

LAND AT TYDDYN CAE FARM, BODUAN, GWYNEDD, WALES

Centred on NGR SH 33465 37785

Results of Archaeological Investigations

Prepared by:
Paul Jones and Paul Rainbird

On behalf of:
CgMs Consulting

Report No: ACD1151/2/1

Date: August 2015



archaeology

LAND AT TYDDYN CAE FARM, BODUAN, GWYNEDD, WALES

Centred on NGR SH 33465 37785

Results of Archaeological investigations

CONTENTS

	<i>Summary</i>	
1.	Introduction	1
2.	Archaeological background	1
3.	Aim	1
4.	Methodology	2
5.	Results	2
6.	The finds	5
7.	Discussion	5
8.	Conclusions	6
9.	Archive	7
10.	Acknowledgements	7
11.	Sources consulted	7

List of figures

Fig. 1: Site location

Fig. 2: Location of Area 1 and trenches 1-3

Fig. 3: Plan of all features, Area 1

Fig. 4: Section drawings, Area 1

List of plates

Plate 1: Area 1 showing F1037 and F1038, viewed from the south

Plate 2: Area 1 showing F1049 in foreground and pit group beyond, viewed from the south

Plate 3: Area 1 showing F1049, viewed from the east

Plate 4: Trench 1, viewed from the northeast

Plate 5: Trench 2, viewed from the northwest

Plate 6: Trench 3, viewed from the north

Summary

An archaeological strip, map and sample excavation in conjunction with trenches was carried out by AC archaeology during June 2015 on land at Tyddyn Cae Farm, Boduan, Gwynedd (centred on NGR SH 33465 37785), to provide supplementary information for a planning application for construction of a solar park. Although the results of the trenches (Area 2) proved to be negative, the excavation area (Area 1) revealed two ditches both representing part of the same former boundary or enclosure, possibly enclosing some form of settlement. Further sub-division of this enclosure was highlighted by an E-W aligned ditch. Although no conclusive settlement evidence in the form, for example, of roundhouses was observed, vestiges of associated settlement activity were revealed. This comprised a number of both clustered and isolated pit features and a gully. The finds were limited to two worked flints and two burnt clay fragments. It is tentatively concluded that the settlement dates to the later prehistoric period.

1. INTRODUCTION (Fig. 1)

- 1.1 This document sets out the results of archaeological investigations consisting of a strip map and sample and trenches undertaken on land at Tyddyn Cae Farm, Boduan, Gwynedd (centred on NGR SH 33465 37785). The work was carried out to provide supplementary information for a forthcoming application for the construction of a solar park. The work was commissioned by CgMs Consulting on behalf of Lightsource Renewable Energy Ltd.
- 1.2 The proposed development covers an area of approximately 21ha on land which slopes gently down to the south, from a height 70m above Ordnance Datum to 30m. It is located to the east of the village of Boduan on the Llŷn Peninsula (Fig 1), with the solid geology comprising Ashgil Rocks (mudstone, siltstone and sandstone from the Ordovician era). These deposits are overlain by superficial glacial deposits of sand and gravel (British Geological Survey 2015).

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The site has been the subject of a desk-based assessment (Hyder 2014), geophysical survey by magnetometer technique (Archaeology Wales 2014a) and trial trench evaluation (Archaeology Wales 2014b). The latter is the most relevant to this document as it identified a small number of archaeological features spread over 33 trenches, the majority of which related to drainage gullies of probable post-medieval or modern date, as well as a probable natural feature. A ditch, albeit undated, in the centre of the site in Trench 25 (Area 2) was of more substantial form.

3. AIM

- 3.1 The aim of the archaeological investigations was to establish the presence or absence, extent, depth, character and date of any archaeological features, deposits or finds within Areas 1 and 2.

4. METHODOLOGY

- 4.1** The archaeological investigations were undertaken in accordance with a Written Scheme of Investigation produced by CgMs Consulting (Jago 2015) and a Project Design prepared by AC Archaeology (Valentin 2015) and with reference to the Chartered Institute for Archaeologists (CIfA) 2014 document *Standards and Guidance for Archaeological Excavation*.
- 4.2** The work comprised a strip, map and sample (Area 1) and linear trenching (Area 2), located where the construction of a compound, storage area and sub-station are proposed (Fig 2). Area 1 was located within the NW corner of the proposed development area and had maximum dimensions of 100m NE-SW by 13m NW-SE. The excavation in Area 2 comprised three trenches (Trenches 1-3) totalling 128m in length, each measuring 1.8m wide. These were located in the position of the new access track and in the vicinity of Trench 25 from the prior trial trench evaluation (Archaeology Wales 2014).
- 4.3** Area 1 and all of the trenches located within Area 2 were positioned using a Leica Viva GS08 device with a horizontal accuracy of up to 10mm. All soil removal was undertaken under the control and direction of the Site Archaeologist. Topsoil and overburden were removed by mechanical excavator, using a wide toothless bucket, and ceased at the level at which archaeological deposits or natural subsoil was exposed.
- 4.4** Following completion of the overburden removal, Area 1 and the trench bases in Area 2 were cleaned by hand, where necessary, and any subsoil deposits identified. All features and deposits revealed were recorded using the standard AC archaeology pro-forma recording system, comprising written, graphic and photographic records, and in accordance with AC archaeology's *General Site Recording Manual, Version 2* (revised August 2012). Detailed sections or plans were produced at a scale of 1:10, 1:20 or 1:50 as appropriate.

