

Environmental Statement: Technical Appendix 6.2 – Geophysical Survey Report

ES TA 6.2

Development of National Significance

Alaw Môn Solar Farm

Land west of the B5112, 415m south of Llyn Alaw, 500m east of Llantrisant and 1.5km west of Llannerch-y-Medd, Anglesey

February 2024





Alaw Môn Solar Farm, Anglesey

GEOPHYSICAL SURVEY REPORT

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PROJECT SUMMARY

Headland Archaeology (UK) Ltd undertook a geophysical (magnetometer) survey on a single contiguous block of land south of Llyn Alaw Reservoir in north central Anglesey. The site incorporates land attached to Chwaen Goch, Chwaen Bach, Tan Rallt and Nantanog Farms. The survey report, together with a desk-based assessment, will provide baseline information in support of a planning application for a proposed solar farm development (Alaw Môn Solar Farm).

The survey has identified numerous linear anomalies and linear trends in the data in all 63 fields within the proposed development area (PDA). Some of these anomalies clearly correspond with boundaries recorded on the 1901 Ordnance Survey map edition. Many others are also considered highly likely to locate 18th or 19th century field boundaries or enclosures based on their alignment and the characteristic magnetic response, although they are not recorded on historic mapping and tithe maps provide little additional detail. Within the extant and former fields numerous parallel trends in the data confirm that the land although laid to permanent pasture has been ploughed and drained to improve the quality of the pasture. Some sinuous and curvilinear anomalies which terminate, or cross former boundaries are also interpreted as older, possibly stone-lined, drains.

Against this background of post-medieval and modern agricultural activity are a handful of other anomalies which may be of earlier origin. These include smaller and irregularly shaped enclosures that do not obviously fit the later pattern of field division as well as three circular/sub-circular 'enclosures' one of which corresponds with a previously recorded cropmark. These features are all interpreted as of possible archaeological origin and are assessed as of moderate potential.

Earlier activity may also be indicated by a small cluster of discrete anomalies, adjacent to a watercourse, which may be indicative of prehistoric burnt mounds although this interpretation is tentative. Also of possible archaeological origin is a rectangular anomaly that may be indicative of an area of burning or firing. All these anomalies are relatively limited in extent.

The only feature of probable (rather than possible) archaeological origin is a double-dich 'enclosure' at the northern end of the PDA, previously unknown, which is considered likely to be of prehistoric date and of high archaeological potential.

The geology has had a big impact on the data and in the areas where it outcrops closest to the surface results in a very strong background against which it may be difficult to resolve 'weaker' archaeological responses. However, it is considered likely that the survey would have identified any extensive areas of archaeological activity, subject to the limitations of the technique.

Overall, the PDA may be characterised as forming part of a landscape of post-medieval farming, enclosure, and land improvement/drainage with a background of scattered, probably pre-historic, activity.

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ALAW MÔN SOLAR FARM, ANGLESEY

GEOPHYSICAL SURVEY REPORT

1. INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by Pegasus Group (the Consultant), on behalf of Wylfa Green Ltd (the Client) to undertake a geophysical (magnetometer) survey on land in north central Anglesey (Illus 1) in advance of the submission of a planning application for a proposed solar farm (Alaw Môn Solar Farm). The results of the survey will inform a forthcoming planning application for the proposed development and will help determine future archaeological strategy at the site, if required.

The survey was undertaken to assess the impact of the proposed development on the historic environment. It was undertaken in accordance with an Archaeological Written Scheme of Investigation (WSI) (Headland 2021), approved by Gwynedd Archaeological Trust, who provide archaeological advice to Anglesey County Council, and in line with current best practice (Chartered Institute for Archaeologists 2014, Europae Archaeologia Consilium 2016).

The surveys were carried out between March 29th and April 23rd 2021.

1.1. SITE LOCATION, TOPOGRAPHY AND LAND-USE

The Proposed Development Area (PDA), centred at NGR 237875 383672, is 25 kilometres east of Holyhead, east of the hamlet of Llantrisant and 1km south of Llyn Alaw, in north central Anglesey. It comprises a block of land across 63 fields (F1 to F63 inclusive) incorporating Chwaen Goch, Chwaen Bach, Tan Rallt and Nantanog Farms.

The PDA has, however, reduced in size since the geophysical survey was undertaken; the PDA referenced in this report covers a larger area.

The whole of the PDA is currently permanent grazed pasture (Illus 2 to Illus 7 inclusive) with occasional areas of rush and gorse (Illus 6) to the field margins and western margins of the PDA and occasional outcropping geology (Illus 7).

Land within the PDA varies greatly being 84m Above Ordnance Datum (AOD) around Nantanog Farm in the centre and at the same elevation to the northeast around Chwaen Bach Farm and rising to 108m AOD to the west and south of Tan Rallt. The land slopes steeply down to the north-west of Nantanog falling to approximately 35m Above Ordnance Datum (AOD) along the western PDA boundary adjacent to a watercourse.

1.2. GEOLOGY AND SOILS

The underlying bedrock geology comprises Ordovician Rocks (undifferentiated), comprising interbedded Mudstone and Sandstone across the whole of the PDA. This is mostly overlain by superficial deposits of Till, Devensian (Diamicton) although a band where there are no recorded superficial deposits runs across the centre of the PDA. A narrow band of Alluvium is recorded immediately adjacent to the stream on the northwestern edge of the PDA (NERC 2020).

