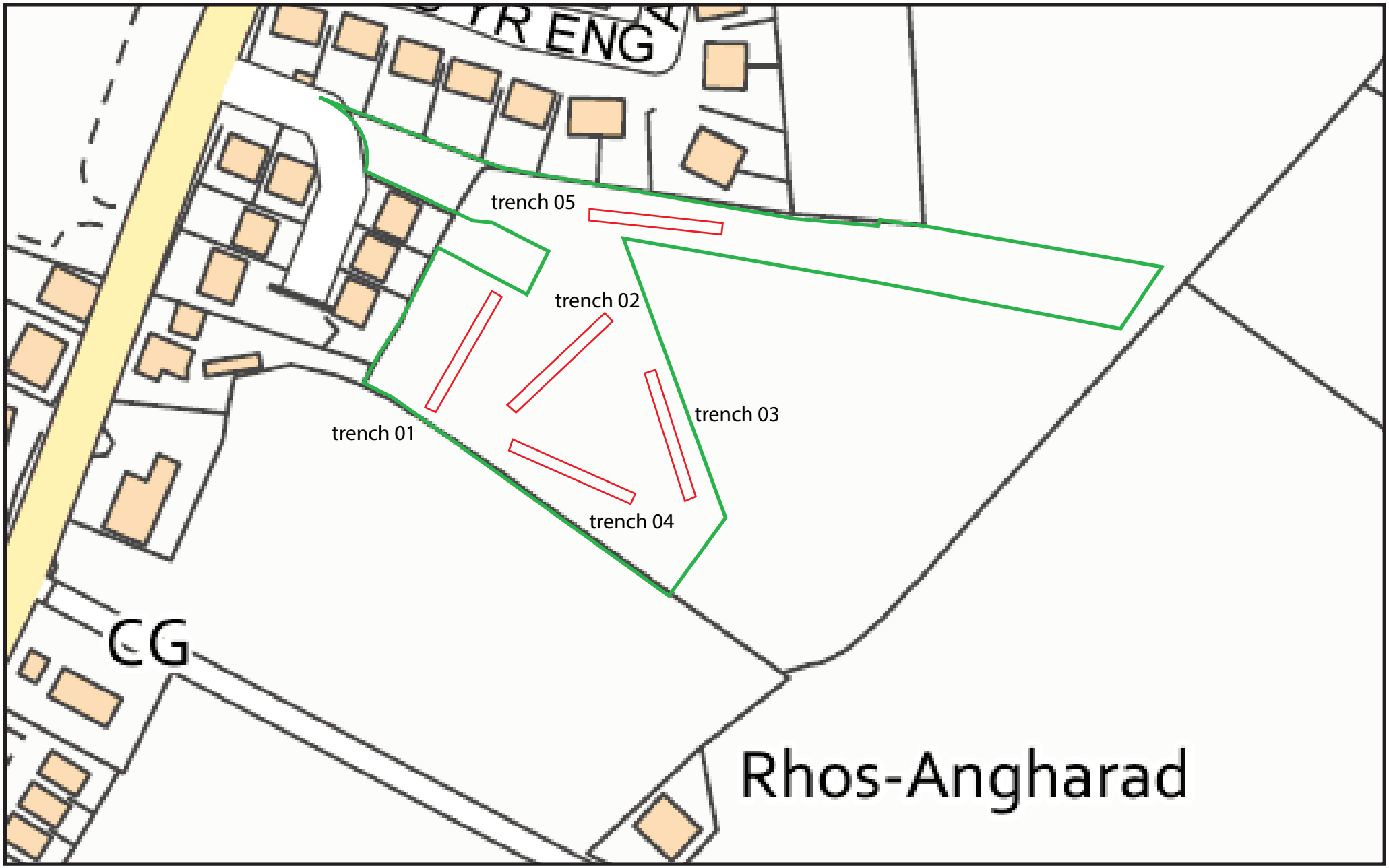


Figure 02: Trench Location Plan (in red) and development area (in green). Scale: 1 to 1250@A4. © Crown Copyright Ordnance Survey AL10002089.

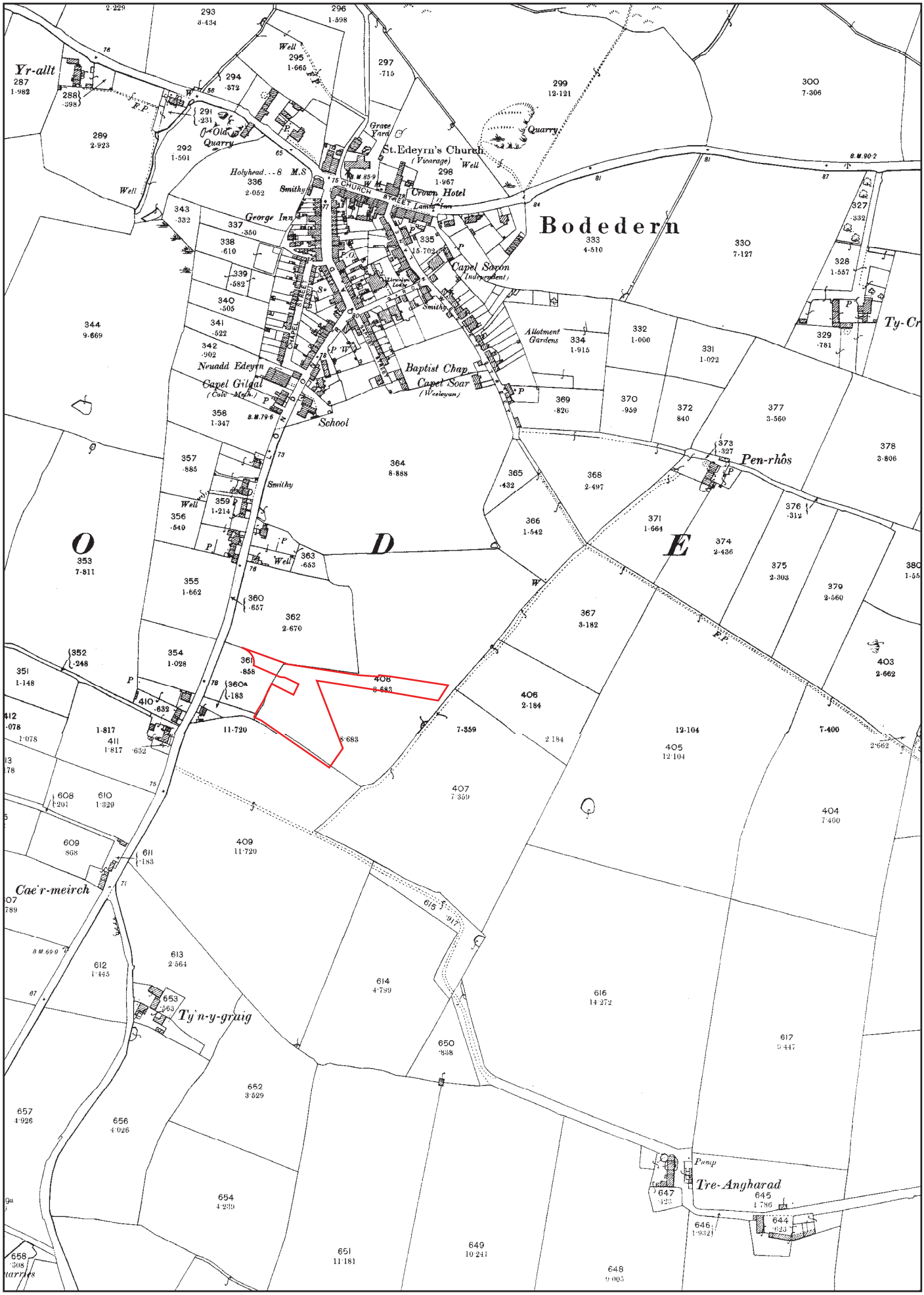


FIGURE 03: First Edition 25-inch Anglesey Ordnance Survey Map of 1888, sheets XII.05, XII.06, XII.09 and XII.10. Scale: 1 to 5000@A4.

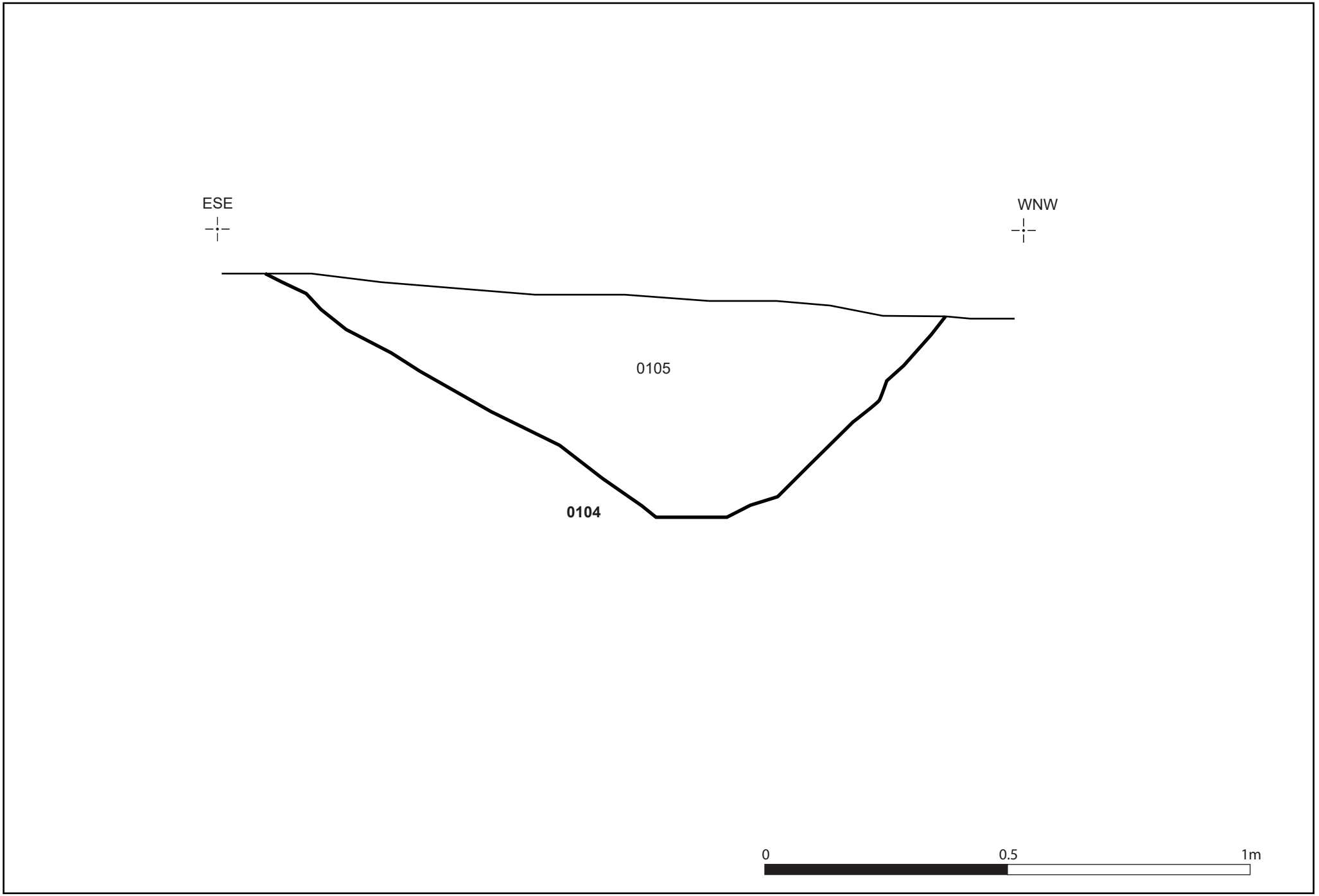
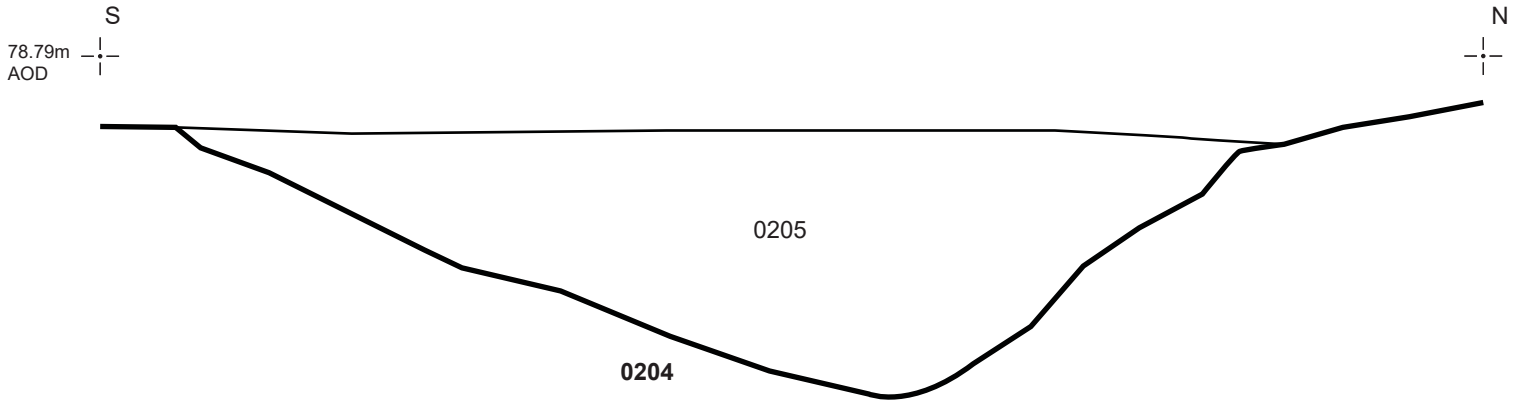
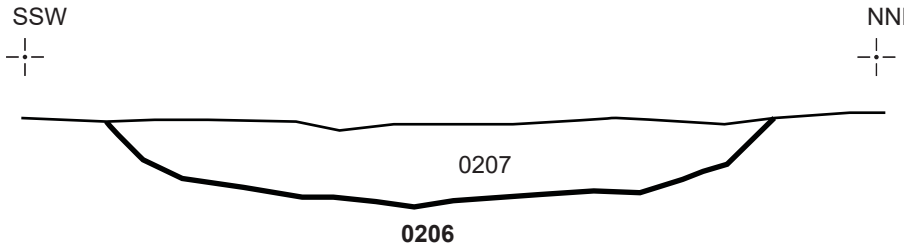


Figure 04: Trench 1 North-Northeast Facing Section of Context [0104]; scale 1:10@A4.