5. RESULTS

Area 1 (Figs 3 and 4; Plates 1-2)

- 5.1** Across Area 1 the general level of preservation was variable with a number of features visible only at their base where the lowermost levels cut into natural subsoil; this was due to truncation and disturbance resulting from post-medieval and modern activity. Overall, this contributed to difficulties in establishing the stratigraphic relationship between some intercutting features where the surviving deposits were shallow.
- 5.2** The archaeological features were sealed by a subsoil of reddish-brown sandy clay (1001). The depth of subsoil varied between 400-600mm. Overlying this was a topsoil of brown clayey sand (1000) with an average depth of 200mm. Archaeological features cut the natural subsoil (1002) which consisted of yellowish to brown sandy clay and were concentrated wholly within the NE of the stripped area. The principal features were two ditches (F1037 and F1038) on the same alignment both probably representing part of a more extensive enclosure. All the remaining features were contained to the east of the ditches and comprised a single E-W aligned ditch (F1049), small gully (F1039) and eleven pits (F1005, F1008, F1013, F1011, F1018, F1020, F1022, F1024, F1044, F1054 and F1056).

Ditches F1037, F1038 (Figs 4a, 4b and 4c)

- 5.3** Both ditches were commonly aligned N-S and extended across the site beyond the limit of the excavation. Their fairly comparable nature and commonality of alignment suggest that they are related.

Ditch F1037 was visible over a length of 10m and extending beyond the southern limit of the excavation area. It had fairly regular dimensions of 1.70-1.80m wide and 1.00-1.10m deep with regular V-shaped profile and narrow rounded base. It was excavated in two segments [1015 and 1016]. The ditch was filled by a simple sequence of two fills consisting of coarse sandy clay (Fig. 4a). No finds were retrieved from the fills. At its northern end the ditch terminated at the same location as the termination of ditch F1038; due to the comparable composition and colour of the fills to both ditches no stratigraphic relationship between the two could be established at their joint termini. No finds were retrieved from the fills. The ditch was cut along its eastern edge by pit F1013.

Ditch F1038 was recorded over a length of 6.00m extending beyond the northern limit of the excavation area and was excavated in two segments [1017 and 1025]. It measured up to 1.40m wide and 0.78m deep; the ditch profile was slightly variable consisting of a U to V-shape with a narrow flat to rounded base (Figs 4b-c). Up to three comparable deposits consisting of coarse sand clay filled the ditch. No finds were recovered.

Pit F1013 (Fig. 4a)

- 5.4** Pit F1013 was ovoid in plan and measuring 2.00m long by 1.20m wide and 0.40m deep. It had a broad U-shaped profile consisting of steep sides leading onto a flat base. It contained a single fill (1014) of coarse sand clay silt. No finds were recovered.

Ditch F1049 (Figs 4d and 4e)

- 5.5** E-W aligned ditch F1049 extended across the site for 21m and was positioned 3m to the east and at a right angle to large ditch F1037. It was excavated in three segments [1003, 1047 and 1052]. Towards its eastern extent it cut pit F1005. It measured up to 1.00m wide and 0.34-0.40m deep with a broad U-shaped profile. Filling the ditch was a naturally accumulated sandy clay deposit. No finds were recovered from the fill. The eastern end of the ditch was cut by gully F1039.

Pit F1005 (Fig. 4e)

- 5.6** This feature consisted of an elongated pit measuring at least 1.60m long by 0.55m wide and 0.42m deep. The profile of the pit was similar to pit F1013 having steep to vertical sides and a flat base. It contained two similar coarse sand clay fills (1006 and 1007). No finds were recovered from the fills.

Pit group (Figs 4f, 4g and 4h)

- 5.7** A pit group was located in the northeast part of the trench and comprised a series of six intercutting shallow pits and pit-like features (F1008, F1011, F1018, F1020, F1022 and F1044). Diameters varied between 0.80-2.00m and depths between 0.15-0.40m. Generally the profiles were U-shaped with steep to gently sloping sides and flat to rounded bases. The stratigraphic sequence to a number of these was compromised by truncation and the similar colour and composition of their individual fills. Pits F1022 and F1044 were cut by gully F1039 and pit F1008 was the latest of three intercutting pits F1011 and F1020 that could be discerned stratigraphically. Two flakes of flint were retrieved from the upper fill (1009) of pit F1008.

Linear feature F1039 (Figs 4i and 4j)

- 5.8** This N-S aligned probable gully was excavated in three segments [1040, 1042 and 1050] and exposed for a distance of c.9m extending beyond the southern limit of the excavation. Its northern terminal end was difficult to discern due to the similar colour and composition of its fill with those associated with the pit group, but it is most probably cut by pit F1008. Measuring up to 0.70m wide and 0.20m deep it had a wide U-shape profile with a naturally accumulated single fill of sandy clay. No finds were recovered.

Miscellaneous features (Fig 4l, 4k and 4m)

- 5.9** Features F1054 and F1056 were located in the northern part of the site and were generally insubstantial and heavily truncated. Probable pit F1054 was roughly circular in plan measuring 0.55m in diameter and 0.12m deep with a broad rounded profile. The pit was filled by a single deposit of sandy clay (1055). Two pieces of hearth or furnace lining were recovered from the fill.

Feature F1056 measured 0.35m in diameter by 0.07m deep and contained a single fill (1057) of charcoal-rich sandy clay. No finds were recovered.

Additionally, a single isolated pit F1024 was located approximately 5m east of ditch F1037. This was roughly sub-circular in plan with a broad U-shaped profile with steep, vertical sides and a flat base. It measured 1.72m wide, extended beyond the southern limit of excavation and contained a single sandy clay fill (1026) with no finds.

Area 2 – Trenches 1-3

- 5.10** The three trenches (1-3) that were excavated across Area 2 produced no archaeological features, deposits or finds. Descriptions of the 'negative' trenches are set out in tabulated form below and photographs of each trench are provided in plates 4-6.

