# LAND AT LLWYNDU FARM, ABERPORTH, PEMBROKESHIRE.

NGR: 227282.248598 - centred

# **ARCHAEOLOGICAL EVALUATION – PHASE 2**

# Quality Assurance

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Report No. 1008

# Land at Llwyndu Farm, Aberporth, Pembrokeshire: Archaeological Evaluation

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### **SUMMARY**

Between 29<sup>th</sup> September and 1<sup>st</sup> October 2014, Foundations Archaeology undertook a programme of archaeological evaluation on land at Llwyndu Farm, Aberporth, Pembrokeshire (NGR: 227282.248598 - centred).

The project comprised the excavation and recording of an evaluation trench across an area of land which contained possible archaeological features. The features had previously been identified by a geophysical magnetometer survey, undertaken by AB Heritage Ltd.

The evaluation identified multiple phases of agricultural boundaries, the earliest of which may be of some antiquity, as well as a small number of dispersed pit-like features. The artefactual evidence suggested that the majority of the features present within the trench most likely represented agricultural activity datable to the Medieval period or later. There was no evidence for any focus of activity or *in-situ* structural remains within the evaluated area and the results of a previous geophysical survey were considered to be unreliable, due to Modern dumping and variable soil depths.

# GLOSSARY OF ARCHAEOLOGICAL TERMS AND ABBREVIATIONS

### Archaeology

For the purpose of this project, archaeology is taken to mean the study of past human societies through their material remains from prehistoric times to the modern era. No rigid upper date limit has been set, but AD 1900 is used as a general cut-off point.

### **CBM**

Ceramic Building Material.

### Magnetic (Magnetometer) Survey

Geophysical survey technique used to define areas of past human activity by mapping spatial variations and contrast in the magnetic properties of soil, subsoil and bedrock.

### Medieval

The period between the Norman Conquest (AD 1066) and circa AD 1500. However, in Wales the Medieval period can encompass the period from the end of the Roman period to the Norman period (AD410-1066), in which case it is described as the *Early Medieval* period.

### Natural

In archaeological terms this refers to the undisturbed natural geology of a site, in this case Nantmel Mudstones Formation – mudstone, overlaid by Till, Devensian (Irish Sea Ice) – diamicton (BGS online viewer).

### **NGR**

National Grid Reference from the Ordnance Survey Grid.

### OD

Ordnance Datum; used to express a given height above sea-level. (AOD Above Ordnance Datum).

# OS

Ordnance Survey.

### Post-medieval

The period between circa AD 1500 and AD 1900.

## Prehistoric

The period prior to the Roman invasion of AD 43. Traditionally sub divided into; Palaeolithic – c. 500,000 BC to c. 12,000 BC; Mesolithic – c. 12,000 BC to c. 4,500 BC; Neolithic – c. 4,500 BC to c. 2,000 BC; Bronze Age – c. 2,000 BC to c. 800 BC; Iron Age – c. 800 BC to AD 43.

### Roman

The period between AD 43 and AD 410.

# 1 INTRODUCTION

- 1.1 This report presents the findings of an archaeological evaluation undertaken by Foundations Archaeology between 29<sup>th</sup> September and 1<sup>st</sup> October 2014 on land at Llwyndu Farm, Aberporth, Pembrokeshire (NGR: 227282.248598 centred). The project was commissioned by Greencells.
- 1.2 The project was undertaken in accordance with the general principles of Planning Policy Wales (PPW; Edition 4, 2011) and complied with an approved Written Scheme of Investigation (Foundations Archaeology, 2014) and the Institute for Archaeologists' Standard and Guidance for Archaeological Field Evaluation (2011).