Trench 2 East-Facing Section of Context [0204]; scale 1:10@A4

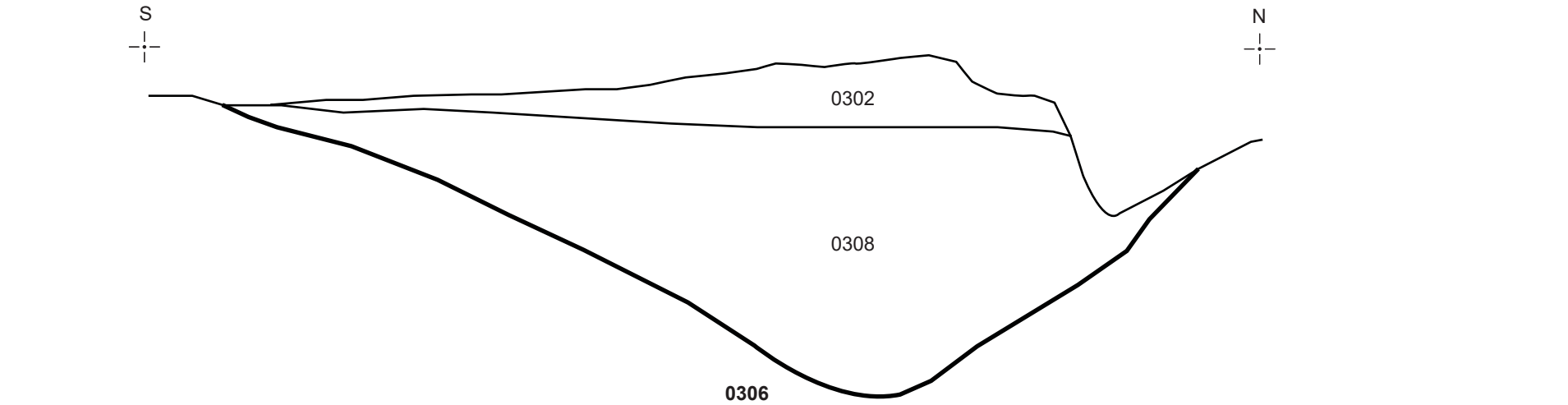
0 0.5 1m



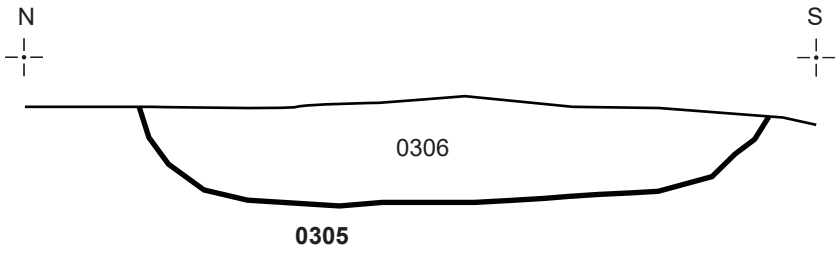
Trench 2 East-Southeast Facing Section of Context [0206]; scale 1:10@A4

0 0.5 1m

Figure 05: Trench 2 - Sections through Contexts [0204] and [0206]. Scales: as shown.



Trench 3 East Facing Section of Context [0306]; scale 1:10@A4



Trench 3 West Facing Section of Context [0305]; scale 1:10@A4

Figure 06: Trench 03 - Sections through Contexts [0305] and [0306]. Scales: as shown.

Plate 1: Pre-commencement view from the west; scale Not used; view from W (archive reference: G2736_01).

Plate 2: View across site from northern boundary; scale Not used; view from N (archive reference: G2736_02).

Plate 3: View across site towards the southeast; scale Not used; view from NW (archive reference: G2736_03).

Plate 4: View of site from the west facing the east; scale Not used; view from W (archive reference: G2736_04).

Plate 5: Pre-commencement view of Trench 1 from the southwest; scale Not used; view from SW (archive reference: G2736_06).

Plate 6: Representative section of Trench 1 from the west-northwest; scale 1x1m; view from WNW (archive reference: G2736_31).

Plate 7: Post-excavation view of Trench 1 from the south-southwest; scale 1x1m; view from SSW (archive reference: G2736_34).

Plate 8: Post-excavation view of Trench 1 from the north-northeast; scale 1x1m; view from NNE (archive reference: G2736_35).

Plate 9: Post-excavation plan shot of ditch [0104] from the north-northwest; scale 1x1m; view from NNW (archive reference: G2736_33).

Plate 10: Linear [0104] showing NW facing section in baulk; scale 1x1m; view from NW (archive reference: G2736_47).

Plate 11: Post-excavation view of Trench 2 from the northeast; scale 2x1m; view from NE (archive reference: G2736_12).

Plate 12: Post-excavation view of Trench 2 from the southwest; scale 2x1m; view from SW (archive reference: G2736_13).

Plate 13: Pre-excavation shot of linear [0204] from the northeast; scale 2x1m; view from NE (archive reference: G2736_19).

Plate 14: Mid-excavation view of stone in situ within ditch [0204] present in fill (0205); scale 1x1m; view from E (archive reference: G2736_20).

Plate 15: East facing section through ditch [0204]; scale 1x1m; view from E (archive reference: G2736_21).

Plate 16: Post-excavation view of ditch [0204] along length of trench; scale 1x1m; view from NE (archive reference: G2736_23).

Plate 17: Pre-excavation shot of linear [0206] from the northeast; scale 1x1m; view from NE (archive reference: G2736_25).

Plate 18: East-southeast facing section through shallow ditch [0206]; scale 1x1m; view from ESE (archive reference: G2736_26).

Plate 19: Post excavation view of shallow ditch [0206] from the northeast; scale 1x1m; view from NE (archive reference: G2736_28).

Plate 20: Proof shot of [0203]: Non archaeological (natural silting between bedrock); scale 1x1m; view from E (archive reference: G2736_30).

Plate 21: Pre-commencement view of Trench 3 from the north-northwest; scale Not used; view from NNW (archive reference: G2736_07).

Plate 22: Representative section Trench 3; scale 1x1m; view from NW (archive reference: G2736_39).

Plate 23: View of trench 03 post-ex; scale 1x1m; view from NNW (archive reference: G2736_42).

Plate 24: Plan view of linear ditch [0306]; scale 1x1m; view from NW (archive reference: G2736_40).

Plate 25: Pre-ex shot of linear [0306]; scale 1x1m; view from SW (archive reference: G2736_45).

Plate 26: East facing section through ditch [0306]; scale 1x1m; view from E (archive reference: G2736_36).

Plate 27: Pre-ex shot of linear [0304] and possible circular feature [0305] at NW end of Trench 03; scale 1x1m; view from SW (archive reference: G2736_43).

Plate 28: West facing section through ditch [0305]; scale 1x1m; view from W (archive reference: G2736_37).

Plate 29: Pre-commencement view of Trench 4 from the east; scale Not used; view from E (archive reference: G2736_08).

Plate 30: Post-excavation view of Trench 4 from the west-northwest; scale 2x1m; view from WNW (archive reference: G2736_16).

Plate 31: Post-excavation view of Trench 4 from the east-southeast; scale 2x1m; view from ESE (archive reference: G2736_17).

Plate 32: Representative section of Trench 4 from the north-northeast; scale 1x1m; view from NNE (archive reference: G2736_18).

Plate 33: Pre-commencement view of Trench 5 from the west (with board); scale Not used; view from W (archive reference: G2736_05).

Plate 34: Post-excavation view of Trench 5 from the west; scale 2x1m; view from W (archive reference: G2736_09).

Plate 35: Post-excavation view of Trench 5 from the east; scale 2x1m; view from E (archive reference: G2736_10).

Plate 36: Representative section of Trench 5 from the north; scale 1x1m; view from N (archive reference: G2736_11).

APPENDIX I

Gwynedd Archaeological Trust Written Scheme of Investigation

LLWYN YR EOS, BODEDERN, YNYS MÔN (G2736)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION (TRIAL TRENCHING)

Prepared for Ingram Property Development Limited

July 2022

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Approvals Table				
	Role	**Printed Name**	**Signature**	**Date**
Originated by	Document Author			
Reviewed by	Document Reviewer			
Approved by	Principal Archaeologist			

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

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

Name Signature Date

LLWYN YR EOS, BODEDERN, YNYS MÔN (G2736)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION (TRIAL TRENCHING)

Prepared for *Ingram Property Development Limited*, July 2022

CONTENTS

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by Ingram Property Development Limited to undertake an archaeological evaluation (trial trenching) in advance of a proposed residential development at Llwyn yr Eos, Bodedern, Ynys Môn (NGR SH33277991; postcode: LL65 3SX; cf. Figure 01). The development area measures 0.7ha and is located to the east of existing housing at Lwyn yr Eos at the southern end of Bodedern village on Ynys Môn, within part of a field in previous use as pasture; the site footprint extends to the northern field boundary and westwards through to the existing residential road. The proposed development, under planning application FPL/2022/105, will include 9 new dwellings together with associated parking, access road and landscaping as detailed on RWE Ltd. Drawing No. 023/GA/001 (cf. Figure 02). The evaluation will comprise 5No trenches and will be completed during July 2022 in accordance with the following guidelines:

- Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) Version 1.1 (The Welsh Archaeological Trusts, 2018);
- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015);
- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015); and
- Standard and Guidance for Archaeological Field Evaluation (Chartered Institute for Archaeologists, 2020).
- Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2020); and
- Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (Chartered Institute for Archaeologists, 2020).

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

1.1 Aims and Objectives

The key aims and objectives are to:

- establish the date and nature of any archaeological remains identified within the evaluation area and assess their implications for understanding local historical development, in conjunction with the known archaeological record. There is known early medieval archaeology in the local area; and
- If no additional archaeological activity is identified, establish why this may be the case.
- To place the results in context, reference shall be made to *A Research Framework for the Archaeology of Wales*.

1.2 Monitoring Arrangements

The archaeological evaluation will be monitored by the Gwynedd Archaeological Planning Service (GAPS) under reference D3660. The content of this WSI and all subsequent reporting by GAT must be approved by GAPS prior to final issue. The GAPS Planning Archaeologist will be kept informed of the project timetable and of the subsequent progress and findings. This will allow time to arrange monitoring visits and attend site meetings (if required) and enable discussion about the need or otherwise for further works (if required) as features of potential archaeological significance are encountered. GAPS' contact details are:

- Tom Fildes | Development Control Archaeologist | tom.fildes@heneb.co.uk | 07920264232

1.3 Historic Environment Record

In line with the GAT Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). In line with this guidance, all submitted reporting will need to include the equivalent of a non-technical summary in Welsh and English at the front of the report combined with short bilingual summaries of the principal Historic Assets recorded during the event. These requirements are mandatory. The GAT HER enquiry number is **1669** and the event primary reference number is **46285**.

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

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

There are no known archaeological assets within the proposed development site. The regional Historic Environment Record (Gwynedd Archaeological Trust, Craig Beuno, Garth Road, Bangor, Gwynedd LL57 2RT) describes Bodedern as a nucleated settlement formed largely to S of post road, possibly late 18th early 19th C in origin (Source: Primary Reference Number 17140 – Bodedern Character Area). Known archaeological assets with the wider area includes:

- Primary Reference (PRN) 2063: an early medieval cemetery of 114 extended inhumations comprising both long cists and unprotected dug graves, along with an enclosure ditch and possible earlier prehistoric activity in the form of post settings was identified and may be of prehistoric origin. The location is reputed to be the traditional site of Eglwys Edern (Longley & Richards, 2000). The site is located at NGR SH34158000, c.775m northeast of the proposed development (cf. Figure 06). An early medieval inscribed stone (PRN 5342) was removed from the site to Bodedern Church.
- Primary Reference (PRN) 6893: an early medieval inscribed stone. A slone slab inscribed with the single word MAILISI was recorded in 1801, in the wall of a barn on Pen Sieri Farm The stone was identified as a funerary memorial of the 5th or 6th century AD and would originally have stood as a monolithic pillar, marking the grave of the person commemorated in the inscription. The site is located at NGR SH34208000, c.875m northeast of the proposed development (cf. Figure 06).

The regional Historic Environment Record also lists several post-medieval structures within Bodedern (cf. Figure 06), including four nonconformist chapels (PRNs 7647 to 7651), the old police station (PRN 11618), Ardwyn House (PRN 65984) and St. Ederyn's Church (PRN 6909); St. Ederyn's Church has medieval origins, with remnants of medieval architecture preserved.

2.2 Historic Mapping

A brief examination of the First to Third Edition 25-inch Anglesey Ordnance Survey Map sheets XII.05, XII.06, XII.09 and XII.10, published in 1888, 1900 and 1924 respectively (cf. Figures 03, 04 and 05), show the development area as an irregular shaped open field southeast of a local road that is little changed on modern mapping. The settlement activity at Bodedern is mostly concentrated around the crossroads to the north, with sporadic settlement along London Road that runs alongside the development area. During the twentieth century, settlement has increased along London Road, with additional housing estates and a new school (cf. Figure 01)

2.3 Geophysical Survey

A geophysical magnetometer survey of the proposed development site was completed for Ingram Property Development Limited by *TigerGeo* (Roseveare M.J., 2022; Appendix V). The survey identified strong magnetic anomaly interpreted as a probable ditch fill (Anomaly [1] cf. Figure 08), that measured up to 1.5 m in width and crossed the site in a straight line from roughly east to west. The survey suggested the anomaly appeared to turn slightly or maybe stop close to the eastern field boundary, but the report stated there was a sharp change in background magnetic texture at this location that could have affected detectability (*ibid.*). The report stated that broad and slightly tapering reduced field strength anomalies [2], [3], [4] and [5] seem likely to have an agricultural or drainage-related origin, perhaps fairly shallow and maybe within the topsoil; the anomalies are widest towards the north, c.4m to 5m in width, decreasing to c.3m wide southwards, although their form is less evident there due to greater background variation. Linear anomalies [6] and [7] were interpreted as typical of narrow ditch-type fills, possibly drainage related (*ibid.*).

3 METHODOLOGY

3.1 Trial Trenching

The trial trenching programme aims to identify and characterise the archaeological potential of the development area. The site currently includes an irregular shaped open field.

The evaluation will comprise 5No 30m x 2m trial trenches, located within accessible areas and to provide sufficient coverage across the site (cf. Figure 07) and the trenches have been positioned to characterise the archaeological potential of the development area and to investigate geophysical anomalies (cf. Figure 08).

Trench	Size	Orientation	Centre Point (NGR)	Rationale
01	30x2m	SSW-NNE	SH33257989	Characterise the archaeological potential of the development area and investigate geophysical anomaly [1] – possible field boundary.
02	30x2m	SSW-NNE	SH33287989	Characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [3] - possible field boundary and land drainage.
03	30x2m	NNW-SSE	SH33307987	Characterise the archaeological potential of the development area and investigate geophysical anomalies [[1] and [5] - possible field boundary and land drainage.
04	30x2m	SWW-SEE	SH33287986	Characterise the archaeological potential of the development area and investigate geophysical anomalies [1] and [4] - possible field boundary and land drainage.
05	30x2m	W-N	SH33307993	Characterise the archaeological potential of the development area.

Note: the precise locations for the trenches may be amended on site due to ground conditions and safety measures; these locations will be confirmed in the final report. There are overhead 11kv powerlines present on site (cf. Figure 07). Whilst the trenches have been located to avoid the route of the powerline, all fieldwork must be undertaken in accordance with the requirements of HSE GS6, including the operation of a safety zone 6 m horizontally from the nearest wire on either side of the overhead line.

The trenches will be located with a Trimble GPS unit. The trenches will be opened and closed by a tracked mechanical excavator supplied by *Ingram Property Development Limited*. All fieldwork will be completed in accordance with industry standards and the GAT Fieldwork Manual.

The trial trenching works are currently scheduled to be undertaken during July 2022, with the following methodology applied:

- The trench locations will be demarcated in advance by GAT staff using a Trimble R8 GNSS/R6/5800 GPS receiver (<10cm accuracy), and scanned with a cable avoidance tool;prior to opening to determine the presence or absence of any services. In support of this, existing service drawings will also be consulted;
- The trenches will be opened by the mechanical excavator using a toothless bucket, although a toothed bucket may be necessary for compacted surface areas and/or hardstanding.
- Excavation by machine will continue until the first significant archaeological horizon, or the glacial horizon, whichever is encountered first;
- A record will be made on GAT pro-formas of the topsoil and subsoil depths, as well as the composition of the glacial horizon (cf. Appendix I, II and III). All encountered subsurface features will be recorded on GAT pro-formas with detailed notations and will be recorded photographically with an appropriate scale. Photographic images will be taken using a digital SLR camera set to maximum resolution in RAW format; the photographic record will be digitised in Microsoft Access as part of the fieldwork archive and dissemination process. Photographic images will be archived in TIFF format using Adobe Photoshop; the archive numbering system will start from G2736_001. A photographic ID board will be used during the evaluation to record site code, image orientation and any relevant trench and context numbers.
- Any archaeological features/deposits/structures encountered will be manually cleaned and examined to determine extent, function, date and relationship to adjacent activity. The following excavation strategy will generally apply: 50% sample of each sub-circular feature, 10% sample of each linear feature (terminal ends and intersection points with other features will be prioritised). However, if more discrete features are identified, these will be 100% excavated as will any exposed segments of linear features. Any features that comprise a spread of material rather than a cut feature, will be completed in quadrants (if fully extant within the mitigation area) or 100% excavated if present as a

discrete spread. Any structural features encountered will be cleaned and recorded but will not be removed;

- The location of the trenches, and any identified features, will be recorded using a Trimble R8 GPS unit. Hand drawn plans will also be completed for any trenches containing archaeological activity; this will include a plan of the trench and features therein as well as individual plans/sections of features encountered. Any required plans or sections will be drawn at a minimum 1:10 scale using GAT A4, A3 or A2 pro-forma permatrace;
- Should dateable artefacts and/or ecofacts be recovered, an interim report will be submitted summarising the fieldwork results, along with recommendations for any subsequent post-excavation assessment in line with the MAP2 process. Post-excavation assessment may include the in-house processing (wet sieving) of ecofact samples, followed by external specialist assessment and radiocarbon dating, as well as the external assessment of diagnostic artefacts. Based on these results a final report will be prepared. Additional time, resourcing and costs will be required to undertake any post-excavation programme of works.