5.11 Trench 1 (Plate 4)

Trench 1			Length	Width	Alignment
			100m	1.8m	NE-SW
Context	Description	Depth	Interpretation		
100	Dark reddish brown silty clay	0-0.20m	Topsoil		
101	Yellowish to brown sandy clay	0.20m+	Natural subsoil		

5.12 Trench 2 (Plate 5)

Trench 2			Length	Width	Alignment
			15m	1.8m	E-W
Context	Description	Depth	Interpretation		
200	Dark reddish brown silty clay	0-0.40m	Topsoil		

201	Yellowish to brown sandy clay	0.40m+	Natural subsoil
-----	-------------------------------	--------	-----------------

5.13 Trench 3 (*Plate 6*)

Trench 3			Length	Width	Alignment
			15m	1.8m	NW-SE
Context	Description	Depth	Interpretation		
300	Dark reddish brown silty clay	0-0.20m	Topsoil		
301	Yellowish to brown sandy clay	0.20m+	Natural subsoil		

6. THE FINDS *by Emma Firth*

- 6.1** A very small assemblage of finds was recovered during the course of the excavations and this includes flint and fragments of hearth or furnace lining.
- 6.2** A total of two struck flints (11g) were recovered from the upper fill (1009) of pit F1008. Both are preparatory flakes from a blade core. One flint has a dull grey patina while the other is a pale grey/brown flint with mottling. Both have small patches of cortex present. The flints are dated as Late Neolithic to Early Bronze Age.
- 6.3** Two small fragments (6g) of hearth or furnace lining were recovered from the fill (1055) of pit F1054. The furnace or hearth lining comprises a layer of fired clay with a slaggy deposit on its surfaces. The date of these fragments is unknown – features producing these types of finds can be Iron Age or more recent in date.

7. DISCUSSION

- 7.1** It has been established that cultivation in recent times has resulted in moderate damage to the underlying archaeological deposits. The apparent truncated nature of many of the features has meant that in many cases the opportunity for finds retrieval, or the recovery of sufficient material for sampling, has been restricted. However despite these limitations, it may be concluded that the excavation has demonstrated, although tentatively, the presence of different and successive phases of settlement activity.
- 7.2** Only a small element of what was perhaps an extensive enclosure was exposed and consisted of two main ditches F1037 and F1038 both aligned N-S. These demarcated the western extent of the archaeological features within the stripped area. There was insufficient stratigraphic and artefactual evidence to establish precisely how these boundary features functioned in relation to each other. No trace of bank was found. The close incidence of termini to both the ditches may suggest different phases of a possible entrance arrangement facing west, although an entrance feature was not in itself apparent. Its location on a slight terrace with extensive views may be significant.
- 7.3** Within the ‘enclosed’ area, the predominant feature was E-W aligned ditch F1049. This may be broadly contemporary with at least enclosure ditch F1037 being

positioned 3m to the east and at a right angle to the ditch and may have formed subdivision of space within the enclosure. The incidence of a 3m gap beyond the western end of ditch F1049 may suggest the position of a possible entranceway allowing access between these sub-divided plots.

- 7.4** The site is located in an area of known prehistoric and Romano-British period activity of prehistoric type; i.e., rural settlement in this area betrays little or no sign of the Roman invasion (Davies 2002, 67). Approximately 2.5km to the northwest of the site is the large hillfort of Garn Boduan (National Monuments Record of Wales NPRN 95271) which is located on a hilltop which dominates the countryside in this area. It has stone-built walls within which are a number of stone built hut circles. Pottery from the site dates to the 2nd century AD, although this is regarded as relating to later re-use of an Iron Age site (Lynch 1995); it should also be noted that radiocarbon dates are lacking from this and similar sites in the area (Davies and Lynch 2000). On the eastern slope at the foot of Garn Boduan are three enclosed hut settlements, once again with extant features constructed of stone (NPRNs 302293 and 302294); these are recorded as dating from the Iron Age through to the 4th century AD. Approximately 1.4km to the east of the site a sub-circular enclosure has been identified close to Mela measuring c. 50m in diameter and tentatively interpreted as a settlement dated to the prehistoric or Romano-British period (NPRN 402183; Ward and Smith 2001). The latter perhaps indicates that stone structures are less common in ancient settlements south of Garn Boduan, which matches the findings of the Llŷn Crop Marks Project which found that where freely drained land was available it was commonly sought out by later prehistoric communities for their settlements (Ward and Smith 2001, 77).
- 7.5** A tentative interpretation of the site is that it is the location of multi-phase settlement in the later prehistoric period. The lack of pottery is typical of the area in the later Bronze Age and Iron Age (Davies and Lynch 2000) and its absence may indicate that the boundary dates from this period; some caution should prevail as a sub-rectangular enclosure at Pant, 10km to the west, was found to be modern despite enclosing late prehistoric and Romano-British features (Ward and Smith 2001). Some of the pit features may be earlier. Flint is available locally only from beach and glacial till deposits and worked flint artefacts are generally regarded as rare in the Llŷn Peninsula (Ward and Smith 2001, 25). The flint flakes may indicate some Late Neolithic or Earlier Bronze Age activity on the site, although flint may be being used locally in the Later Bronze Age.
- 7.6** The trial trenches (1-3) in Area 2 support the conclusions drawn from the previous archaeological works (Archaeology Wales 2014b) that the remainder of the proposed development area contains only evidence of post-medieval and modern period agricultural use in the form of a series of field drains and field boundaries.

8. CONCLUSIONS

- 8.1** The evidence recovered from the excavation within Area 1 has highlighted probable later prehistoric activity within the northwestern part of the proposed development area. Only the western boundary of what may have been an enclosed but undefended settlement lay within this excavated area. As a result, the potential for establishing the character, evolution and chronology of the 'settlement' was somewhat restricted.
- 8.2** The remainder of the proposed development area contains evidence of agricultural use in the post-medieval and modern period.