# 2 PROJECT BACKGROUND

- 2.1 The site comprises agricultural fields, which are located to the west, north and east of Llwyndu Farm, as shown in Figures 1 and 2. The study area is located within two pastoral fields, which are situated immediately west of the farm. The fields are situated on land which slopes downwards from north (136.22m OD) to south (132.17m OD). The underlying geology consists of Nantmel Mudstones Formation mudstone, overlaid by Till, Devensian (Irish Sea Ice) diamicton (BGS online viewer).
- 2.2 It is proposed to construct a new photovoltaic development on fields located around Llwyndu Farm.
- An archaeological assessment of the site was undertaken by Foundations Archaeology in 2012. The assessment concluded that there was limited potential for Mesolithic, Neolithic and Bronze Age activity, but moderate potential for Iron Age activity, with a number of possible defended enclosures and a number of undated, but possibly Iron Age cropmarks in the vicinity. The site was deemed to have a low potential for Roman activity, moderate potential for Medieval activity and high potential for Post-medieval activity in the form of the existing field system.
- A geophysical survey of the site (AB Heritage, 2014) suggested that the greater part of the site was of generally low potential, although possible elements of earlier field systems were identified, which were associated with a sub-square enclosure, containing a penannular feature, situated north of Llwyndu Farm, as well as an area of possible features to the west of the farm (Figure 2).
- 2.5 In light of the identified presence of possible archaeological features within the proposed development area, Dyfed Archaeological Trust Heritage Management required that an archaeological evaluation was to be undertaken at the location of potential archaeological features.
- 2.6 The first phase of evaluation (Foundations Archaeology 2014a) was targeted upon the sub-square enclosure to the north of the farm and confirmed the

probable presence of the enclosure, which was likely to be of some antiquity. Two features situated within the area defined by the enclosure were likely to represent two undated ditches, as opposed to being parts of a penannular ditch or gully.

2.7 The Phase 2 evaluation was targeted upon the possible features located to the west of the farm.

### 3 AIMS

- 3.1 The aim of the archaeological evaluation was to gather high quality data from the direct observation of archaeological deposits, in order to allow the characterisation of the on-site archaeological resource.
- 3.2 This aim was achieved through pursuit of the following specific objectives:
  - i) to identify and define the nature of archaeological deposits on site and date these, where possible;
  - ii) to attempt to characterize the nature of the archaeological sequence and recover information about the spatial patterning of features present on the site;
  - iii) where possible, to define a well dated stratigraphic sequence and recover coherent artefactual and environmental evidence;

iv/ a specific objective of this project was to establish the depths of archaeologically non-significant overburden within the site; in order to facilitate potential future mitigation of archaeological deposits, with a view to preservation *in-situ*. The archaeological evaluation, therefore, sought to minimize its impact upon archaeological deposits, whilst still achieving a coherent resource characterization.

# 4 METHODOLOGY

- A trench, which measured 100m by 1.6m, was excavated within the study area, as shown in Figure 2. It was necessary to leave an unexcavated baulk, which measured 9m long, in order to avoid a hedgerow. The part of the trench to the north of the hedgerow was labelled Trench 1a and the part to the south was labelled Trench 1b. The trench was located in order to test the possible features located to the west of the farm.
- 4.2 Topsoil and non-significant overburden was removed to the top of the archaeological deposits or natural, whichever was encountered first. This was achieved by use of a 360° mechanical excavator, equipped with a toothless grading bucket. All mechanical excavation was conducted under the direction of a suitably experienced archaeologist. Thereafter, all additional excavation was conducted by hand.

- 4.3 Where necessary, the trench was trowel-cleaned in order to adequately define deposits.
- 4.4 All excavation and recording work was undertaken in accordance with the Written Scheme of Investigation and the Foundations Archaeology Technical Manual 3: Excavation Manual.

### 5 RESULTS

- 5.1 A full stratigraphic description of all contexts identified during the course of the project is detailed in Appendix 1 and a list of finds is given in Appendix 2.
- 5.2 The natural, which consisted of light brown beige compact clay silt with frequent patches of grey mudstone, was present at a depth of 0.33m (135.89m OD) at the north end of Trench 1a and 0.60m (131.57m OD) at the south end of Trench 1b. The level of the top of the natural tended to undulate downslope (south) of the hedgerow.
- 5.3 The general stratigraphic sequence varied across the trench: the natural was directly overlaid by topsoil (1001) within Trench 1a and parts of Trench 1b, whilst it was sealed by dump layers (1002) and (1003) at the north end of Trench 1b and subsoil (1004) at the south end of Trench 1b. Layer (1002) contained frequent Modern detritus and probably represented dumping activity associated with the farm.
- 5.4 The evaluation trench contained a total of eleven features; which included four ditches, two of which contained re-cuts, two possible pits, one posthole and two other features.