3.2 Human Remains

Whilst human remains are not expected, if any human remains are identified that cannot be preserved in situ, any excavation will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a Ministry of Justice licence is required under Section *25* of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. In accordance with the Ministry of Justice licence, recovered remains will be reburied once the investigation and/or assessment/analysis are complete.

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

If human remains are recovered that are deemed suitable for further assessment/analysis, this will be completed in accordance with the osteologist's requirements and with *Human Bones from Archaeological Sites Guidelines for producing assessment documents and analytical reports* (Chartered Institute for Archaeologists, 2017).

3.3 Ecofacts

Should any archaeological features and/or sealed deposits be identified that are deemed suitable for assessment and analysis, ecofact samples will be taken of not less than 40 litres for bulk samples, or 100% if the feature is smaller; samples will by GAT staff using 10 litre sampling buckets. All suitable deposits will be sampled at ths stage.

The samples will be subseqeuntly assessed and analysed for plant species and charcoal, with the results used to inform agrarian practices and wood fuel use, as well as possibly dating. Initial assessment would be completed by the GAT Project Archaeologist team using wet sieving, with the subsequent species identification assessment completed by an ecofact specialist (Jackeline Robertson | AOC Archaeology | telephone: 0208 843 7380). Any deposits deemed suitable for dating will be submitted to a laboratory specialising in radiocarbon dating (e.g., SUERC).

Any ecofact assessment/analysis proposals will require additional resourcing and cost and will only be undertaken further to agreement with GAPS and the client.

3.4 Artefacts

Diagnostic artefacts will be retained for further examination and identification; pottery sherds of 19th and 20th century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained. Any artefacts recovered will be treated according to guidelines issued by the UK Institute of Conservation (Watkinson and Neal 2001) in particular the advice provided within *First Aid for Finds* (Rescue 1999) and Historic England.

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

Any specialist assessment/analysis proposals will require additional resourcing and cost and will only be undertaken further to agreement with GAPS and the client.

All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Oriel Môn, Rhosmeirch, Llangefni LL77 7TQ), where they can receive specialist treatment and study. Access to finds must be granted to the Trust for a reasonable period to allow for analysis and for study and publication as necessary. Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.

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

The Treasure Valuation Committee, based at the British Museum, and informed by the Portable Antiquities Scheme, will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and

landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

GAT will contact the landowner (via client) for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Oriel Môn). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to Oriel Môn in accordance with their guidelines.

3.5 Working Project Archive

Following the completion of the fieldwork, a working project archive will be created based on following task list;

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

All relevant site archive data will be added to a digital project register specific to this project, which will be prepared in *Microsoft Excel.*

The site archive data will then be processed, final illustrations will be compiled and a report will be produced which will detail and synthesise the results.

3.6 Data Management Plan

The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data will be confirmed in an updated Selection Strategy document appended to the final report.

3.7 Reporting

A draft report will be submitted within one month of fieldwork completion and a final report will be submitted to the regional Historic Environment Record within six months of project completion. The report will include the following:

1. Non-technical summary (Welsh and English)
2. Introduction
3. Background
4. Methodology
5. Results
6. Conclusion
7. List of sources consulted.
8. Appendix I – approved GAT project specification
9. Appendix II – photographic metadata
10. Appendix III – drawing register

Illustrations will be included for any trenches containing archaeological activity; this will include a scaled plan of the trench and features therein as well as individual scaled plans/sections of features encountered. The reports will also include any received specialist input (ecofacts and/or artefacts).

3.8 Dissemination

On final approval, the following dissemination and archiving of the report and digital dataset will apply:

- A digital report(s) will be provided to the client and GAPS (draft report then final report);
- A digital report will be provided to the regional Historic Environment Record; this will be submitted within six months of project completion (final report only), along with a digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- A digital report and digital archive dataset will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMW and will include:
    - Photographic metadata (Microsoft Access);
    - Photographic archive (TIFF format);
    - Project Information form (Excel);
    - File Information form (Excel) – Microsoft Word report text final;
    - File Information form (Excel) – Photographic metadata (general);
    - File Information form (Excel) – Adobe PDF report final; and
    - File Information form (Excel) - Photographic metadata (detail).

3.9 Selection Strategy

As defined in *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists, 2020) section 3.3.1, a project specific selection strategy and data management plan should be prepared. In support of this, the Chartered Institute for Archaeologist (CIfA), have stated that it is "widely accepted that not all the records and materials collected or created during the course of an Archaeological Project require preservation in perpetuity. These records and materials constitute the Working Project Archive which will be subject to Selection, in order to establish what will be retained for long-term curation". The aim of selection is to ensure that all the elements retained from the Working Project Archive for inclusion in the Archaeological Archive are appropriate to establish the significance of the project and support "future research, outreach, engagement, display and learning activities". Selection should be "focused on selecting what is to be retained to support these future needs, rather than deciding what can be dispersed" and can be qualified by a selection strategy, which details the project-specific selection process, agreed by all parties (including GAPS, client and/or landowner), which will be applied to a Working Project Archive prior to its transfer into curatorial care as the Archaeological Archive.

The selection strategy will be is summarised in Appendix IV and will be confirmed in the mitigation report; the strategy will take into account:

- The aims and objectives of the project.
- The brief and/or Written Scheme of Investigation (WSI)).
- The Collecting Institution's collection policy and/or deposition guidelines.
- Local and regional research frameworks.
- Relevant thematic or period specific research frameworks.
- The project's Data Management Plan (DMP).
- Internal recording and reporting policies.
- Material-specific guidance documents.

4 PERSONNEL

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section with attendances on-site undertaken by a GAT Project Archaeologist(s). The Project Archaeologist will be responsible for following:

- All archaeological evaluation duties on site;
- Client liaison;
- Plant operator liaison;
- GAPS liaison, with regular updates;
- specialist liaison (if relevant);
- completing all on site pro-formas and the fieldwork archive itemised above, including the digital project register;
- sourcing Primary Reference Numbers (PRN) from the GAT HER for any new features identified;
- completing an event summary and creating or updating PRN data, dependent on results; and
- for submitting a draft final report (or interim report) for project manager review and approval, to then be submitted as per the arrangements defined above.

5 HEALTH AND SAFETY

The GAT Project Archaeologist(s) will be CSCS certified. Copies of the site specific risk assessment will be supplied to the client and sub-contractor prior to the start of fieldwork. Any risks and hazards will be indicated prior to the start of work via a submitted risk assessment. All GAT staff will be issued with required personal safety equipment, including high visibility jacket, steel toe-capped boots and hard hat. All GAT fieldwork is undertaken in accordance with the Trust's Health and Safety Manual, Policy and Handbook which were prepared by Ellis Whittam. All work will be undertaken in accordance with the client and site contractors Health and Safety requirements.

All fieldwork will be undertaken in accordance with the latest Welsh Government Covid-19 guidelines, as well the GAT Covid-19 Operating Strategy and Sanitising Strategy.

There are known utility services on site. The trenches have been positioned to avoid the known services, but there is scope for unknown services to be present; the trench locations and environs will be scanned with a cable avoidance tool prior to opening. The location of known services will be included in the site-specific risk assessment.

6 SOCIAL MEDIA

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

7 INSURANCE

7.1 Public/Products Liability

Limit of Indemnity- £5,000,000 any one occurrence and in the aggregate in respect of Product Liability

INSURER Ecclesiastical Insurance Office Plc.

POLICY TYPE Public/Products Liability

POLICY NUMBER UN/000375

EXPIRY DATE 21st June 2023

7.2 Employers Liability

Limit of Indemnity- £10,000,000 any one occurrence.

INSURER Ecclesiastical Insurance Office Plc.

POLICY TYPE Employers Liability

POLICY NUMBER 24765101 CHC / UN/000375

EXPIRY DATE 21st June 2023

7.3 Professional Indemnity

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER PL-PSC10002389775/01

EXPIRY DATE 22nd July 2022

8 SOURCES CONSULTED

1. English Heritage, 1991, Management of Archaeological Projects
2. English Heritage, 2015, Management of Research Projects in the Historic Environment (MoRPHE). Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (Version 1.1)
3. Longley, D. & Richards, A., 2000, Early Medieval Burial in Gwynedd. Gwynedd Archaeological Trust Report 350.
4. Longley, D., 2001, The Removal of the MAILISI Stone from Pen Sieri, Llanfaelog, to Trecastell. Gwynedd Archaeological Trust Report 420
5. Roseveare M.J., 2022. Land Adjacent to Llwyn Yr Eos, Bodedern, Ynys Mon Geophysical Survey Report. TigerGeo Project code: EEA211.
6. Royal Commission on Ancient and Historic Monuments of Wales 2015 Guidelines for digital archives
7. Standard and Guidance for Archaeological Field Evaluation (Chartered Institute for Archaeologists, 2020).
8. Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Chartered Institute for Archaeologists, 2020).

FIGURE 01

Location Map. The development area is outlined in red. Scale: 1 to 5000@A4. © Crown Copyright Ordnance Survey AL10002089

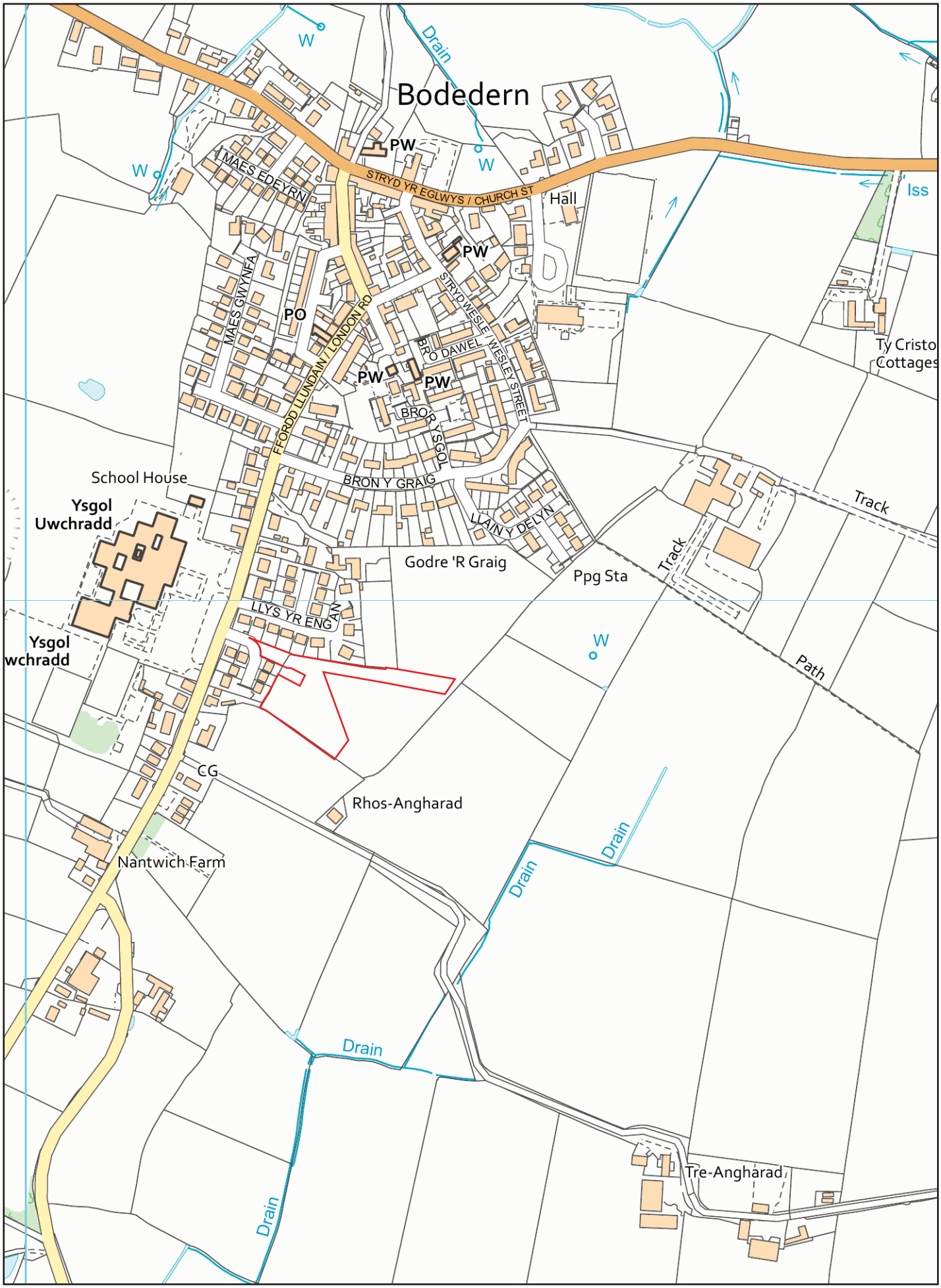


FIGURE 01: Location Map. The development area is outlined in red. Scale: 1 to 5000@A4.

FIGURE 02

Reproduction of RWE Ltd. Drawing No. 023/GA/001. Scale as shown

NODIADAU/NOTES

- Proposed Dropped Kerbs
- Proposed Half Batter Kerbs
- Proposed Back of Footway Kerbs

- Note that speciel taper kerbs will be required during constriction between kerb types

Porous Asphalt Sections
- Exact color surfacing to be at the discretion of the developer in agreement with the highway authority.

Non - Porous Asphalt Sections
- Exact detail of surfacing to be at the discretion of the developer in agreement with the highway authority.
- Non-porous sections laid to allow service trenches throughput site and not affect future maintenance regime of statutory undertakers.

RHIF NO.	NEWIDIADAU/ MODIFICATIONS	GAN/BY	DYDDIAD/DATE

RWE Ltd.
Consulting Engineers

CLEIENT/CLIENT :
Ingram Property Development LTD.

CYNLLUN / SCHEME :
RESIDENTIAL DEVELOPMENT
Llwyn yr Eos, Bodedern

TEITL LLUNIAD / DRAWING TITLE :
GENERAL ARRANGEMENT
HIGHWAY & FFL'S

DARLUNWYD GAN : DRAWN BY :	RW	DYDDIAD DARLUNWYD : DATE DRAWN :	10.03.22
CYHOEDDWYD GAN : ISSUED BY :	RW	DYDDIAD CYHOEDD : DATE ISSUED :	10.03.22
Tudalen / Sheet:	1 of 1	GRADDFEYDD : SCALES :	1:200 @ A1

Rhif Lluniad / Drawing No. 023/GA/001

CYW REV

FIGURE 03

First Edition 25-inch Anglesey Ordnance Survey Map of 1888, sheets XII.05, XII.06, XII.09 and XII.10. Scale: 1 to 5000@A4.