9. ARCHIVE

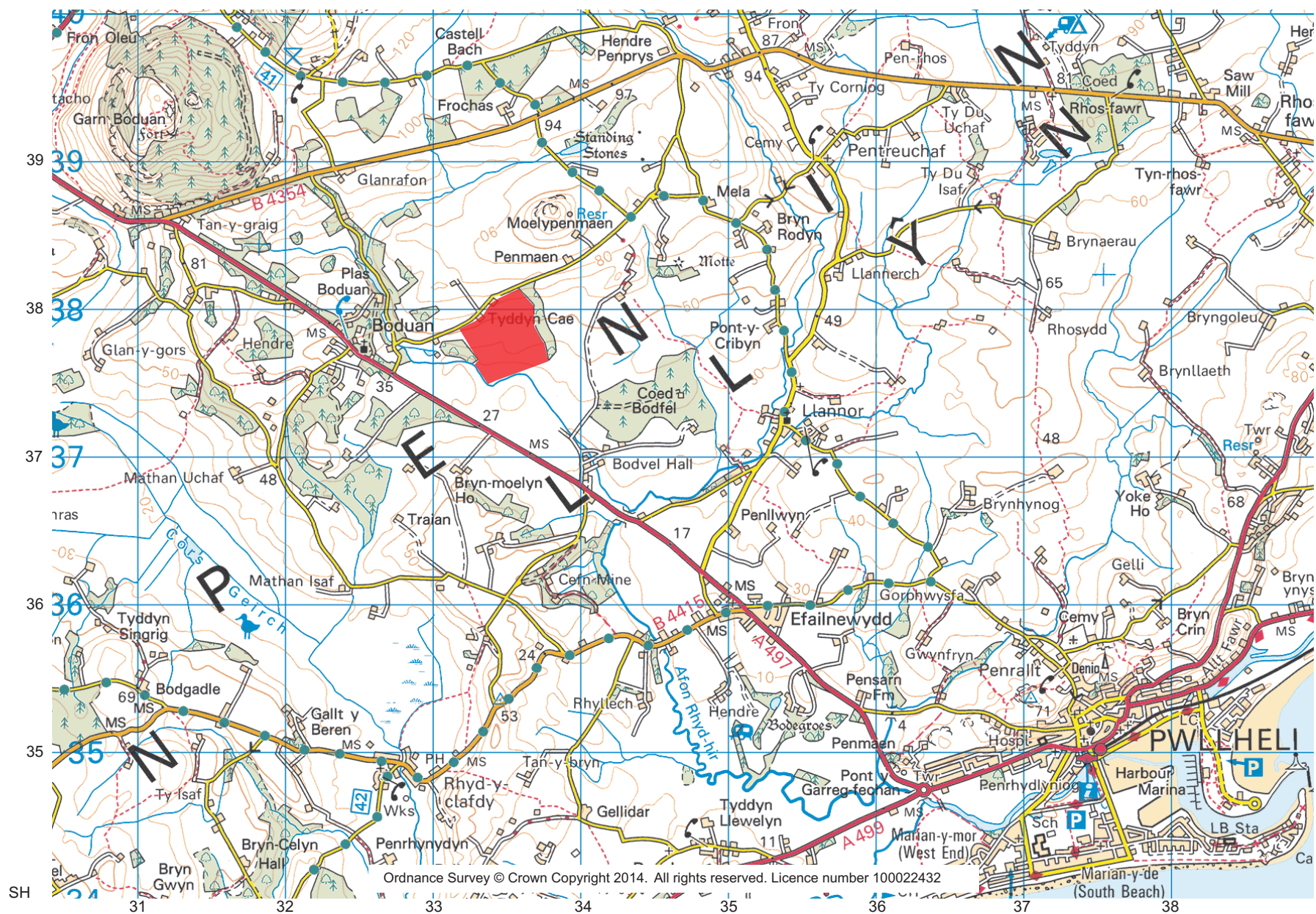
- 9.1 The finds, paper and digital archive is currently held at the offices of AC archaeology Ltd, at 4 Halthaies Workshops, Bradninch, near Exeter, Devon, EX5 4LQ. It will be held pending a decision by Bangor Museum regarding deposition of the archive.

10. ACKNOWLEDGEMENTS

The archaeological investigations were commissioned by CgMs consulting on behalf of Lightsource Renewable Energy Ltd. The work was carried out by Paul Jones and Gareth Holes. The illustrations for this report were prepared by Nicholas Crabb and Sarnia Blackmore.

11. SOURCES CONSULTED

- Archaeology Wales, 2014a, *Land at Tyddyn Cae Farm Boduan, Gwynedd. A Geophysical Survey*. Report No. 1276.
- Archaeology Wales, 2014b, *Land at Tyddyn Cae Farm Boduan, Gwynedd. Field Evaluation*. Report No. 1300.
- British Geological Survey British Geological Survey online 2015 www.bgs.ac.uk/opengeoscience
- Coflein: Royal Commission on the Historic and Ancient Monuments of Wales <http://www.coflein.gov.uk>
- Davies, J.L., 2002, 'Roman Wales: an introduction', in Arnold, C.J. and Davies, J.L. (eds) *Roman and Early Medieval Wales*, 1-140. Stroud.
- Davies, J.L. and Lynch, F., 2000, 'Later Bronze Age and Iron Age', in Lynch, F., Aldhouse-Green, S., and Davies, J.L. (eds) *Prehistoric Wales*, 139-219. Stroud.
- Hyder Consulting, 2014, *Tyddyn Cae Solar Development. Cultural Heritage Desk-Based Assessment*. No. 0001-UA007363UE21.
- Jago, S., 2015, *Written Scheme of Investigation for archaeological works: Land at Tyddyn Cae Farm, Boduan, Gwynedd*. Unpublished CgMs Consulting document for client, ref. WB/SJ/19226.
- Lynch, F., 1995, *A Guide to Ancient and Historic Wales: Gwynedd*. London.
- Valentin, J., 2015, *Land at Tyddyn Cae Farm. Boduan, Gwynedd: Project Design for Archaeological Investigations via Condition*. Unpublished AC archaeology document ref. ACD1151/1/0
- Ward, M. and Smith, G., 2001, 'The Llŷn Crop Marks Project', *Studia Celtica* 35, 1-87.