# 6 DISCUSSION

- 6.1 Ditches/re-cuts [1005]/[1032] and [1015]/[1021] were similar to each other and ditch [111], which was present within the Phase 1 evaluation (Foundations Archaeology 2014a). These ditches appeared to represent part of a former field system which, although undated, was stratigraphically earlier than Postmedieval feature [1019].
- 6.2 **Feature [1008]** was situated to the north of and parallel with the hedgerow and probably represented the base of a shallow excavation related to the construction of the hedgerow bank. Post-medieval pottery was present within the fill (1009) of the feature.
- Ditch [1028] was stratigraphically later than subsoil (1004) and its position correlated with a linear geophysical anomaly situated to the southwest of the trench. The northeast southwest alignment of the ditch/geophysical anomaly was similar to the Modern field boundaries and, as such, it is likely that ditch [1028] represented a former division within the field. Ditch [1022] was stratigraphically later than ditch [1028] and was associated with a possible

posthole [1024], which possibly represented part of a fence-line, associated with the ditch. A total of two sherds of Medieval pottery were recovered from the primary fill of ditch [1023]; although, the sherds were small and abraded and, as such, are likely to represent re-deposited material. Ditches/posthole [1028]/[1022]/[1024] therefore remained undated; although it is most likely that they represented multiple phases of former agricultural boundaries, which were probably of Medieval or later date.

- 6.4 **Feature [1010]** was very shallow and difficult to interpret; although, its fill (1011) contained frequent charcoal, which indicated that it probably represented the base of a shallow feature, as opposed to an accumulation of topsoil within an undulation in the top of the natural substrate. A small, abraded sherd of Medieval pottery, present within fill (1011), is most likely to represent re-deposited material.
- 6.5 **Features [1012] and [1019]** were only partially present with the trench, although they most likely represented pits. Both of these features contained  $17^{th}$   $19^{th}$  century pottery and are therefore probably dated to the Postmedieval period or later.
- A small artefactual assemblage included some probably residual Medieval pottery, as well as Post-medieval pottery, along with CBM/tile, metal artefacts and bottle glass.
- 6.7 There was a generally poor correlation with the geophysical survey results. The presence of Modern dumping within the trench, along with variable soil depths caused by the undulating natural, is likely to have significantly affected the reliability of the geophysical survey.
- 6.8 The evaluation has identified multiple phases of agricultural boundaries, the earliest of which ([1005]/[1032] and [1015]/[1021]) may be of some antiquity, as well as a small number of dispersed pit-like features. The artefactual evidence suggested that the majority of the features present within the trench most likely represented agricultural activity datable to the Medieval period or later. There was no evidence for any focus of activity or *in-situ* structural remains within the evaluated area and the results of the previous geophysical survey were considered to be unreliable, due to Modern dumping and variable soil depths.
- Discussions between Roy King and Zoe Bevans-Rice have agreed that the archaeological features comprise relatively dispersed and robust features of generally low value, which will not to be affected by, to any significant degree, where impacted upon by the mini-piles associated with the photovoltaic development. It has therefore been agreed between Ms Bevans-Rice and Roy King that concrete shoes would not be appropriate in this area. The planning authority has accordingly been notified by Ms Bevans-Rice that traditional mini-piles would be an acceptable construction methodology across the Phase 2 evaluation area.

6.10 The archive is currently held at the offices of Foundations Archaeology, but will be deposited with the appropriate museum in due course. An OASIS form will be completed and submitted.