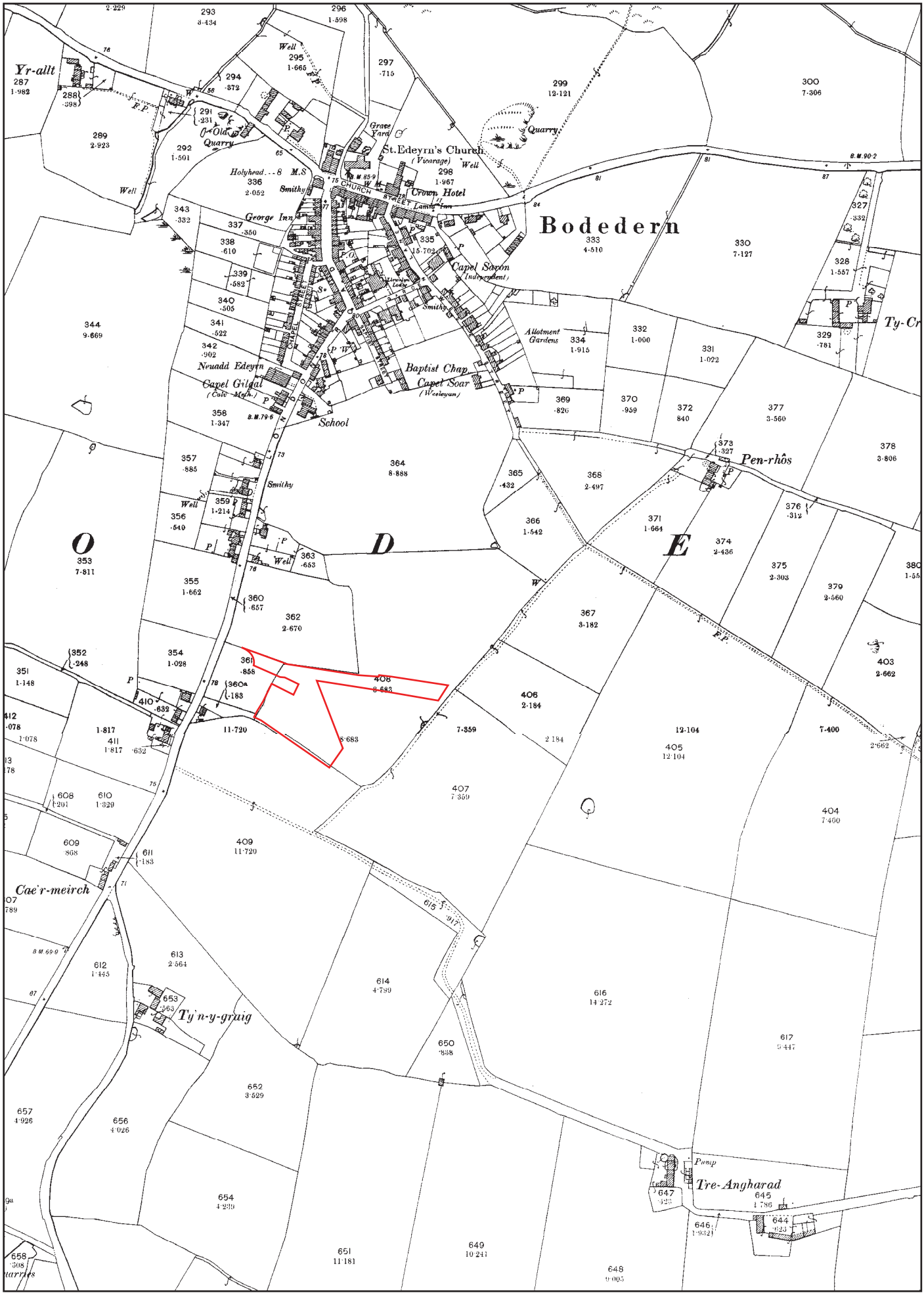


FIGURE 03: First Edition 25-inch Anglesey Ordnance Survey Map of 1888, sheets XII.05, XII.06, XII.09 and XII.10. Scale: 1 to 5000@A4.

FIGURE 04

Second Edition 25-inch Anglesey Ordnance Survey Map of 1900, sheets XII.05, XII.06, XII.09 and XII.10. Scale: 1 to 5000@A4.

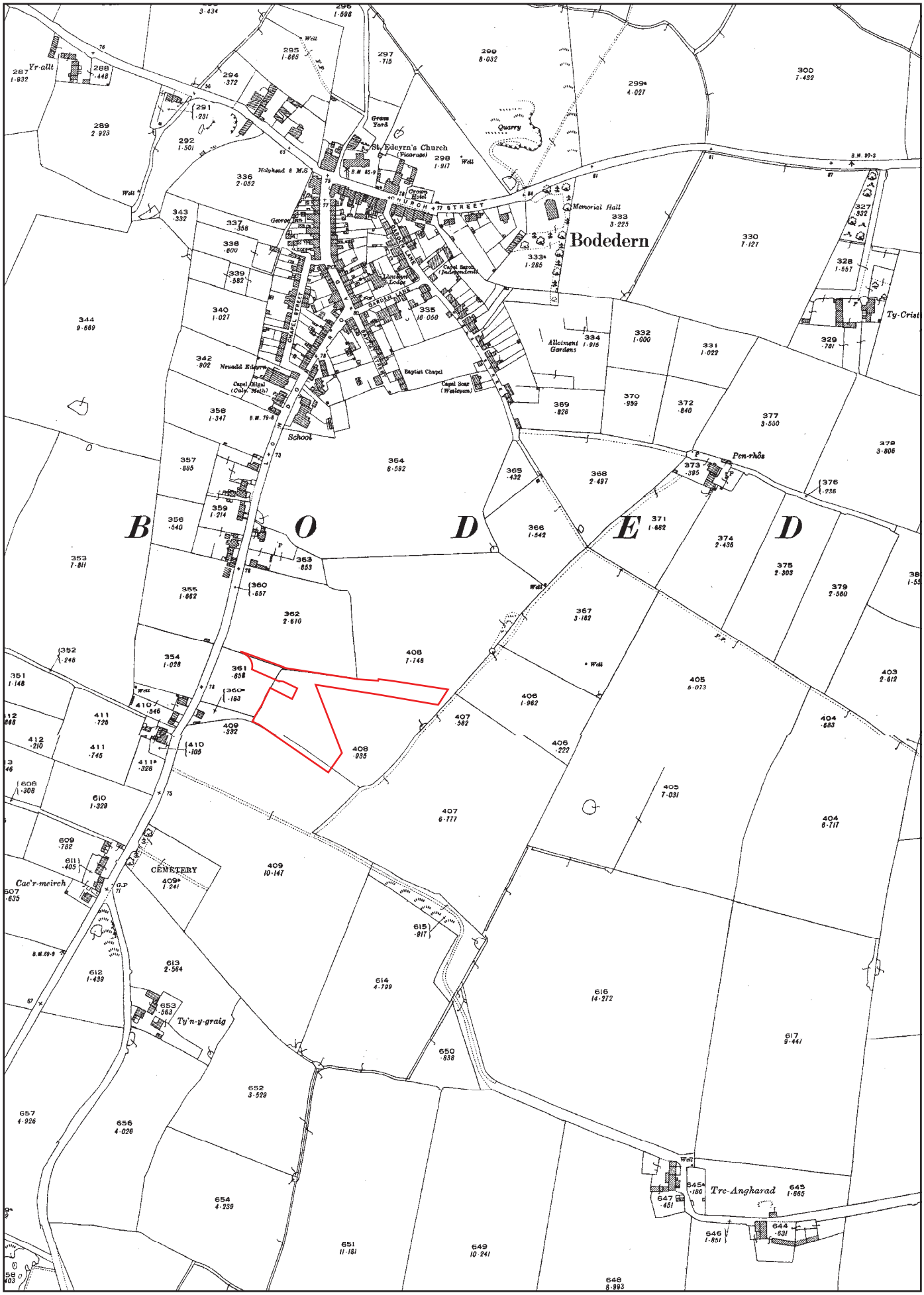


FIGURE 04: Second Edition 25-inch Anglesey Ordnance Survey Map of 1900, sheets XII.05, XII.06, XII.09 and XII.10. Scale: 1 to 5000@A4.

FIGURE 05

Third Edition 25-inch Anglesey Ordnance Survey Map of 1924, sheets XII.05, XII.06, XII.09 and XII.10. Scale: 1 to 5000@A4.

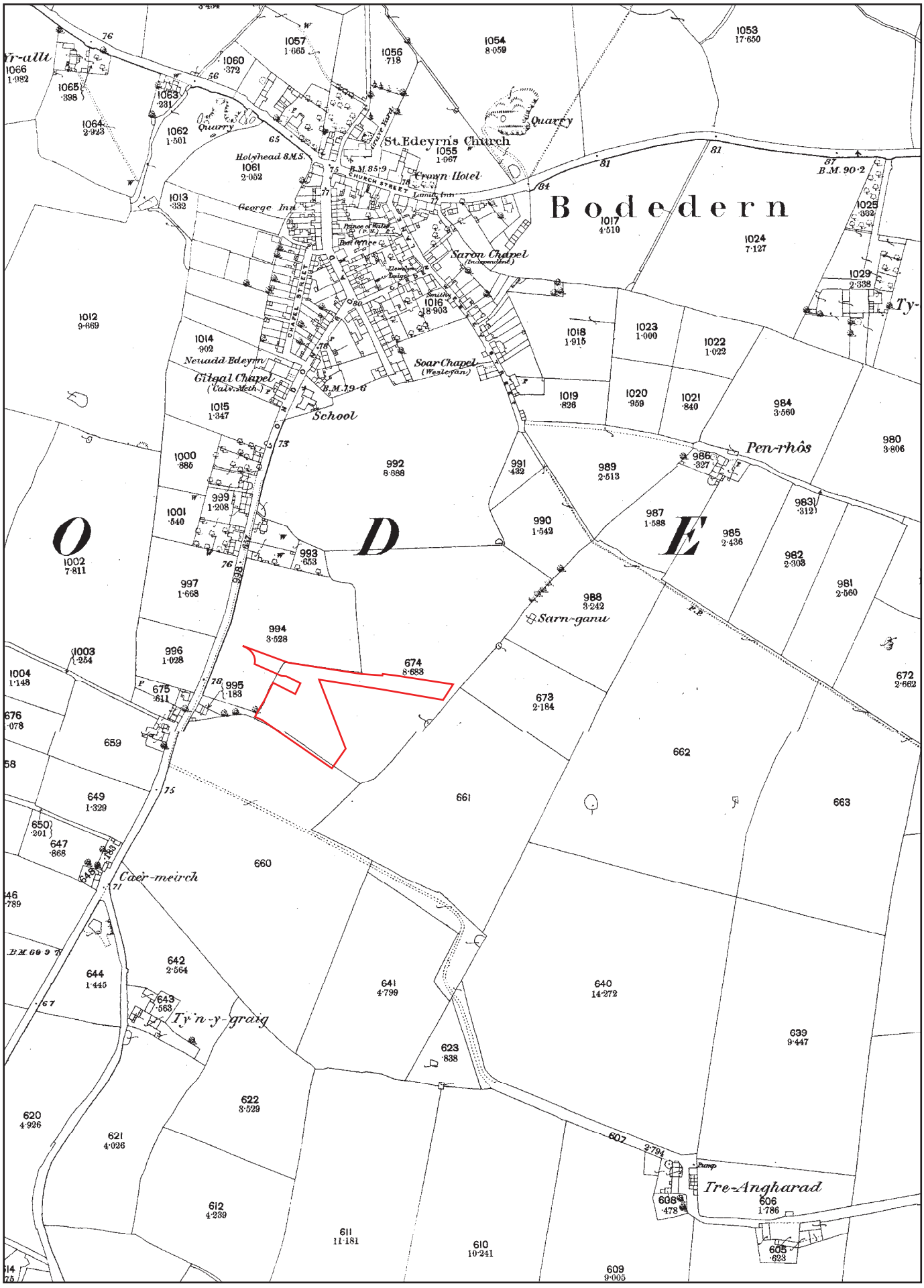


FIGURE 05: Third Edition 25-inch Anglesey Ordnance Survey Map of 1924, sheets XII.05, XII.06, XII.09 and XII.10. Scale: 1 to 5000@A4.

FIGURE 06

Location Map detailing development area (in red) and local archaeological assets. Scale: 1 to 10000@A4. © Crown Copyright Ordnance Survey AL10002089

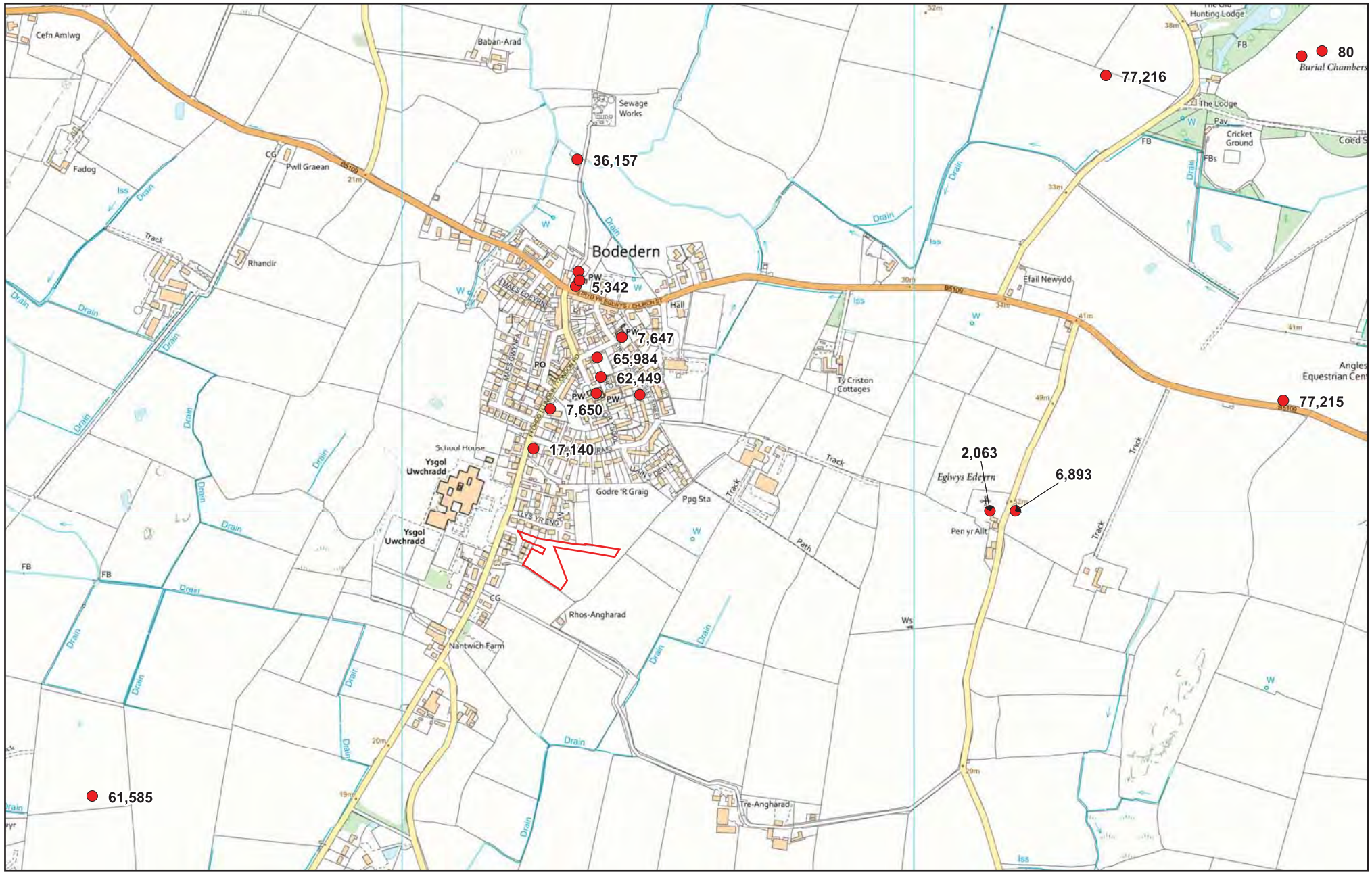


FIGURE 06: Location Map detailing development area (in red) and local archaeological assets. Scale: 1 to 10000@A4.