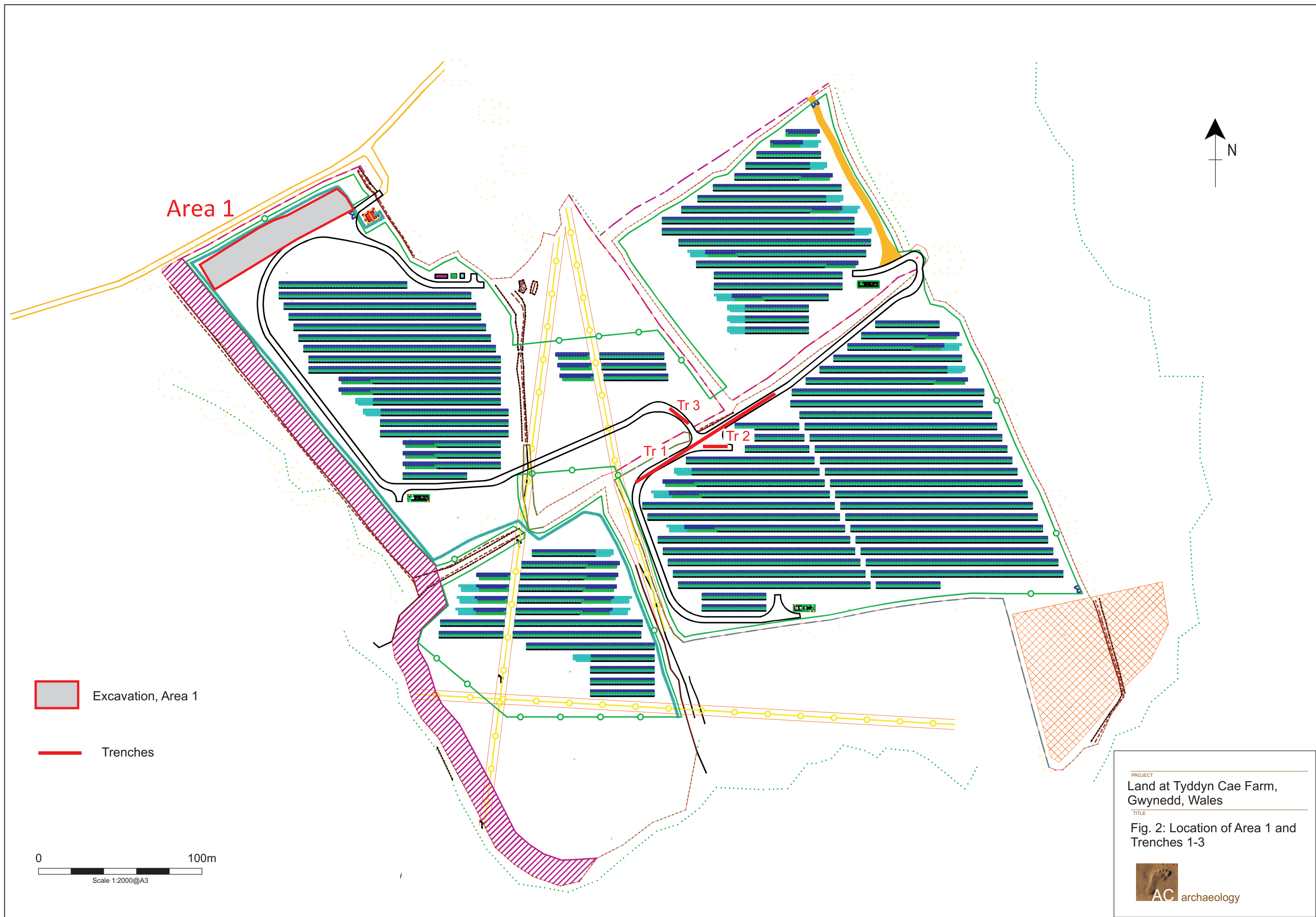


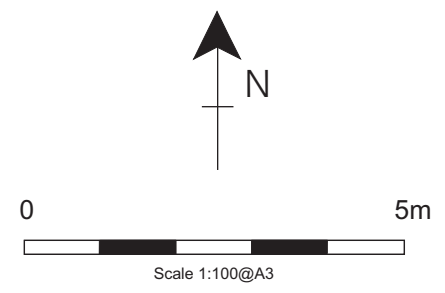