# 7 BIBLIOGRAPHY

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# 8 ACKNOWLEDGEMENTS

Foundations Archaeology would like to thank Zoe Bevans-Rice and Mike Ings of Dyfed Archaeology and Albert Fischer of Greencells for their assistance during the course of this project.

Ę	E)	(w)//\	CVT   1 /m   W/(m)   D(m)	DESCRIPTION	CUTS/LATER THAN	CUT BY/EARLIER THAN
	1	_		TRENCH 1a/b; 100m by 1.6m. Natural = yellow beige compact clay sift with frequent patches of		
				grey mudstone.		
1001	п	Ē	north 0.34	Topsoil; light brown clay silt, which contained occasional mudstone boulders and fragments.	1002, 1004	na
			south 0.31			
1002	g	16	0.53	Layer of re-deposited natural clay, which contained frequent mudstone fragments and	1003, 1014	1001
				boulders and frequent Modern detritus. Dissipated at 16m from north end of Trench 1b.		
1003	2	9	0.15	Layer of dark grey brown plastic clay silt. Dissipated at 10m from north end of Trench 1b.	natural.	1002
100	000	5	4.0	Subsoil: tan brown grey peaty clay. Dissipated at 20m from south end of Trench 1b.	natural.	1001
10051	× 0×	0.22	0.07	West-northwest - east-southeast aligned ditch with steep sides and a flat base. Contained fill 1006.	natural.	1006
1006	>0.8	0.22	0.07	Fill of ditch [1005]; beige brown clay silt, which contained occasional grey mudstone and rare	[1005]	[1032]
				charcoal flecks.		
1007	6.	0.7	0.14	Fill of ditch re-cut (1032); tan brown clay silt, which contained occasional charcoal flecks and	[1032]	1001
				occasional grey mudstone.		
110081	9.	2.4	0.2	Northeast - southwest aligned linear 'scoop' with a wide, flat profile, Contained fill 1009.	natural.	1009
1009	9	2.4	0.2	Fill of scoop [1008]; grey brown clay silt, which contained occasional grey mudstone and	[1008]	1001
				occasional charcoal flecks.		
10101	8.	1.2	0.13	Sub-circular feature with wide, flat profile. Contained fill 1011.	natural.	1011
101	<u>~</u>	1.2	0.13	Fill of feature [1010]; grey brown soft clay silt, which contained occasional grey mudstone and	[1010]	1011
				frequent charcoal flecks.		
10.20	0	0	0.27	Ecotum with a shain adde and flat base Contained fills 1013 and 1014.	natural.	1013