FIGURE 07

Trench Location Plan (in red), development area (in green) and location of overhead powerline (in blue). Scale: 1 to 1250@A4. © Crown Copyright Ordnance Survey AL10002089

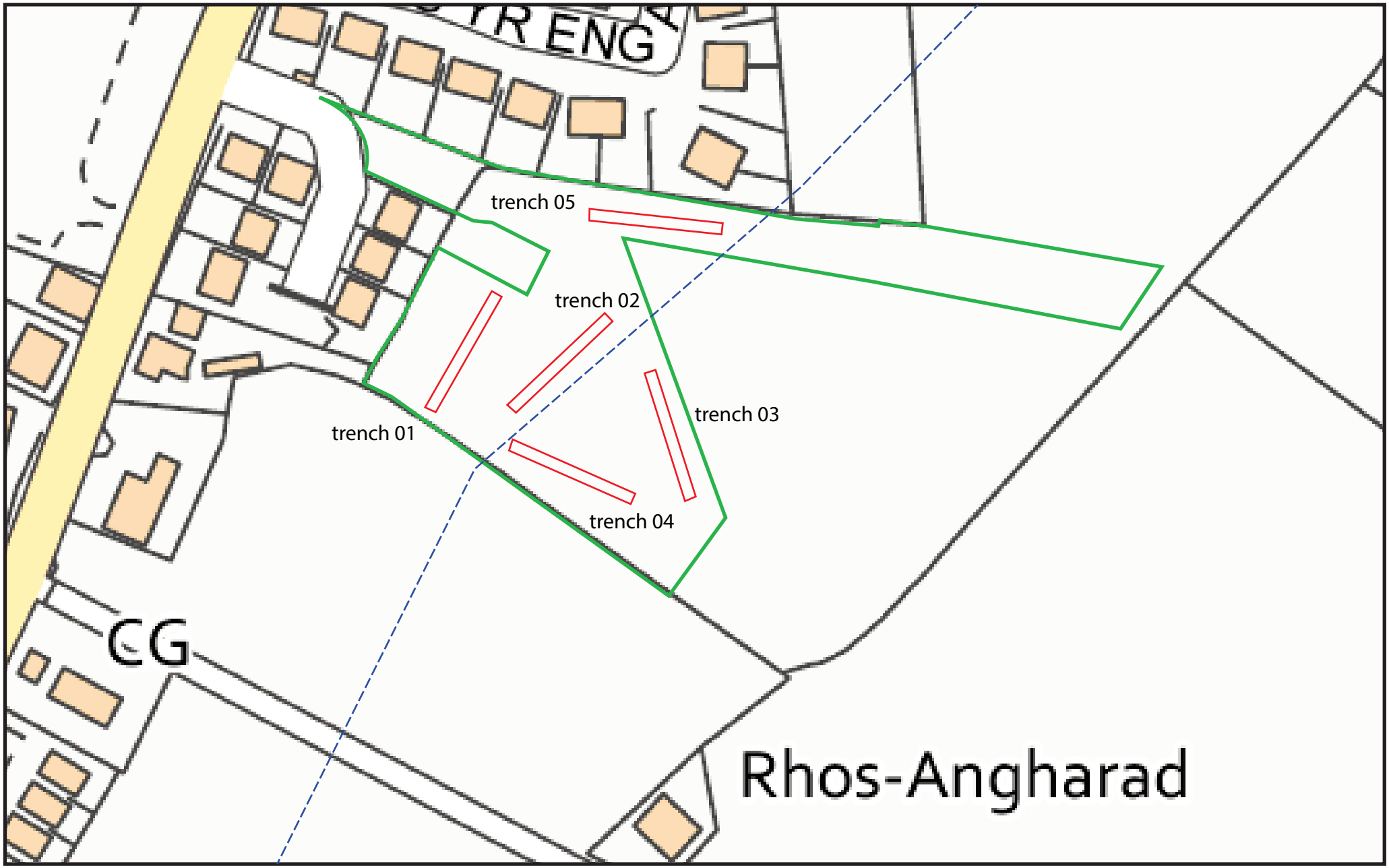


Figure 07: Trench Location Plan (in red), development area (in green) and location of overhead powerline (in blue).
Scale: 1 to 1250@A4. © Crown Copyright Ordnance Survey AL10002089

FIGURE 08

Trench Location Plan. Based on TigerGeo Drawing No. DWG 03, with amendments.

EEA211 Land Adjacent to Lwyn Yr Eos, Bodedern, Ynys Mon
DWG 03 Interpretation

Orthographic Scale: 1:1000 @ A4 Spatial Units: Meter. Do not scale off this drawing

TIGERGEO

APPENDIX I

Gwynedd Archaeological Trust Trench Sheet pro-forma

TRENCH SHEET

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

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

Context No.	Depth below surface	Brief description

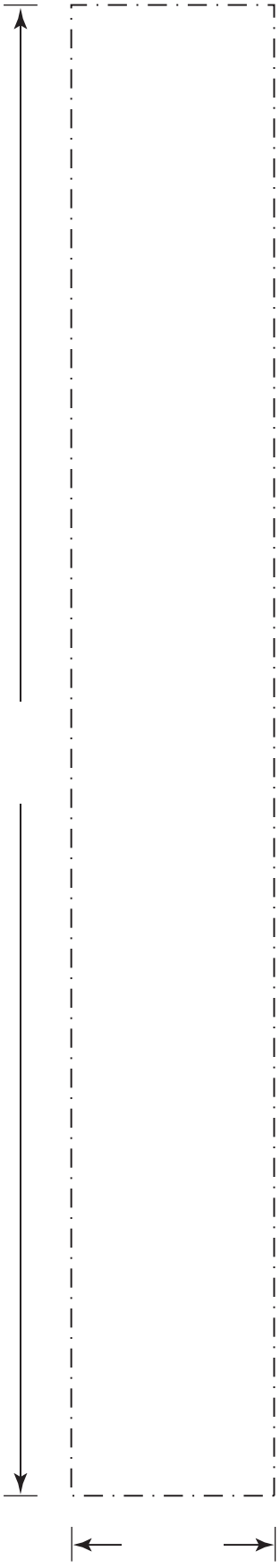
General summary

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Test Pit/Trial Trench Record

Sketch plan:

Add north arrow:



Sketch section:

Notes:

☐ Continuation sheet

APPENDIX II

Gwynedd Archaeological Trust Photographic Record pro-forma

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Digital Photographic Record

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

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

APPENDIX III

Gwynedd Archaeological Trust Context Sheet pro-forma

GWYNEDD ARCHAEOLOGICAL TRUST **CONTEXT RECORD FORM**

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

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

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

PHOTOGRAPHS - Film No./ Frame No.

SAMPLE Nos.	**FIND Nos.**

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

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

SKETCH

DESCRIPTION/INTERPRETATION CONTINUED

APPENDIX IV

Gwynedd Archaeological Trust Selection Strategy pro-forma

G2721_Former_Newborough_School 13/04/2022 v1.0

Selection Strategy

Project Information

Project Management

Project Manager	John Roberts john.roberts @heneb.co.uk	
Archaeological Archive Manager	John Roberts john.roberts @heneb.co.uk	
Organisation	Gwynedd Archaeological Trust	
Stakeholders		**Date Contacted**
Collecting Institution(s)	GAT Historic Environment Record	08/07/2022
	RCAHMW	On completion of Project Archive
	Oriel Môn, Rhosmeirch, Llangefni LL77 7TQ	If applicable, post-fieldwork based on artefact recovery
Project Lead / Project Assurance	Gwynedd Archaeological Planning Services	tbc
Landowner / Developer	Cyngor Ynys Môn	Contact via client

Resources

Resources required Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.	No unusual resources required outside of GAT normal operating equipment and personnel.

Context

Describe below the context of this Selection Strategy. You should refer to:

- The aims and objectives of the project;
- Local Authority guidance (including the brief);
- Research Frameworks;
- The repository collection development policy and/or deposition policy;
- Material-specific guidance documents.

Note: This section may be copied from your Project Design/WSI to ensure all Stakeholders receive this context information.

The full aims and objectives of this project are detailed in the project specific WSI.

Gwynedd Archaeological Trust has been asked by Ingram Property Development Limited to undertake an archaeological evaluation (trial trenching) in advance of a proposed residential development at Llwyn Yr Eos, Bodedern, Ynys Môn (NGR SH33277991; postcode: LL65 3SX; cf. WSI Figure 01). The development area measures 0.7ha and is located to the east of existing housing at Lwyn Yr Eos at the southern end of Bodedern village on Ynys Môn, within part of a field in previous use as pasture; the site footprint extends to the northern field boundary and westwards through to the existing residential road. The proposed development, under planning application FPL/2022/105, will include 9 new dwellings together with associated parking, access road and landscaping as detailed on RWE Ltd. Drawing No. 023/GA/001 (cf. WSI Figure 02). The evaluation will comprise 5No trenches and will be completed during July 2022

Source: Gwynedd Archaeological Trust. 2022. Llwyn Yr Eos, Bodedern, Ynys Môn: Written Scheme of Investigation for Archaeological Evaluation (Trial Trenching). Prepared For Cyngor Ynys Môn. April 2022. Project G2736.

1 – Digital Data

Stakeholders

Name the individual(s) responsible for the Digital Data Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Collections Curator).

John Roberts (GAT Principal Archaeologist)

Selection

Location of Data Management Plan (DMP)
Selection of digital data elements should be considered in your project's DMP. For the purpose of the Selection Strategy, you can either copy the selection section of your DMP below, or attach it as an appendix to this document. Please indicate here if the DMP is attached.

All digital data will be collected, stored and selected in lines with the Gwynedd Archaeological Trust (GAT) Data Management Plan located on GAT's servers (available on request).

The selection strategy in your DMP should:

1.1 Define what digital data will be selected for inclusion in the archaeological archive, how this will be done, and why. Do not forget to consider that specialists may have digital data that should be included in the archaeological archive.
1.2 Identify the selection review points during the project (i.e. project planning, data gathering, analysis and reporting and archive compilation).
1.3 Reference all relevant standards, policies or guidelines (e.g. digital repository deposition requirements) and specialist advice sought.
1.4 Identify any selection decisions that differ from standard guidelines and explain why.

Following the completion of the fieldwork, a working project archive will be created based on following task list;

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

All relevant site archive data will be added to a digital project register specific to this project, which will be prepared in *Microsoft Excel.*

This data will then be used as the basis for the physical and digital dataset archives. Information from these will be used to compile the project report. The physical archive will be stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset will be stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-

selected digital data will be confirmed in an updated digital management plan appended to the final report

De-Selected Digital Data

The procedure for dealing with De-selected digital data and what specialist advice informed this process should be recorded in your DMP. Please copy this information here or attach your DMP as an appendix to this document.

It is envisaged that the de-selected material will be retained on the GAT servers for 2 years following the completion of the project at which point they will be reviewed and deleted as necessary in line with the GAT DMP.

Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

2 – Documents

Stakeholders

Name the individual(s) responsible for the Documents Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;
Sean Derby – Historic Environment Record, Gwynedd Archaeological Trust;
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*

Selection

Describe your Selection Strategy for the Documents elements of the archaeological archive. To do this you must:

2.1 Define which documents will be selected for inclusion in the archaeological archive, how this will be done, and why. Do not forget to consider that specialists may have documents that should be included in the archaeological archive.
2.2 Identify the selection review points during the project (e.g. project planning, data gathering, analysis and reporting and archive compilation).
2.3 Reference all relevant standards, policies or guidelines (e.g. digital repository deposition requirements) and specialist advice sought.
2.4 Identify any selection decisions that differ from standard guidelines and explain why.

- A digital report will be provided to the regional Historic Environment Record; this will be submitted within six months of project completion (final report only), along with a digital dataset comprising an Event PRN summary. The report and dataset will be submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- A digital report and digital archive dataset will be provided to Royal Commission on Ancient and

Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset will be prepared in the format required by RCAHMW and will include:

- Photographic metadata (Microsoft Access);
- Photographic archive (TIFF format);
- Project Information form (Excel);
- File Information form (Excel) – Microsoft Word report text final;
- File Information form (Excel) – Photographic metadata (general);
- File Information form (Excel) – Adobe PDF report final; and
- File Information form (Excel) - Photographic metadata (detail).

De-Selected Documents

Describe the procedure for dealing with De-selected material and what specialist advice has informed this procedure.

It is envisaged that the material de-selected from inclusion in the preserved archive will be duplicates or re-productions created during the analysis phase of the project. De-selected material will therefor either be retained to supplement GAT's research files or recycled.

Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

3 – Materials

Note: This step should be completed for each material component of the archaeological archive. Copy this table for the various materials as required, providing the 'Material Type' and a section identifier (eg. '3.1') for each.

Material type	Bulk Finds	**Section 3.**	

Stakeholders

Name the individual(s) responsible for the Materials Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;
Tom FIldes Planning Archaeologist, Gwynedd Archaeological Planning Service;
Oriel Ynys Môn

Diagnostic artefacts will be retained for further examination and identification. Pottery sherds of 19th and 20th century date will be examined on site and the context from which they were retrieved noted but the sherds will not be retained.
Trust staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants used by the Trust, including National Museums and Galleries of Wales at Cardiff.
The artefacts will be treated according to guidelines issued by the UK Institute of Conservation (Watkinson and Neal 2001) in particular the advice provided within *First Aid for Finds* (Rescue 1999) and Historic England.
Any waterlogged artefacts (e.g. wood or leather) that are to be recovered for post-excavation assessment and analysis will be processed in accordance with *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage, 2011) and specifically in accordance with Brunning and Watson (2010) for waterlogged wood and Historic England (2012) for waterlogged leather. In such cases an external specialist will be contacted to agree an appropriate sampling and recovery strategy via Lucy Whittingham | Project Manager (post-excavation) | AOC Archaeology | telephone: 0208 843 7380 | email: lucy.whittingham@aocarchaeology.com).
All finds are the property of the landowner; however, it is Trust policy to recommend that all finds are donated to an appropriate museum (in this case Oriel Ynys Môn, Rhosmeirch Llangefni LL77 7TQ), where they can receive specialist treatment and study.
GAT will contact the landowner via client for agreement regarding the transfer of artefacts, initially to GAT and subsequently to the relevant museum (Oriel Ynys Môn). A GAT produced pro-forma will be issued to the landowner where they are given the option to donate the finds or to record that they want them returning to them once analysis and assessment has been completed. Artefacts will be transferred to the Oriel in accordance with their guidelines.

Selection

Describe your Selection Strategy for each material type and or object type. To do this you must:

3.1 State the Selection Strategy you are applying to each category of material, how this will be done, and why.
3.2 Identify the selection review points during the project (e.g. project planning, data gathering, analysis and reporting and archive compilation).
3.3 Reference all relevant standards, policies or guidelines (e.g. thematic, period, and regional, Research Frameworks, repository deposition policies) and specialist advice sought.
3.4 Identify any selection decisions that differ from standard guidelines and explain why.

The Materials Selection Template may be useful in structuring this section.

The full material archive returned to the GAT offices will be reviewed following analysis: Stakeholders (see above) will make selection decisions based on specialists reports and selection recommendations and SDMS collecting policy. The selection will take place during archive completion.

Uncollected Material

If you are practising selection in the field, describe the process that will be applied. To do this you must:

- Detail how you will characterise, quantify and record all uncollected material on site.
- Explain how you will dispose of, or re-distribute, uncollected material.