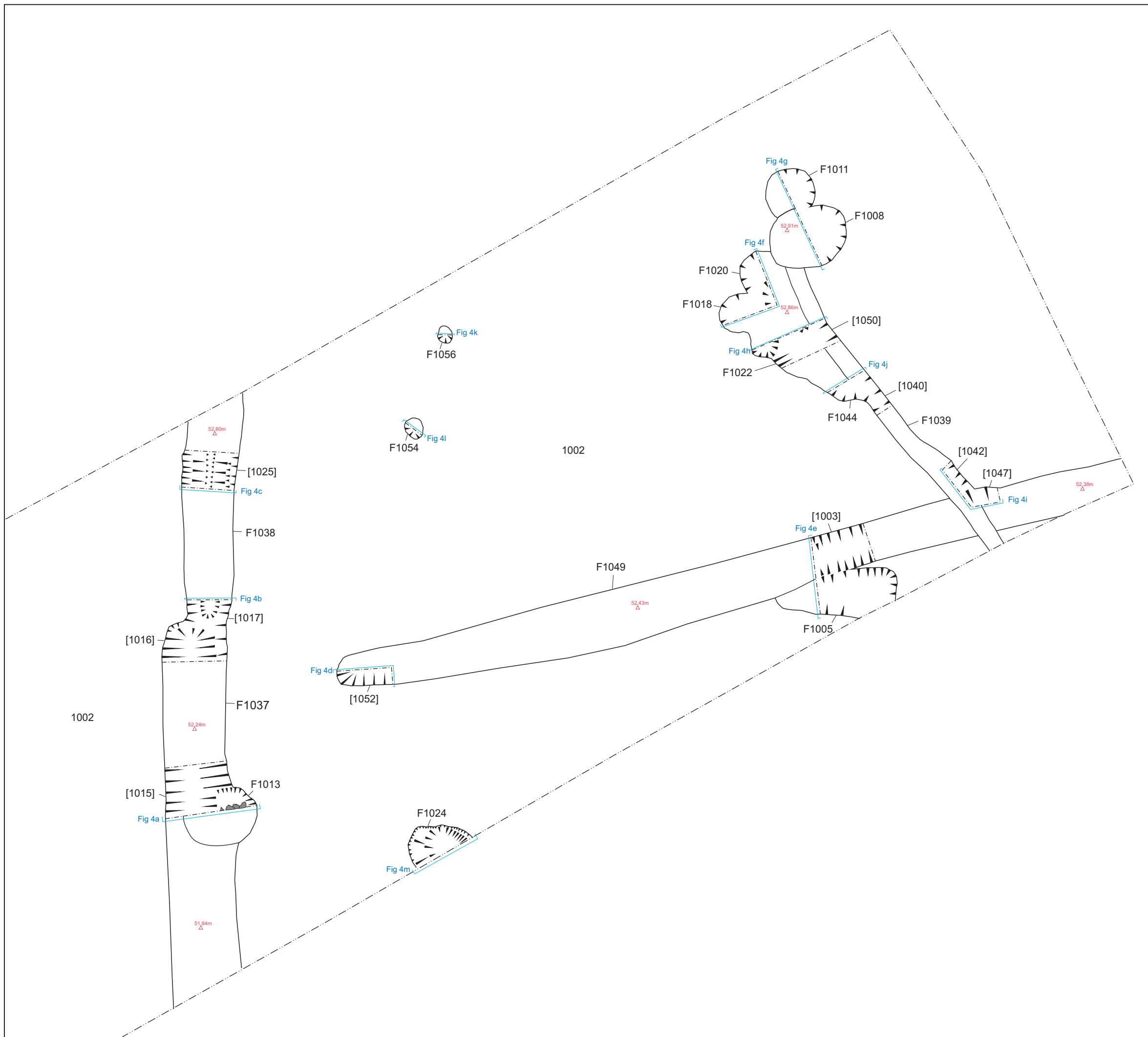
PROJECT  AC archaeology