Land at Llwyndu Farm, Aberporth, Pembrokeshire: Archaeological Evaluation

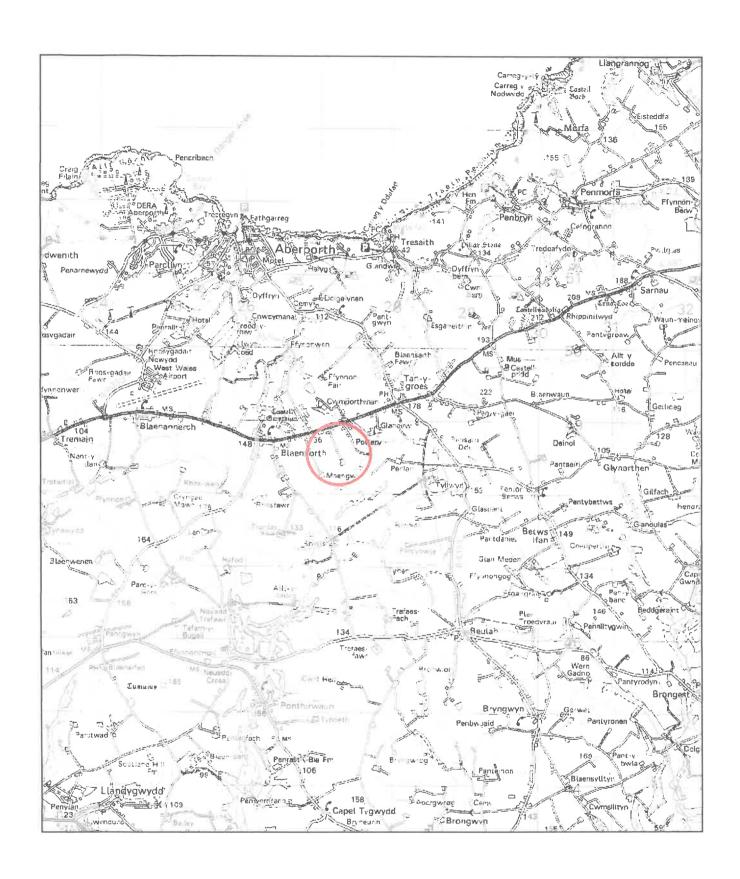
CXT	L(m)	W(m)	D(m)	DESCRIPTION	COIS/LAIER THAN	THAN
1013	~	6.0	0,19	Fill of feature [1012]; grey soft gritty silt, which contained frequent mudstone and occasional	[1012]	1014
				charcoal flecks.		
1014	2.85	6.0	0.21	Fill of feature [1012]; mid brown clay silt, which contained occasional mudstone and occasional	1013	1002
				charcoal flecks.		
1015]	1.85	0.32	0.2	Northeast - southwest aligned ditch with steep sloping sides and a flat base. Contained fills	natural.	1016, 1018
				1016 and 1018. Equivalent to ditch [1005].		
1016	<i>ر</i> ۔	0.32	0.2	Fill of ditch (1015); mixed beige brown compact clay silt, which contained occasional mudstone	[1015]	[1021]
				and rare charcoal flecks. Similar to fill 1018.		
1017	0.65	0.34	0.13	Fill of ditch re-cut [1021]; mid brown soft clay silt, which contained occasional mudstone and	[1021]	[1019]
				rare charcoal flecks,		
1018	~	0.25	0.13	Fill of ditch [1015]; mixed orange brown compact clay silt, which contained occasional	[1015]	[1019]
				mudstone,		
1019]	2.45	1.2	0.26	Feature with a shallow, uneven profile. Contained fill 1020.	1017, 1018	1020
1020	2.45	1.2	0.26	Fill of pit (1019); grey brown soft clay silt, which contained frequent mudstone fragments and	[1019]	1001
				occasional charcoal flecks.		
[1021]	0.65	0.34	0.13	Re-cut of ditch [1015] with steep sloping sides and a flat base. Contained fill 1017.	1016	1017
1022]	9.	1.92	0.66	West-northwest - east-southeast aligned ditch with steep sides and a flat base. Contained fills	1004, 1030	1023, 1026
				1023, 1025, 1026, 1027 and 1031. Associated with possible posthole [1024].		
1023	د	1.98	0.33	Fill of ditch [1022] and possible posthole [1024]; mid brown clay silt, which contained	[1022], [1024]	1031
				occasional mudstone and occasional charcoal flecks.		
[1024]	9.0	0.2	70.20	Possible posthole with a flat base. The feature was situated at the northern edge of ditch [1022].	natural.	1023
				Contained fill 1023.		
1025	~	2.24	0.43	Fill of ditch [1022]; brown clay silt, which contained occasional mudstone and rare	1031	1001
				-		

# Land at Llwyndu Farm, Aberporth, Pembrokeshire: Archaeological Evaluation

F->	(4)	1 (m) W(m)	(m/C	DESCRIPTION	CUTS/LATER THAN	CUT BY/EAKLIER THAN
	,	172	0.5	Fill of ditch (1022); mid grey brown clay sift, which contained occasional mudstone and	[1022]	1027
3	-			rare charcoal flecks.		
1027	~	1.73	0.32	Fill of ditch (1022); light brown clay silt, which contained occasional mudstone and rare	1026	1001
				charcoal flecks.		
180011	1.7	7.	0.58	Northeast - southwest aligned ditch with a flat base. Contained fills 1029 and 1030.	natural.	1029
1029	~		0.21	Fill of ditch [1028]; grey brown clay silt, which contained occasional mudstone and rare	[1028]	1030
				charcoal flecks.		
1030	~	4.0	0.43	Fill of ditch (1028); mid brown silt clay, which contained occasional mudstone.	1029	[1022]
1031	~	1.46	0.18	Fill of ditch (1022); grey brown clay silt, which contained rare charcoal flecks.	1023	1025
	- C		0.14	Re-cut of ditch [1005] with a wide shallow profile. Contained fill 1007.	1006	1007