Any uncollected material will be left on-site to be incorporated into backfill.

De-Selected Material

Describe what you will do with the de-selected material. All processed material should have been adequately recorded before de-selection.

All bulk finds will be assessed and recorded to appropriate standards. De-selected material will be returned to the landowner as agreed by the landowner and curatorial archaeologist.

Amendments

Detail any amendments to the above selection strategy here.

Date	Amendment	Rationale	Stakeholders

Materials Selection Template

This table may be inserted into Section 3 of the main Selection Strategy Template to help present differing selection strategies for different material types

Find Type	Selection Strategy	Stakeholders	Review Points

APPENDIX V

Reproduction of TigerGeo Project code: EEA211. Geophysical Survey Report.

TIGERGEO

Land Adjacent to Lwyn Yr Eos, Bodedern, Ynys Mon

Geophysical Survey Report
(Fluxgate Magnetometer – Archaeology)

Version 1.0

Project code: EEA211

Produced for: Ingram Property Development Ltd

Lead Author:

MJ Roseveare, Senior Geophysicist

BSc(Hons) MSc MEAGE FGS MCIfA

REGISTERED ORGANISATION CIfA

27th April 2022

Environmental Geophysics – Survey, Research and Consultancy

Land Adjacent to Lwyn Yr Eos, Bodedern, Ynys Mon

Digital data

Item and version	Sent to	Sent date

Audit

Version	Author	Checked	Date
1	MJ Roseveare	ACK Roseveare	27th April 2022

Project metadata

Project Code	EEA211
Client	Ingram Property Development Ltd
Fieldwork Date	25th March 2022
Field Personnel	ACK Roseveare, MJ Roseveare
Data Processing Personnel	A Gerea, ACK Roseveare
Reporting Personnel	MJ Roseveare
Report Date	27th April 2022
Report Version	1.0

TigerGeo Limited

TigerGeo Limited - Registered in England & Wales 09895326 - D-U-N-S 22-127-7456
Registered Office: 2 Wyevale Business Park, Kings Acre, Hereford, Herefordshire HR4 7BS UK
+44 (0) 1989 477 020 – www.tigergeo.com - @TigerGeoUK – also on LinkedIn & Facebook
EuroGPR Member 129, licensed to undertake radar survey in the UK by OFCOM – 1065067/1

Non-Technical Summary

A survey was commissioned by Ingram Property Development Ltd to prospect for buried features of potential archaeological interest, there being a proposal to develop the land for residential use. The local authority has requested that a geophysical survey be undertaken as part of a phased scheme of evaluation initiated by Nexus Heritage.

This report describes the work undertaken using an array of Sensys FGM650-3 fluxgate sensors mounted on a GNSS-tracked non-magnetic platform and controlled by a Mercury650-8 digitiser.

The survey revealed a major ditch bisecting the development and from examination of the Tithe Map this does not appear to be an old field boundary; it is also wider than might be expected for this class of feature. Other anomalies mapped at the site seem to represent land drainage and former agricultural use of the land and there is also a lateral textural change related to a transition off the Till deposits.

Crynodeb Annhechnegol

Comisiynwyd arolwg gan Ingram Property Development Ltd i chwilio am nodweddion wedi'u claddu a allai fod o ddiddordeb archaeolegol, gan fod cais i ddatblygu'r tir dan sylw at ddefnydd preswyl. Mae'r awdurdod lleol wedi gofyn am arolwg geoffisegol fel rhan o gynllun gwerthuso graddol gan Nexus Heritage.

Mae'r adroddiad hwn yn disgrifio'r gwaith sydd wedi'i wneud gan ddefnyddio amrywiaeth o synwyryddion fflwcs Sensys FGM650-3 ar lwyfan anfagnetig â thraciwr GNSS ac wedi'u rheoli gan ddigidwr Mercury650-8.

Fel rhan o'r arolwg, canfuwyd ffos sylweddol yn hollti'r datblygiad ac ar ôl edrych ar y Map Degwm, ymddengys nad hen ffin cae ydyw; mae hefyd yn lletach na'r disgwyl ar gyfer y nodwedd hon. Mae anghysondebau eraill ar fap y safle ac ymddengys bod y rheini'n cynrychioli draeniau lleol a defnydd amaethyddol y tir yn y gorffennol. Yn ogystal, mae newid ochrol mewn gwead yn ymwneud â gweddnewid mewn dyddodion clog-glai.

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1 Introduction

A magnetic survey has been commissioned by Ingram Property Development Ltd to prospect for buried features of potential archaeological interest within an area of land to the rear of existing housing within which further housing will be built. The local authority has requested that a geophysical survey be undertaken as part of a phased scheme of evaluation initiated by Nexus Heritage.

This report describes the work undertaken using an array of Sensys FGM650-3 fluxgate sensors mounted on a GNSS-tracked non-magnetic platform and controlled by a Mercury650-8 digitiser and presents the results of the survey with an interpretation informed by the best available information at the time of writing.

2 Context

2.1 Location

The survey area is located to the east of existing housing at Lwyn Yr Eos at the southern end of Bodedern village on Ynys Mon, within part of a field in previous use as pasture. The site footprint extends to the northern field boundary and westwards through to the existing residential road but prior to survey part of the area had been subject to earthmoving to create an access into it.

Country	Wales
County	Ynys Mon
Nearest Settlement	Bodedern
Central Co-ordinates	233315, 379880
Survey Area (ha)	0.7, originally 0.5, 0.1 lost from this due to prior earthmoving

2.2 Environment

The below information is taken from the British Geological Survey (BGS), modern and historic mapping and aerial imagery and provides a basic summary of the survey area.

Soilscapes Classification	Slowly permeable seasonally wet acid loamy and clayey soils [17]
Superficial 1:50,000 BGS	Till, Devensian, Diamicton [TILLD]
Bedrock 1:50,000 BGS	New Harbour Group – Mica Schist and Psammite. Metamorphic basalts and calcium silicates. [NNH]
Topography	Level
Current Land Use	Pasture
Historic Land Use	Pasture
Vegetation Cover	Rough grassland

2.3 Archaeology

Nothing is known within the site boundary and the field boundaries are as mapped on late 19th century Ordnance survey editions (National Library of Scotland) and the Tithe Map (National Library of Wales).

Examination of aerial photographic information available through Google Earth reveals nothing of interest nor signs of any recent activity that might affect the survey result.

A search of Coflein revealed nothing of interest within the site although an early medieval cemetery is known at Eglwys Edeyrn a few hundred metres to the east.

3 Discussion

3.1 Data character

The soil within the development footprint is strongly magnetisable, allowing fills to produce strong anomalies in the absence of more intense forms of susceptibility enhancement, e.g. by heating. Anomaly strengths associated with a ditch fill are between 10 and 20 nT and other fills with much lower contrast against the background still attain about 2 nT strength.

Background magnetic variation is significant, 3 – 4 nT within 5 m and there are many discrete, likely natural, sources associated with strengths of +/-10 nT or more. For this reason, the detection of small discrete features of archaeological interest, e.g. small pit fills and hearths, is unlikely to be realistic and that linear features will predominate within the result.

3.2 Geology, soils and hydrology

The good magnetic contrast is probably due to the metamorphic bedrock and a less magnetisable region to the north may indicate a greater depth of Till deposits over this. As already observed, strongly magnetisable soils, while good for the detection of large or linear features, can also contribute a strong natural texture to the data.

Within the data there are numerous small anomalies likely to be from individual igneous stones both within the base of the soil and also within the Till deposits.

3.3 Land use

Broad and slightly tapering reduced field strength anomalies [2], [3], [4] and [5] seem likely to have an agricultural or drainage-related origin, perhaps fairly shallow and maybe within the topsoil. They are widest towards the north, about 4 - 5 m, decreasing to about 3 m southwards although their form is less evident here due to greater background variation. They all reduce the anomaly strength of ditch fill [1], so are either significantly less magnetic than the soil to each side or maybe remove some of the magnetic material within [1].

To their east, their layout may be continued by thin enhanced field strength linear anomalies [6] and [7] typical of narrow ditch-type fills, maybe drainage-related.

Perpendicular to all these are a number of linear anomalies typical of land drains.

3.4 Archaeology

The only anomaly of archaeological interest is the strongly magnetic probable ditch fill [1], up to 1.5 m wide and crossing the site in a straight line from roughly east to west. It appears to turn slightly or maybe stop close to the eastern field boundary, but this is also where there is a sharp change in background magnetic texture and hence there is a question about overall detectability beyond this.

3.5 Conclusions

The presence of a major ditch fill crossing the site is unexpected, nothing being known consequent upon the fairly recent construction of houses closer to the road. There is therefore no obvious explanation for this feature which could be of any date from prehistory into the earlier post-medieval period. Its width might suggest a boundary marker rather than a simple field boundary, but the reduction of anomaly strength where crossed by the set of linear features might suggest the magnetic element of the fill is relatively shallow.

There is no evidence for past settlement or industrial activity, subject to the caveat that small discrete features could produce anomalies masked by the relatively large natural background variation.

3.6 Caveats

Geophysical survey is reliant upon the detection of anomalous values and patterns in physical properties of the ground, e.g. magnetic, electromagnetic, electrical, elastic, density and others. It does not directly detect underground features and structures and therefore the presence or absence of these within a geophysical interpretation is not a direct indicator of presence or absence in the ground. Specific points to consider are:

- some physical properties are time variant or mutually interdependent with others;
- for a buried feature to be detectable it must produce anomalous values of the physical property being measured;
- any anomaly is only as good as its contrast against background textures and noise within the data.

TigerGeo will always attempt to verify the accuracy and integrity of data it uses within a project but at all times its liability is by necessity limited to its own work and does not extend to third party data and information. Where work is undertaken to another party's specification any perceived failure of that specification to attain its objective remains the responsibility of the originator, TigerGeo meanwhile ensuring any possible shortcomings are addressed within the normal constraints upon resources.

4 Technical Considerations

4.1 Soil properties

Magnetic survey for any purpose relies upon the generation of a clear magnetic anomaly at the surface, i.e. strong enough to be detected by instrumentation and exhibiting sufficient contrast against background variation to permit diagnostic interpretation. The anomaly itself is dependent upon the chemical properties of a particular volume of ground which govern its magnetic susceptibility and hence induced magnetic field, the strength of any remanent magnetisation, the shape and orientation of the volume of interest and its depth of burial. Finally the choice and configuration of measurement instrumentation will affect anomaly size and shape.

Archaeological sites present a complex mixture of these factors and for some the causative affects are not known. However, depth of burial and size are usually fairly constrained and background susceptibility can be estimated or in some cases measured. Fortunately heat will raise the susceptibility of most soils and topsoil tends to be more magnetic than subsoil, by volume. The degree of remanent magnetisation is harder to predict and depends on both the magnetic properties of the natural soil and any chemical processes to which it has been subjected.

It is hard to form reliable conclusions about what sort of geology is supportive of magnetic survey as there are many factors involved, plus magnetic response can vary across geological units and is also dependent upon post-deposition and erosional processes. In general a relatively non-magnetic parent material contrasting with a magnetisable erosion product, i.e. one which contains iron in the form of oxides and hydroxides, will allow archaeological structures to exhibit a magnetic contrast against their surroundings and especially if the soil has been heated or subjected to certain processes of fermentation. In the absence of either, magnetic enhancement becomes entirely reliant upon the natural geochemistry of the soil and enhancement will often be weaker and more variable.

The principal magnetic iron mineral is the oxide magnetite which sometimes occurs naturally but is more often formed during the heating of soil. Subsequent cooling yields a mixture of this, non-magnetic oxide haematite and another magnetic oxide, maghaemite. Away from sources of heat, other magnetic iron minerals include the sulphides pyrite and greigite while in damp soils complex chemistry involving the hydroxides goethite and lepidocrocite can create strong magnetic anomalies. There are thus a number of different geochemical reaction pathways that can both augment and reduce the magnetic susceptibility of a soil. In addition, this susceptibility may exhibit depositional patterns unrelated to and independent of visible stratigraphy or features.

Most structures of archaeological interest detected by magnetic survey are fills within negative or cut features, areas of heated soil and structures built from magnetically thermo-remanent (TRM) materials like brick and tile. Not all fills are magnetic and they can be more magnetic or less magnetic than the

surrounding ground. It is common for fills to exhibit variable magnetic properties through their volume, basal primary silt often being more magnetic than the material above it due to an increased proportion of eroded topsoil within it. However, a fill containing heated soil may be more magnetic than this primary silt and sometimes a feature that has contained standing water can contain highly magnetic silts formed by mechanical depositional processes (depositional remanent magnetisation, DRM).

A third structural factor in the detection of buried structures is the depth of topsoil over the feature. As fills sink, the hollow above accumulates topsoil and hence a structure can be detected not through its own magnetisation but through the locally deeper topsoil above it. The volume of soil required depends upon the magnetic susceptibility but just a few centimetres are often sufficient. Such a thin deposit is easily lost through subsequent erosion by natural factors or ploughing.

4.2 Instrumentation

Instrumentation plays a significant part in the performance of magnetic survey in an archaeological context and it is the instrument configuration that governs the form and strength of an anomaly. Vertical gradiometers are insensitive to laminar structures, e.g. broad lenses of topsoil within the upper fills of features but they have a high lateral resolution. Their response is strongly governed by the depth of a material below the lower sensor and hence topsoil containing a significant amount of magnetic debris can appear as a mass of noise that masks anomalies from deeper sources.

5 Methodology

5.1 Introduction

The use of magnetic survey is, from experience, probably the most effective route to an overview of possible archaeological remains and their context. Some classes of feature may escape detection by this method alone, multiple methods being normally more informative, but within the bounds of practicality features perhaps only 0.5m wide or diameter have a chance of being detected plus there can be some analysis of characteristics potentially diagnostic of different materials and structures.

Work generally follows the recommendations of these documents:

- Chartered Institute for Archaeologists (2014, updated 2020) "Standard and Guidance for Archaeological Geophysical Survey";
- English Heritage (2008) "Geophysical Survey in Archaeological Field Evaluation";
- European Archaeological Council (2015) "Guidelines for the Use of Geophysics in Archaeology";

and is undertaken in accordance with the high professional standards and technical competence expected by the Geological Society of London.

5.2 Survey

A light weight and specially built non-magnetic sledge or wheeled cart is towed at a distance behind a sit-astride ATV driven by a LANTRA-qualified person. This sledge or cart carries a transverse array of fluxgate sensors connected to a control system tracked in real time by a GNSS receiver. This provides a continuous stream of NMEA messages to the control system which uses these to regulate measurement resolution etc. Position and magnetic data is stored internally plus transmitted to a rugged laptop for real time navigation and monitoring purposes.

Navigation data includes a map with the current instrument positions, the track traversed by the instruments and guidance for parallel lines etc. as well as measurement resolution, line speed, direction and other dynamic indicators. Rest mode system noise is easy to inspect simply by pausing during survey, and the continuous display makes monitoring for quality intrinsic to the process of undertaking a survey.

All instrumentation is given time to acclimatise to ambient values prior to starting survey. Once underway, survey is continuous apart from operator breaks and proceeds in a logical fashion across the site, avoiding

wet or unsafe ground and obstacles, seeking as complete a coverage as possible given site and weather conditions.

Measured variable	Vertical gradient of vertical component of magnetic flux density / nT/m
Instrument	Array of Sensys FGM650-3 sensors with a Mercury6508 digitiser
Configuration	Gradiometric transverse array (4 sensors, ATV towed)
Sensitivity	0.1 nT @ 200 Hz (manufacturer's specification)
QA Procedure	Continuous observation
Spatial resolution	1.0 m between lines, 0.15 m fixed along line interval (live stacking)

5.3 Processing

All data processing is minimised and limited to what is essential for the class of data being collected, e.g. reduction of orientation effects, suppression of single point defects (drop-outs or spikes) etc.