Land at Tyddyn Cae Farm, Gwynedd,
Wales

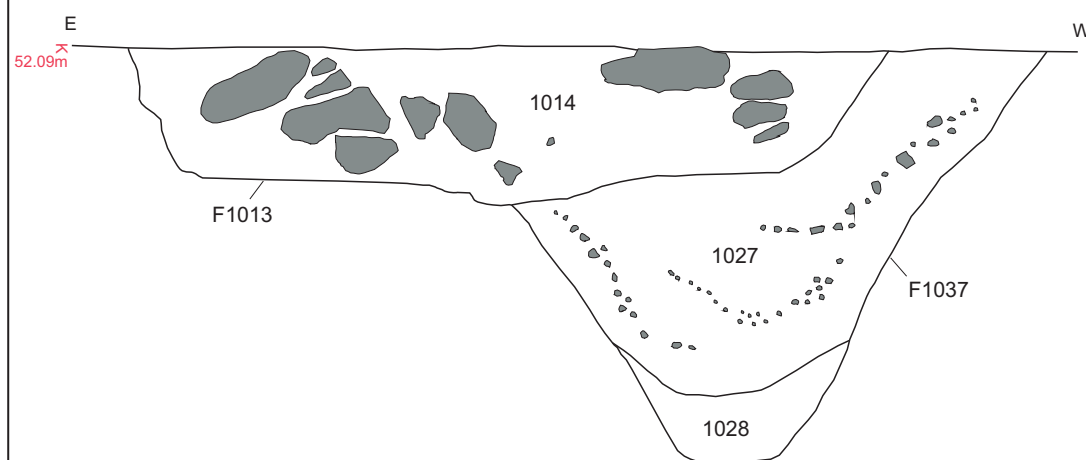
TITLE

Fig. 1. Site location

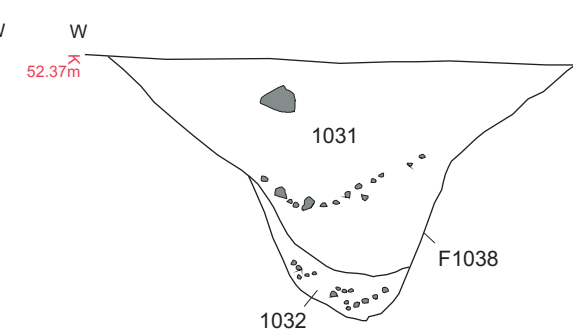




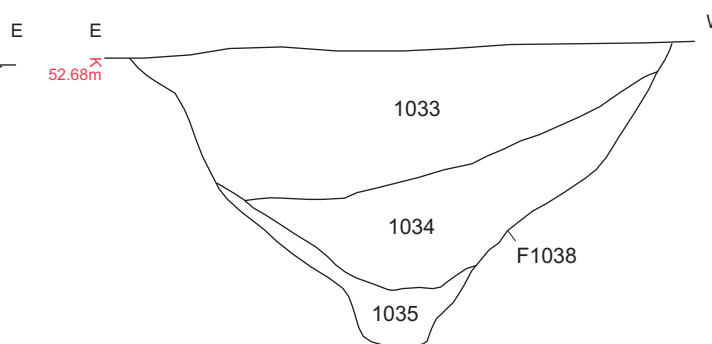
a) Section of F1037 and F1013



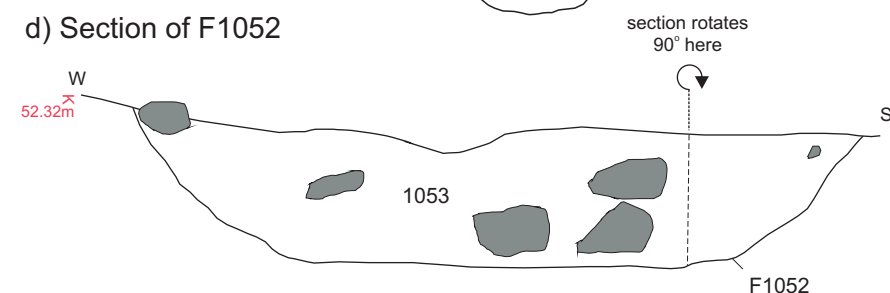
b) Section of F1038



c) Section of F1038



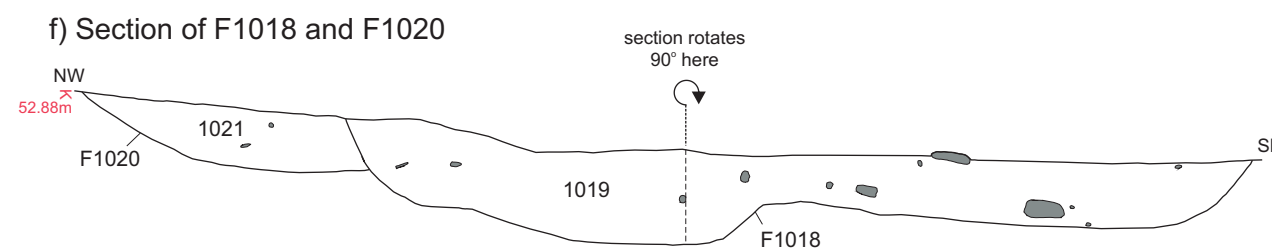
d) Section of F1052



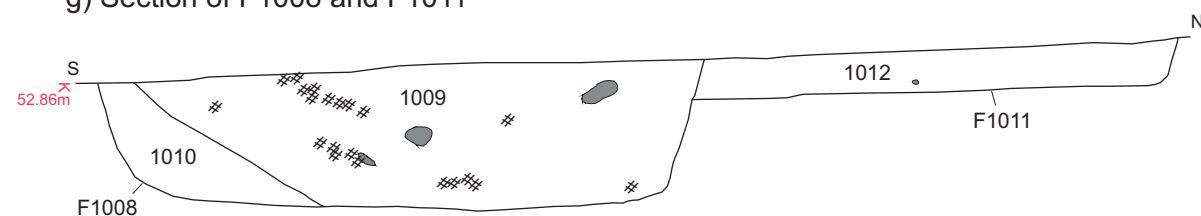
e) Section of F1049 and F1005



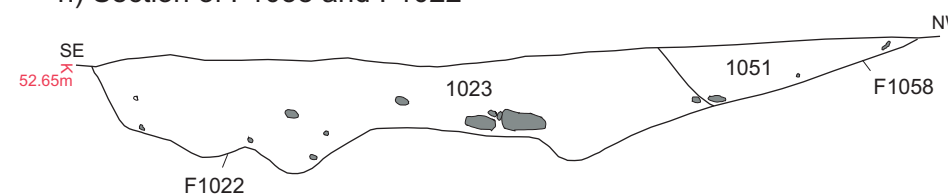
f) Section of F1018 and F1020



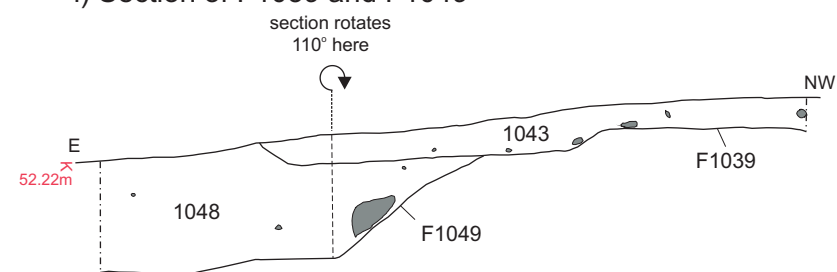
g) Section of F1008 and F1011



h) Section of F1058 and F1022



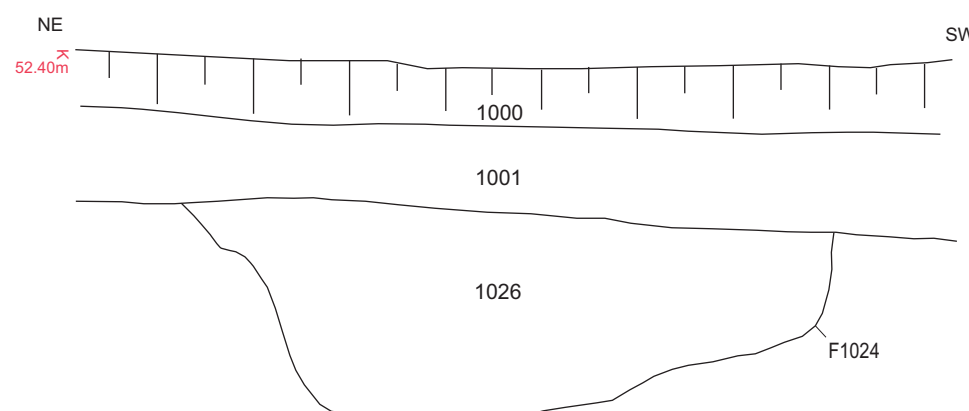
i) Section of F1039 and F1049



k) Section of F1056



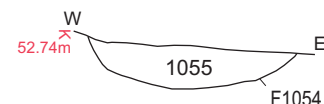
m) Section of F1024



j) Section of F1039 and F1044

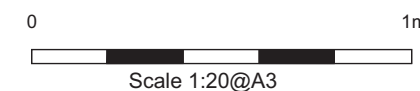


l) Section of F1054



Key