**APPENDIX 2: The Finds** 

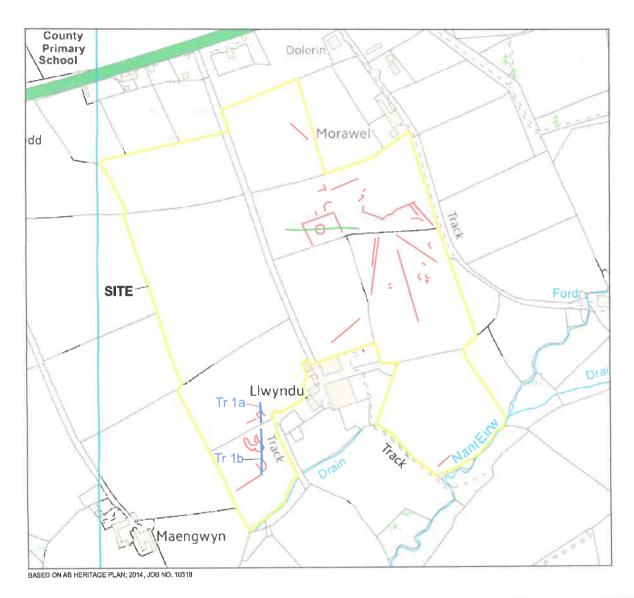
Pottery identification by Roy King.

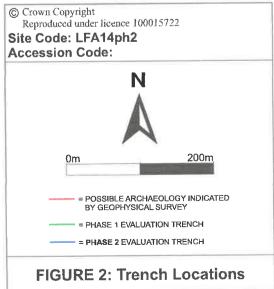


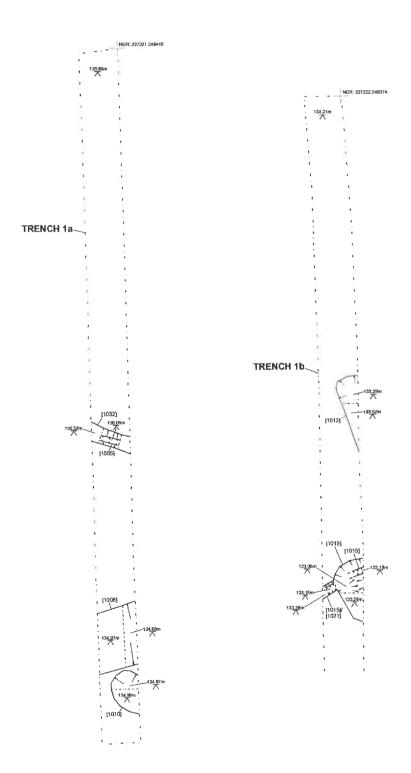
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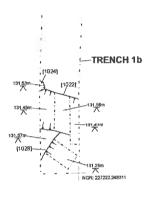
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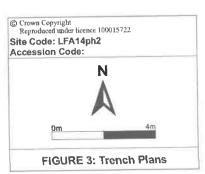
**FIGURE 1: Site Location** 