The initial processing uses proprietary software developed in conjunction with the acquisition system and includes sensor and GNSS data alignment, co-ordinate transformation to OSGB36 via OSTN15 and reduction of temporal variations through application of 1D temporal median bandpass filters. These suppress sensor drift and heading variations at native along-line resolution before 2D interpolation to a grid of 0.25 m cells. This grid may then be lightly smoothed to reduce the effects of single point variations that may be tiny anomalies distorted or introduced by the interpolation process, before being brought into Manifold GIS for final imaging and detailed analysis.

Raw data and process metadata is internally archived.

For this project the following processes were applied:

Process	**Software**	**Parameters**
Measurement & GNSS receiver data alignment	Proprietary	
Temporal reduction, regional field suppression	Proprietary	Bandpassed 0.3 – 15.0s
Gridding	Surfer	Kriging, 0.25m x 0.25m
Smoothing	Surfer	Gaussian lowpass 3x3 data (0.75m)

5.4 Interpretation

Numerous sources are used in the interpretive process, which takes into account shallow geological conditions, past and present land use, drainage, weather before and during survey, topography and any previous knowledge about the site and the surrounding area. Old Ordnance Survey mapping is consulted and also older sources if available. Geological information (for the UK) is sourced only from British Geological Survey resources and aerial imagery from online sources. LiDAR data is usually sourced from the Environment Agency or other national equivalents, SAR from NASA and other topographic data from original survey.

Information from nearby surveys is consulted to inform upon local data character, variations across soils and near-surface geological contexts. Published data from other surveys may also be used if accompanied by adequate metadata.

On some sites, e.g. some gravels and alluvial contexts, there will be anomalies that can obscure those potentially of archaeological interest. They may have a strength equal to or greater than that associated with more relevant sources, e.g. ditch fills, but can normally be differentiated on the basis of anomaly form coupled with geological understanding. Where there is ambiguity, or relevance to the study, these anomalies will be included in this category.

Not all changes in geological context can be detected at the surface, directly or indirectly, but sometimes there will be a difference evident in the geophysical data that can be attributed to a change, e.g. from alluvium to tidal flat deposits, or bedrock to alluvium. In some cases the geophysical difference will not exactly coincide with the geological contact and this is especially the case across transitions in soil type.

Geophysical data varies in character across areas, due to a range of factors including soil chemistry, near surface geology, hydrology and land use past and present. These all contribute to the texture of the data,

i.e. a background character against which all other anomalies are measured.

Coherent linear dipolar enhancement of magnetic field strength marking ditch fills, narrow bands of more variable magnetic field or changes in apparent magnetic susceptibility, are all included within the category of former field boundaries if they correlate with those depicted on the Tithe Map or early Ordnance Survey maps. If there is no correlation then these anomaly types are not categorised as a field boundaries.

Banded variations in apparent magnetic susceptibility caused by a variable thickness of topsoil, depositional remanent magnetisation of sediments in furrows or susceptibility enhancement through heating (a by product of burning organic matter like seaweed) tend to indicate past cultivation, whether ridge-based techniques, medieval ridge and furrow or post medieval 'lazy beds'. Modern cultivation, e.g. recent ploughing, is not included.

In some cases it is possible to identify drainage networks either as ditch-fill type anomalies (typically 'Roman' drains), noisy or repeating dipolar anomalies from terracotta pipes or reduced magnetic field strength anomalies from culverts, plastic or non-reinforced concrete pipes. In all cases identification of a herring bone pattern to these is sufficient for inclusion within this category.

Any linear or discrete enhancement of magnetic field strength, usually with a dipolar character of variable strength, that cannot be categorised as a field boundary, cultivation or as having a geological origin, is classified as a fill potentially being of archaeological interest. Fills are normally earthen and include an often invisible proportion of heated soil or topsoil that augments local magnetic field strength. Inverted anomalies are possible over non-earthen fills, e.g. those that comprise peat, sand or gravel within soil. This category is subject to the 'habitation effect' where, in the absence of other sources of magnetic material, anomaly strength will decrease away from sources of heated soil and sometimes to the extent of non-detectability.

Former enclosure ditches that contained standing water can promote enhanced volumetric magnetic susceptibility through depositional remanence and remain detectable regardless of the absence of other sources of magnetic enhancement.

Anything that cannot be interpreted as a fill tends to be a structure, or in archaeological terms, a feature. This category is secondary to fills and includes anomalies that by virtue of their character are likely to be of archaeological interest but cannot be adequately described as fills. Examples include strongly magnetic bodies lacking ferrous character that might indicate hearths or kilns. In some cases anomalies of ferrous character may be included.

On some sites the combination of plan form and anomaly character, e.g. rectilinear reduced magnetic field strength anomalies, might indicate the likely presence of masonry, robber trenches or rubble foundations. Other types of structure are only included if the evidence is unequivocal, e.g. small ring ditches with doorways and hearths. In some circumstances a less definite category may be assigned to the individual anomalies instead.

It is sometimes possible to define different areas of activity on the basis of magnetic character, e.g. texture and anomaly strength. These might indicate the presence of middens or foci within larger complexes. This category does not indicate a presence or absence of discrete anomalies of archaeological interest.

5.5 Glossary

Acronym / term	Type	Definition
A	Physical quantity	SI unit Amp of electric current
BGS	Organisation	British Geological Survey
CIfA	Organisation	Chartered Institute for Archaeologists
dB	Physical quantity	Decibel, unit of amplification / attenuation
DRM	Process	Depositional Remanent Magnetisation
EAGE	Organisation	European Association of Geoscientists and Engineers
EGNOS	Technology	European Geostationary Navigation Overlay Service
ERT	Technology	Electrical resistivity tomography
ETRS89	Technology	European Terrestrial Reference System (defined 1989)

Acronym / term	Type	Definition
ETSI	Organisation	European Telecommunications Standards Institute
EuroGPR	Organisation	European Ground Penetrating Radar Association, the trade body for GPR professionals
G-BASE	Data	British Geological Survey Geochemical Atlas
GeolSoc	Organisation	Geological Society of London, the chartered body for the geological profession
GNSS	Technology	Global Navigation Satellite System
GPR	Technology	Ground penetrating radar
GPS	Technology	Global Positioning System (US)
inversion	process	A combination of forward and backward modelling intended to construct a 2D or 3D model of the physical distribution of a variable from data measured on a 1D or 2D surface. It is fundamental to ERT survey
IP	Physical quantity	Induced polarisation (or chargeability) units mV/V or ms
m	Physical quantity	SI unit metres of distance
mbgl	Physical quantity	Metres below ground level
MHz	Physical quantity	SI unit mega-Hertz of frequency
MS	Physical quantity	Magnetic susceptibility, unitless
mS	Physical quantity	SI unit milli-Siemens of electrical conductivity
nT	Physical quantity	SI unit nano-Tesla of magnetic flux density
OFCOM	Organisation	The Office of Communications, the UK radio spectrum regulator
Ohm	Physical quantity	SI unit Ohm of electrical resistance
OS	Organisation	Ordnance Survey of Great Britain
OSGB36	Data	The OS national grid (Great Britain)
OSTN15	Technology	Current coordinate transformation from ETRS89 to OSGB36 co-ordinates
RDP	Physical quantity	Relative Dielectric Permittivity, unitless
RTK	Technology	Real Time Kinematic (correction of GNSS position from a base station)
s	Physical quantity	SI unit seconds of time
TMI	Physical quantity	Total magnetic intensity (measured flux density minus regional flux density)
TRM	Process	Thermo-Remanent Magnetisation
V	Physical quantity	SI unit Volt of electric potential
WGS84	Data	World Geodetic System (defined 1984)

5.6 Bibliography

British Geological Survey 1: 50,000 mapping (https://mapapps.bgs.ac.uk/geologyofbritain/home.html)

Heritage Gateway (https://www.heritagegateway.org.uk/gateway/advanced_search.aspx)

Google Maps (https://www.google.com/maps/)

Lewis, D, 2022, "*Land adj. Stad Llwyn Yr Eos Estate, Bodedern, Anglesey*", TigerGeo Limited, Project EEA211

National Library of Scotland (NLS) historic mapping (https://maps.nls.uk/geo/explore/side-by-side/)

National Panel for Archaeological Archives in Wales, 2017, "*The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales*", Welsh Museums Federation

National Soil Resources Institute (NSRI) Soilscapes mapping (https://mapapps2.bgs.ac.uk/ukso/home.html)

The National Library of Wales, Welsh Tithe Maps and Apportionments (https://places.library.wales/browse/)

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

5.7 For reference

Aspinall, A, *et al*, 2008, "Magnetometry for Archaeologists", Geophysical Methods for Archaeology, Altamira Press

Blakely, R J, 1996, "Potential Theory in Gravity and Magnetic Applications", Cambridge University Press

David, A, *et al*, 2008, "Geophysical Survey in Archaeological Field Evaluation", English Heritage

Milsom, J, 2003, "Field Geophysics", 3rd edition, The Geological Field Guide Series, Wiley

Rawlins, B G *et al*, 2012, "The advanced soil geochemical atlas of England and Wales". British Geological Survey, Keyworth

Schmidt, A, 2013, "Geophysical Data in Archaeology: A Guide to Good Practice", ADS

Scollar, I, 1990, "Archaeological Prospecting and Remote Sensing", Topics in Remote Sensing 2, Cambridge University Press

Tarling, D H, *et al*, (ed.), 1999, "Palaeomagnetism and Diagenesis in Sediments", Geological Society, London, Special Publications, 151

Telford, W M, *et al*, 1990, "Applied Geophysics", 2nd Edition, Cambridge University Press

6 Supporting Information

6.1 Archiving

TigerGeo maintains an archive for all its projects, access to which is permitted for research purposes. Copyright and intellectual property rights are retained by TigerGeo on all material it has produced, the client having full licence to use such material as benefits their project. This archive contains all survey and project data, communications, field notes, reports and other related material including copies of third party data (e.g. CAD mapping, etc.) in digital form unless required to delete these, e.g. certain classes of OS digital data upon licence expiry.

The existence of surveys for archaeological purposes will normally be registered on the OASIS system provided there are no conflicting requirements for confidentiality.

The archive will be prepared to meet these specifications:

- National Standard for Guidance to Best Practise for Collecting and Depositing Archaeological Archives in Wales (NPAAW, 2017);
- RCAHMW Guideline for Digital Archives (2015).

6.2 Dissemination

It is assumed that Ingram Property Development Ltd will determine the distribution path for reporting, including to any end client, other contractors, local authority etc., and will determine the timetable for upload of the project report to the OASIS Grey Literature library or supply of report or data to other archiving services including the Historic Environment Record, taking into account confidentiality etc.

TigerGeo reserves the right to display data rendered anonymous on its website and in other marketing or research publications.

6.3 Standards and quality

TigerGeo is developing an Integrated Management System (IMS) towards ISO certification for ISO9001, ISO14001 and OHSAS18001/ISO45001. For work within the archaeological sector TigerGeo has been awarded CIfA (Chartered Institute for Archaeologists) Registered Organisation status.

A high standard of client-centred professionalism is maintained in accordance with the requirements of relevant professional bodies including the Geological Society of London (GeolSoc) and the Chartered Institute for Archaeologists (CIfA). Senior members of TigerGeo are professional members of the GeolSoc (FGS), CIfA (MCIfA & ACIfA grades) and other appropriate bodies, including the European Association of Geoscientists and Engineers (EAGE) Near Surface Division (MEAGE) and the Institute of Professional Soil Scientists (MISoilSci).

In addition TigerGeo is a member of EuroGPR and all ground penetrating and other radar work is in accordance with ETSI EG 202 730.

The management team at TigerGeo have almost 50 years of combined experience of near surface geophysical project design, survey, interpretation and reporting, based across a wide range of shallow geological contexts.

Data processing and interpretation adheres to the scientific principles of objectiveness and logical consistency. A standard set of approved external sources of information, e.g. from the British Geological Survey, the Ordnance Survey and similar sources of data, in addition to previous TigerGeo projects, guide the interpretive process. Due attention is paid to the technical constraints of method, resolution, contrast and other geophysical factors.

There is a strong culture of internal peer-review within TigerGeo, for example, all reports pass through a process of authorship, technical review and finally proof-reading before release to the client. Technical queries resulting from TigerGeo's work are reviewed by the Senior Geophysicist to ensure uniformity of response prior to implementing any edits, etc.

All work is undertaken in accordance with the high professional standards and technical competence expected by the Geological Society of London and the European Association of Geoscientists and Engineers.

6.4 Key personnel

Martin Roseveare, MSc BSc(Hons) MEAGE FGS MCIfA	**Senior Geophysicist, Director**
Martin specialised (MSc) in geophysical prospection for shallow applications and since 1997 has worked in commercial geophysics. Elected a GeolSoc Fellow in 2009 he is now working towards achieving CSci. A member of the European Association of Geoscientists & Engineers, he has served on the EuroGPR and CIfA GeoSIG committees and on the scientific committees of the 10th and 11th Archaeological Prospection conferences. He has reviewed papers for the EAGE Near Surface conference, was a technical reviewer of the Irish NRA geophysical guidance and is a founding member of the ISSGAP soils group. Professional interests include the application of geophysics to agriculture and the environment, e.g. groundwater and geohazards. He is also a software writer and equipment integrator with significant experience of embedded systems.	
Anne Roseveare, BEng(Hons) DIS MISoilSci	**Operations Manager, Environmental Geophysicist, Data Analyst**
On looking beyond engineering, Anne turned her attention to environmental monitoring and geophysics. She is a Member of the British Society of Soil Science / Institute of Professional Soil Scientists (BSSS/IPSS) and has specific areas of interest in soil physics & hydrology, agricultural applications and industrial sites. Working in shallow geophysics since 1998, Anne is a founding member of the ISSGAP soils group, also was the founding Editor of the International Society for Archaeological Prospection (ISAP). Specifications, logistics, health and safety, data handling & analysis are integral parts of her work, though she is happily distracted by the possibilities of discovering lost cities, hillwalking, dance and good food.	
Daniel Lewis, MA BA(Hons) ACIfA	**Consultant Archaeologist**
Daniel studied archaeology at the University of Nottingham and worked in field archaeology for many years, managing urban and rural fieldwork projects in and around Herefordshire. When the desk became more appealing he jumped into the world of consulting, working on small and large multi-discipline projects throughout England and Wales. At the same time, he returned to University, gaining an MA in Historic Environment Conservation. With experience in the heritage sector since 1998, Daniel has a diverse portfolio of skills. Here he ensures that geophysical work within the heritage sector is well grounded in archaeology. His spare time includes much running up mountains.	
Alexandra Gerea, MSc, BSc, PhD Candidate	**Geophysical Processor & Analyst**
Alexandra has a BSc in Geophysics and an MSc in Applied Geo-biology and is in the final stages of a PhD in the UK after living in Portugal for six months working on her master's degree. Since 2008 she has used most mainstream processing applications across electrical, magnetic and radar methods. She combines a love of nature and science and is currently studying plant roots in agricultural environments using geophysical methods. When not doing that she enjoys travelling, hiking, nature, yoga, books, foreign languages and cats. A few years ago she found a passion for electronics and started building different devices including intelligent gardening systems and coding in Python.	