- Stone
- Charcoal



PROJECT
Land at Tyddyn Cae farm, Gwynedd, Wales

TITLE

Fig. 4: Section drawings, Area 1



Plate 1: Area 1 showing F1037 and F1038, viewed from the south (scales 2m and 1m)

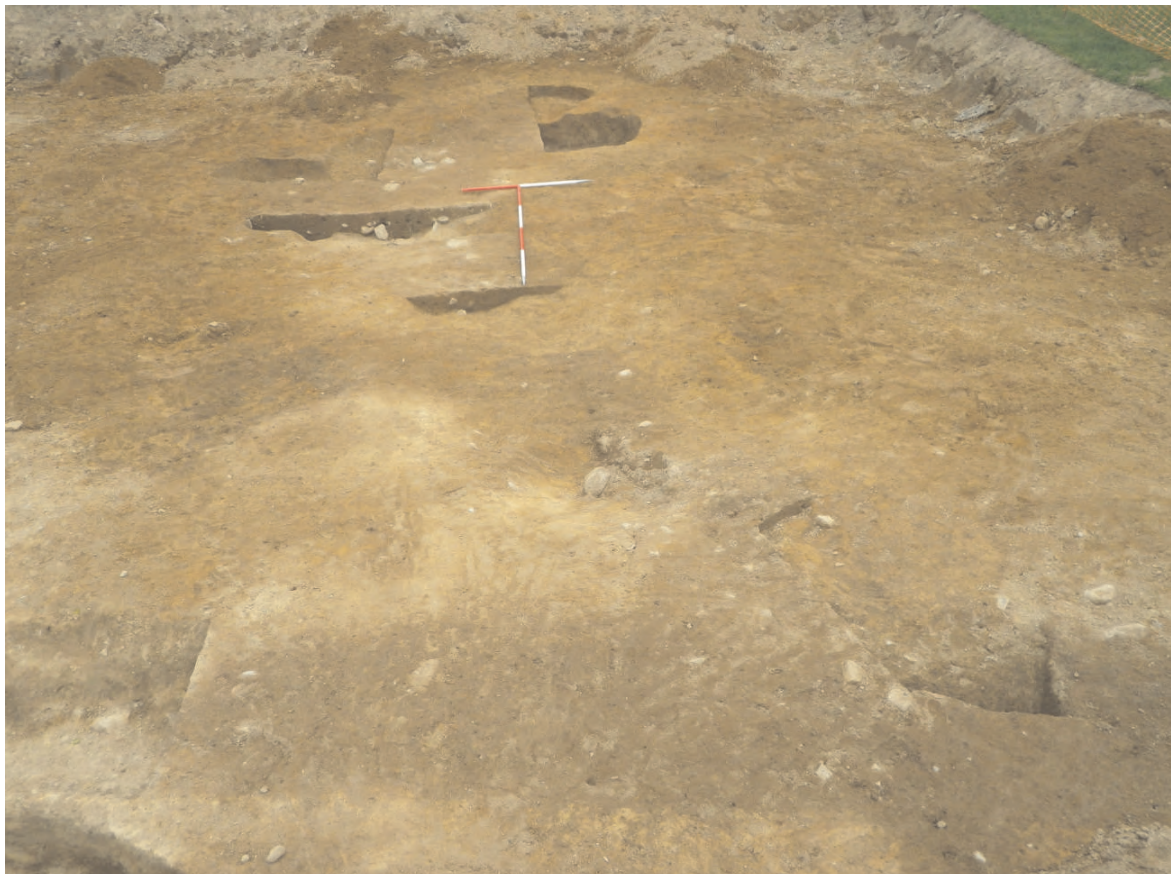


Plate 2: Area 1 showing F1049 in the foreground and the pit group beyond, viewed from the southeast (scales 2m and 1m)



Plate 3: Area 1 showing F1049, viewed from the east
(scales 2m and 1m)



Plate 4: Trench 1, viewed from the northeast (scale 1m)



Plate 5: Trench 2, viewed from the northwest (scale 1m)



Plate 6: Trench 3, viewed from the north (scale 1m)

Devon Office

AC archaeology Ltd
Unit 4, Halthaies Workshops
Bradninch
Nr Exeter
Devon
EX5 4LQ

Telephone/Fax: 01392 882410

Wiltshire Office

AC archaeology Ltd
Manor Farm Stables
Chicklade
Hindon
Nr Salisbury
Wiltshire
SP3 5SU

Telephone: 01747 820581
Fax: 01747 820440

www.acarchaeology.co.uk