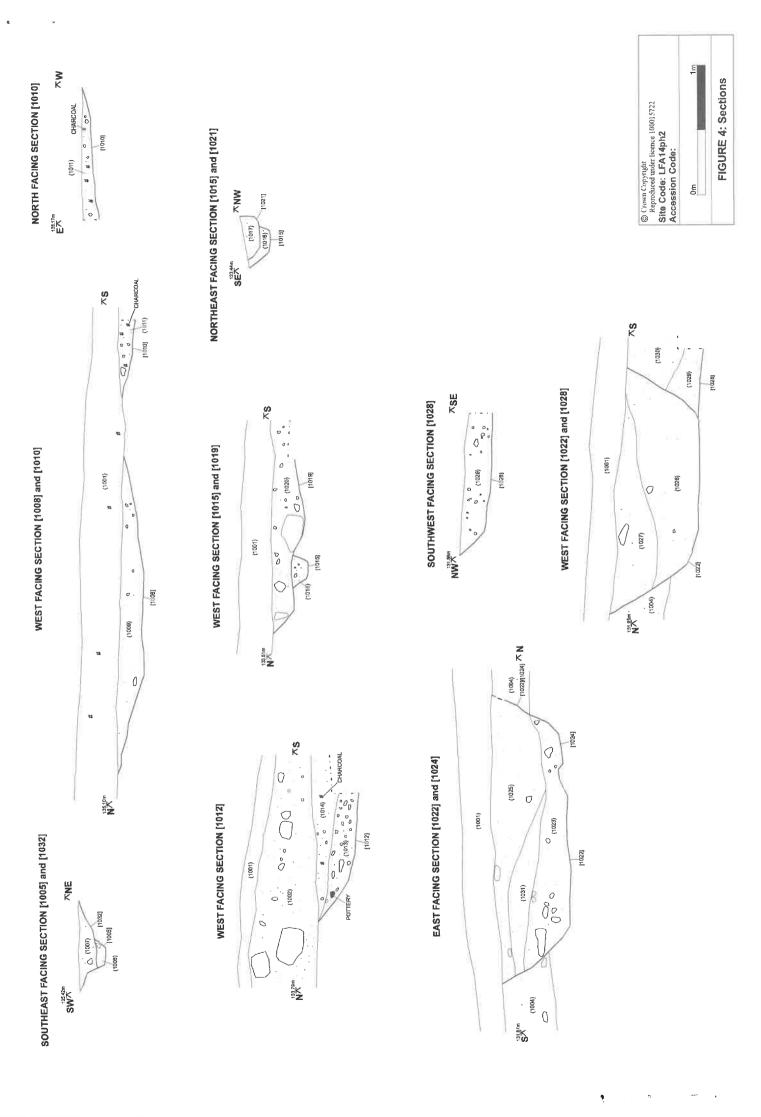


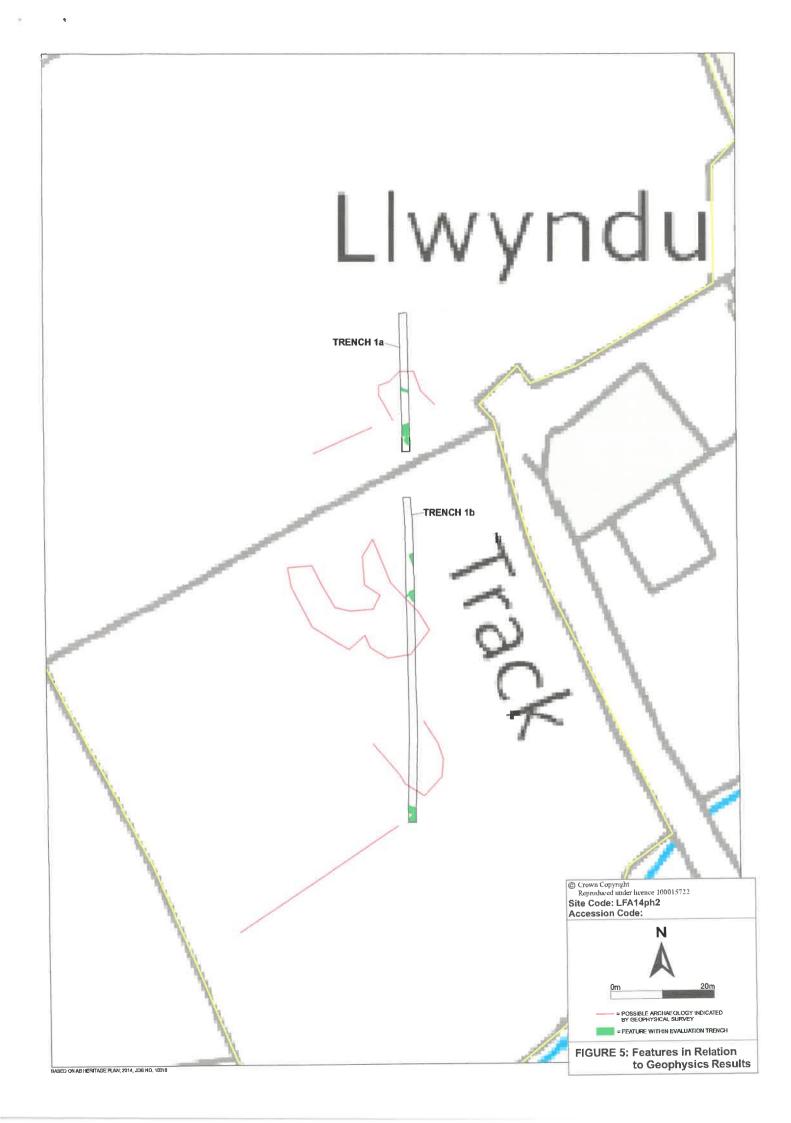


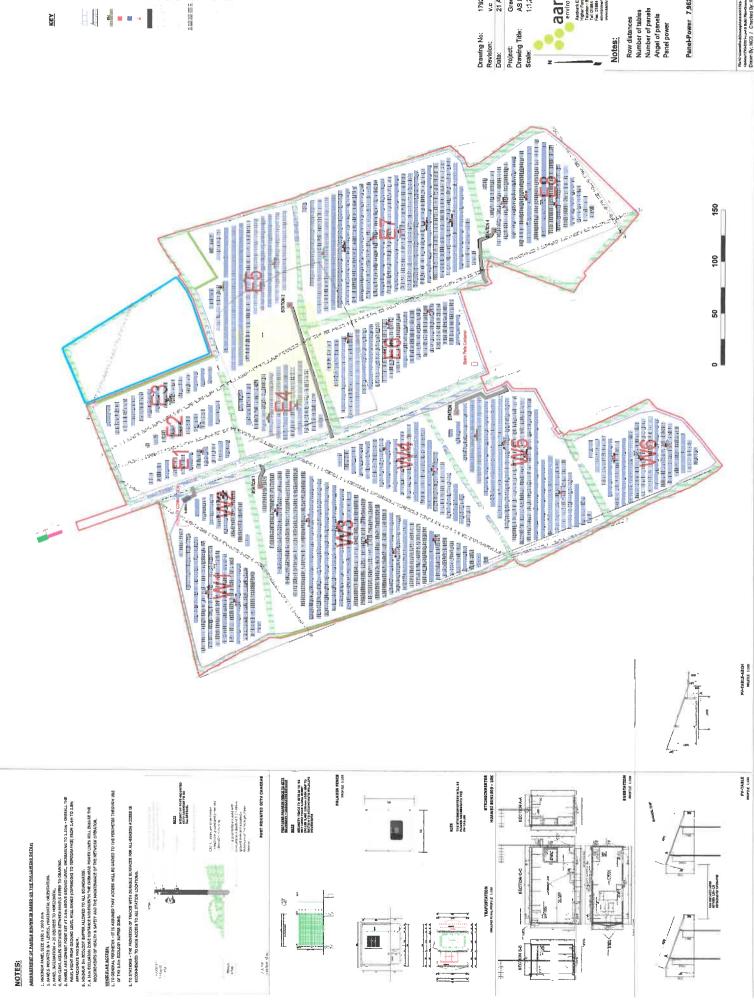












KEY

SEE TO OVERHEAD POWER LINE

Greencells Llwyndu Solar Farm AS Built Plan 1:1,250 @ A1 aardvark
environment maters
Assayes to these
Properties wherever v.c 21 August 2018 1792/D001

Panel-Power 7,952,175 MWp