Magnetic Survey
Extent

Planning Boundary
Outline

EEA211 Land Adjacent to Lwyn Yr Eos, Bodedern, Ynys Mon
DWG 01 Site Location

Orthographic Scale: 1:10000 @ A4 Spatial Units: Meter. Do not scale off this drawing

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EEA211 Land Adjacent to Lwyn Yr Eos, Bodedern, Ynys Mon
DWG 02 Magnetic Data

Orthographic Scale: 1:1000 @ A4 Spatial Units: Meter. Do not scale off this drawing

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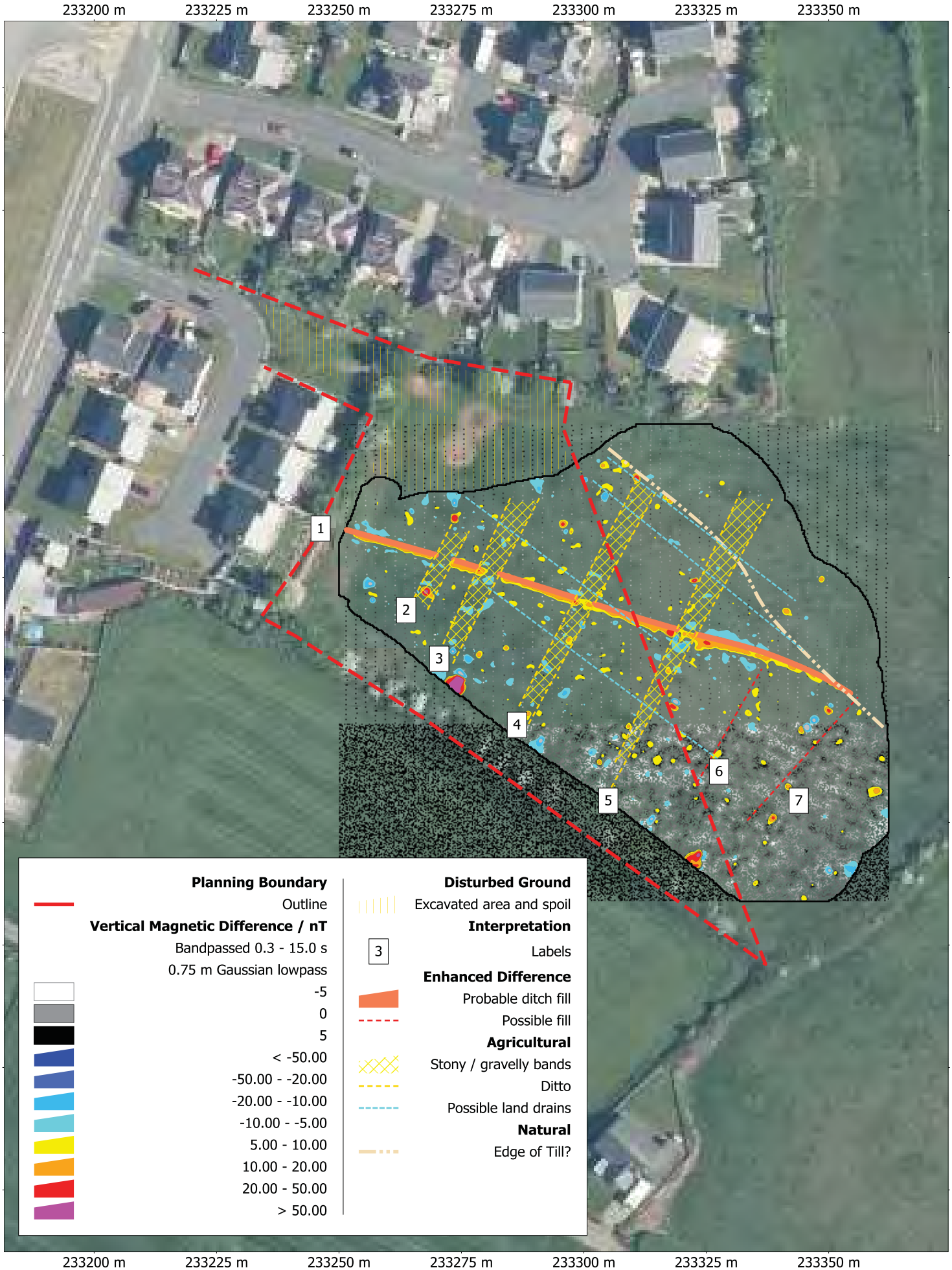

EEA211 Land Adjacent to Lwyn Yr Eos, Bodedern, Ynys Mon
DWG 03 Interpretation

Orthographic Scale: 1:1000 @ A4 Spatial Units: Meter. Do not scale off this drawing

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APPENDIX II

Gwynedd Archaeological Trust Photographic Record Metadata

PHOTO RECORD NUMBER	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2736_01	Pre-commencement view of Trench 5 from the west.		W	Not used	Pre-excavation shot	Anne Marie Oates	18/07/2022	Gwynedd Archaeological Trust	01
G2736_02	View across site from northern boundary.		N	Not used	General view of site	Anne Marie Oates	18/07/2022	Gwynedd Archaeological Trust	02
G2736_03	View across site towards the southeast.		NW	Not used	General view of site	Anne Marie Oates	18/07/2022	Gwynedd Archaeological Trust	03
G2736_04	View of site from the west facing the east.		W	Not used	General view of site	Anne Marie Oates	18/07/2022	Gwynedd Archaeological Trust	04
G2736_05	Pre-commencement view of Trench 5 from the west (with board).		W	Not used	Pre-excavation shot	Anne Marie Oates	18/07/2022	Gwynedd Archaeological Trust	33
G2736_06	Pre-commencement view of Trench 1 from the southwest.		SW	Not used	Pre-excavation shot	Michael Sion Lynes	18/07/2022	Gwynedd Archaeological Trust	05
G2736_07	Pre-commencement view of Trench 3 from the north-northwest.		NNW	Not used	Pre-excavation shot	Michael Sion Lynes	18/07/2022	Gwynedd Archaeological Trust	21
G2736_08	Pre-commencement view of Trench 4 from the east.		E	Not used	Pre-excavation shot	Michael Sion Lynes	18/07/2022	Gwynedd Archaeological Trust	29
G2736_09	Post-excavation view of Trench 5 from the west.		W	2x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	34

PHOTO RECORD NUMBER	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2736_10	Post-excavation view of Trench 5 from the east.		E	2x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	35
G2736_11	Representative section of Trench 5 from the north.		N	1x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	36
G2736_12	Post-excavation view of Trench 2 from the northeast.		NE	2x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	11
G2736_13	Post-excavation view of Trench 2 from the southwest.		SW	2x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	12
G2736_14	Representative section of Trench 2 from the northeast.		SE	1x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	
G2736_15	Pre-excavation shot of possible linear [0203] from the southwest.	[0203]	SW	1x1m	Pre-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	
G2736_16	Post-excavation view of Trench 4 from the west-northwest.		WNW	2x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	30
G2736_17	Post-excavation view of Trench 4 from the east-southeast.		ESE	2x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	31
G2736_18	Representative section of Trench 4 from the north-northeast.		NNE	1x1m	Post-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	32

PHOTO RECORD NUMBER	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2736_19	Pre-excavation shot of linear [0204] from the northeast.	[0204]	NE	2x1m	Pre-excavation shot	Michael Sion Lynes	19/07/2022	Gwynedd Archaeological Trust	13
G2736_20	Mid-excavation view of stone in situ within ditch [0204] present in fill (0205).	[0204], (0205)	E	1x1m	Mid-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	14
G2736_21	East facing section through ditch [0204].	[0204], (0205)	E	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	15
G2736_22	Plan shot of ditch [0204] from the east.	[0204], (0205)	E	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	
G2736_23	Post-excavation view of ditch [0204] along length of trench.	[0204], (0205)	NE	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	16
G2736_24	View of ditch [0204] within trench section (oblique).	[0204], (0205)	NW	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	
G2736_25	Pre-excavation shot of linear [0206] from the northeast.	[0206], (0207)	NE	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	17
G2736_26	East-southeast facing section through shallow ditch [0206].	[0206], (0207)	ESE	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	18
G2736_27	Post-excavation plan shot of shallow ditch [0206] from the east-southeast.	[0206], (0207)	ESE	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2736_28	Post excavation view of shallow ditch [0206] from the northeast.	[0206], (0207)	NE	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	19
G2736_29	Post excavation view of shallow ditch [0206] from the northeast.	[0206], (0207)	NE	1x1m	Post-excavation shot	Michael Sion Lynes	20/07/2022	Gwynedd Archaeological Trust	
G2736_30	Proof shot of [0203]: Non archaeological (natural silting between bedrock).	[0203]	E	1x1m	Proof shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	20
G2736_31	Representative section of Trench 1 from the west-northwest.		WNW	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	06
G2736_32	North-northwest facing section through ditch [0104].	[0104], (0105)	NNW	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	
G2736_33	Post-excavation plan shot of ditch [0104] from the north-northwest.	[0104], (0105)	NNW	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	09
G2736_34	Post-excavation view of Trench 1 from the south-southwest.		SSW	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	07
G2736_35	Post-excavation view of Trench 1 from the north-northeast.		NNE	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	08
G2736_36	East facing section through ditch [0306].	[0306]	E	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	26

PHOTO RECORD NUMBER	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2736_37	West facing section through ditch [0305].	[0305]	W	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	28
G2736_38	Plan shot of ditch [0305] from the west.	[0305]	W	1x1m	Post-excavation shot	Michael Sion Lynes	21/07/2022	Gwynedd Archaeological Trust	
G2736_39	Representative section Trench 3	(0301) (0302) (0303)	NW	1x1m	Post-excavation shot	Carollina Ferrera	22/07/2022	Gwynedd Archaeological Trust	22
G2736_40	Plan view of linear ditch [0306]	[0306] (0308)	NW	1x1m	Post-excavation shot	Carollina Ferrera	22/07/2022	Gwynedd Archaeological Trust	24
G2736_41	Plan view of linear ditch [0306]	[0306] (0308)	N	1x1m	Post-excavation shot	Carollina Ferrera	22/07/2022	Gwynedd Archaeological Trust	
G2736_42	View of trench 03 post-ex	[0306] (0308) [0305] (0307)	NNW	1x1m	Post-excavation shot	Carollina Ferrera	22/07/2022	Gwynedd Archaeological Trust	23
G2736_43	Pre-ex shot of linear [0304] and possible circular feature [0305] at NW end of trench 03	[0304] [0305]	SW	1x1m	Pre-excavation shot	Anne Marie Oattes	22/07/2022	Gwynedd Archaeological Trust	27
G2736_44	Pre-ex shot of linear [0304] and possible circular feature [0305] at NW end of trench 03 with board	[0304] [0305]	SW	1x1m	Pre-excavation shot	Anne Marie Oattes	22/07/2022	Gwynedd Archaeological Trust	
G2736_45	Pre-ex shot of linear [0306]	[0306] (0308)	SW	1x1m	Pre-excavation shot	Anne Marie Oattes	22/07/2022	Gwynedd Archaeological Trust	25

PHOTO RECORD NUMBER	DESCRIPTION	CONTEXT NUMBER (S)	VIEW FROM	SCALE(S)	REASON FOR PHOTO	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2736_46	Linear [0104] showing excavated slot	[0104] (0105)	SW	1x1m	Post-excavation shot	Anne Marie Oattes	22/07/2022	Gwynedd Archaeological Trust	
G2736_47	Linear [0104] showing NW facing section in baulk	[0104] (0105)	NW	1x1m	Post-excavation shot	Anne Marie Oattes	22/07/2022	Gwynedd Archaeological Trust	10
G2736_48	SE facing section through linear [0104]	[0104] (0105)	SE	1x1m	Post-excavation shot	Anne Marie Oattes	22/07/2022	Gwynedd Archaeological Trust	

APPENDIX III

Gwynedd Archaeological Trust Selection Strategy

G2736_Bodedern
28/07/2022 v2.0
Selection Strategy

Project Information

Project Management

Project Manager	John Roberts john.roberts @heneb.co.uk
Archaeological Archive Manager	John Roberts john.roberts @heneb.co.uk
Organisation	Gwynedd Archaeological Trust

Stakeholders		**Date Contacted**
Collecting Institution(s)	GAT Historic Environment Record	08/07/2022
	RCAHMW	On completion of Project Archive
	Oriel Môn, Rhosmeirch, Llangefni LL77 7TQ	If applicable, post-fieldwork based on artefact recovery
Project Lead / Project Assurance	Gwynedd Archaeological Planning Services	tbc
Landowner / Developer	Cyngor Ynys Môn	Contact via client

Resources

Resources required Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.	No unusual resources required outside of GAT normal operating equipment and personnel.

Context

Describe below the context of this Selection Strategy. You should refer to:

- The aims and objectives of the project;
- Local Authority guidance (including the brief);
- Research Frameworks;
- The repository collection development policy and/or deposition policy;
- Material-specific guidance documents.

Note: This section may be copied from your Project Design/WSI to ensure all Stakeholders receive this context information.

The full aims and objectives of this project are detailed in the project specific WSI.

Gwynedd Archaeological Trust was asked by Ingram Property Development Limited to undertake an archaeological evaluation (trial trenching) in advance of a proposed residential development at Llwyn Yr Eos, Bodedern, Ynys Môn (NGR SH33277991; postcode: LL65 3SX; cf. WSI Figure 01). The development area measured 0.7ha and was located to the east of existing housing at Lwyn Yr Eos at the southern end of Bodedern village on Ynys Môn, within part of a field in previous use as pasture; the site footprint extends to the northern field boundary and westwards through to the existing residential road. The proposed development, under planning application FPL/2022/105, included 9 new dwellings together with associated parking, access road and landscaping as detailed on RWE Ltd. Drawing No. 023/GA/001 (cf. WSI Figure 02). The evaluation will comprise 5No trenches and has been completed during July 2022.

Source: Gwynedd Archaeological Trust. 2022. Llwyn Yr Eos, Bodedern, Ynys Môn: Written Scheme of Investigation for Archaeological Evaluation (Trial Trenching). Prepared For Cyngor Ynys Môn. April 2022. Project G2736.

1 – Digital Data

Stakeholders

Name the individual(s) responsible for the Digital Data Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Collections Curator).

John Roberts (GAT Principal Archaeologist)

Selection

Location of Data Management Plan (DMP)
Selection of digital data elements should be considered in your project's DMP. For the purpose of the Selection Strategy, you can either copy the selection section of your DMP below, or attach it as an appendix to this document. Please indicate here if the DMP is attached.

All digital data has been collected, stored and selected in lines with the Gwynedd Archaeological Trust (GAT) Data Management Plan located on GAT's servers (available on request).

Following the completion of the fieldwork, a working project archive has been created based on following task list;

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

All relevant site archive data has been added to a digital project register specific to this project, which has been prepared in *Microsoft Excel.* This data has been used as the basis for the physical and digital dataset archives. Information from these has been used to compile the project report. The physical archive has been stored in a designated project folder and the location confirmed in the Trust project database; the digital dataset has been stored on a dedicated Trust server, with the location confirmed in the Trust project database via a specific hyperlink. External datasets for the HER and RCAHMW are as defined in the dissemination strategy below. De-selected digital data has been confirmed in an updated digital management plan appended to the final report

De-Selected Digital Data

There is no de-selected data

2 – Documents

Stakeholders

Name the individual(s) responsible for the Documents Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

John Roberts – Principal Archaeologist, Gwynedd Archaeological Trust;
Sean Derby – Historic Environment Record, Gwynedd Archaeological Trust;
Gareth Edwards, *Head of Knowledge and Understanding, RCAHMW*

Selection

- A digital report has been provided to the regional Historic Environment Record; this has been submitted within six months of project completion (final report only), along with a digital dataset comprising an Event PRN summary. The report and dataset has been submitted in accordance with the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1.1); and
- A digital report and digital archive dataset has been provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. The dataset has been prepared in the format required by RCAHMW and included:
    - Photographic metadata (Microsoft Access);
    - Photographic archive (TIFF format);
    - Project Information form (Excel);
    - File Information form (Excel) – Microsoft Word report text final;
    - File Information form (Excel) – Photographic metadata (general);
    - File Information form (Excel) – Adobe PDF report final; and
    - File Information form (Excel) - Photographic metadata (detail).

De-Selected Documents

Describe the procedure for dealing with De-selected material and what specialist advice has informed this procedure.

There is no de-selected data

Gwynedd Archaeological Trust
Ymddiriedolaeth Archaeolegol Gwynedd

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