The soils are classified in the Soilscape 17 Association which are described as slowly permeable seasonally wet acid loamy and clayey soils (Cranfield University 2021).

2. ARCHAEOLOGICAL BACKGROUND

The following archaeological background has been extracted from the Heritage Desk-Based Assessment (DBA) prepared by Pegasus Group. The DBA is based on a review of data held by Cadw, RCAHMW, and the Gwynedd Archaeological Trust Historic Environment Record, as well as historic maps available online and held at the National Library of Wales.

The HER records several monuments within or abutting the boundaries of the PDA (shown on Illus 9). Just outside the north-western edge of the PDA (on the western edge pf F21) is the Scheduled Monument of a Bronze Age burial mound (Cors y Bol - PRN 2083). Due east of this monument, in F21, scatters of worked flints have been found (PRN 5870) and cropmarks of a possible trackway (in the north of F20) and a possible enclosure in F25 have been identified from aerial photographs and are recorded as PRN 55722 and PRN 55723 respectively. In the east of the PDA, in F33, is the cropmark of another enclosure of uncertain date (PRN 5871). Beside the stream on the north-eastern edge of F7 (but just outside the PDA) and at Pen-yr-allt (between F5 and F6 but again outside the boundary of the PDA, a farmstead and a cottage are depicted on a map dated 1839 (PRN 55744 and PRN 55745).

Within a 2km radius of the PDA is further evidence for prehistoric activity: other Bronze Age burial mounds to the east and north-west of the PDA (PRN 2081 and PRN 2088), probable-Bronze Age standing stones to the south-east and north-west of the PDA (PRN 7378, PRN 59769, PRN 2069, PRN 2066), cropmark enclosures to the south-west of the PDA (PRN 5868), and the Scheduled Y Werthyr Iron Age hillfort to the west of the PDA (PRN 2077). There is also evidence for early medieval activity to the southwest of the PDA (PRN 2075, PRN 90203) and at Llechcynfawry to the south of the PDA (PRN 2080, PRN 81625, PRN 2085); and historic maps show numerous scattered buildings, many of which are no longer extant.

3. AIMS, METHODOLOGY AND PRESENTATION

The general aim of the geophysical survey was to provide enough information to establish the presence/absence, character, and extent of any archaeological remains within the PDA. This will therefore enable an assessment to be made of the impact of the proposed development on any subsurface archaeological remains, if present.

The specific archaeological objectives of the geophysical survey were:

to gather enough information to inform the extent, condition, character, and date (as far as circumstances permit) of any archaeological features and deposits within the PDA,

to obtain information that will contribute to an evaluation of the significance of the scheme upon cultural heritage assets, and

to prepare a report summarising the results of the survey.

3.1. MAGNETOMETER SURVEY

Magnetic survey methods rely on the ability of a variety of instruments to measure very small magnetic fields associated with buried archaeological remains. A feature such as a ditch, pit or kiln can act like a small magnet, or series of magnets, that produce distortions (anomalies) in the earth's magnetic field. In mapping these slight variations, detailed plans of sites can be obtained as buried features often produce reasonably characteristic anomaly shapes and strengths (Gaffney & Gater 2003). Further information on soil magnetism and the interpretation of magnetic anomalies is provided in Appendix 1.

The survey was undertaken using four Bartington Grad601 sensors mounted at 1m intervals (1m traverse interval) onto a rigid carrying frame. The system was programmed to take readings at a frequency of 10Hz (allowing for a 10-15cm sample interval) on roaming traverses (swaths) 4m apart. These readings were stored on an external weatherproof laptop and later downloaded for processing and interpretation. The system was linked to a Trimble R8s Real Time Kinetic (RTK) differential Global Positioning System (dGPS) outputting in NMEA mode to ensure a high positional accuracy for each data point.

MLGrad601 and MultiGrad601 (Geomar Software Inc.) software was used to collect and export the data. Terrasurveyor V3.0.36.0 (DWConsulting) software was used to process and present the data.

3.2. REPORTING

A general site location plan is shown in Illus 1 at a scale of 1:15,000. Illus 2 to Illus 7 inclusive are site

condition photographs. Illus 8 shows the GPS swaths and location of site condition photographs at 1:12,500. Illus 9 presents the greyscale data for the whole PDA, showing Sector boundaries, HER data, and scheduled monuments, also at a scale of 1:12,500. Illus 10 and Illus 11 show the interpretation of the data with Illus 10 displaying the archaeological and possible archaeological anomalies and Illus 11 those anomalies interpreted as being due to agricultural activity or geology. Fully processed (greyscale) data, minimally processed data (XY trace plot) data and an interpretative plot (by Sector) are presented, at a scale of 1:2,500, in Illus 12 to Illus 47 inclusive.

Technical information on the equipment used, data processing and magnetic survey methodology is given in Appendix 1. Appendix 2 details the survey location information and Appendix 3 describes the composition and location of the site archive. Data processing details are presented in Appendix 4.

The survey methodology, report and any recommendations comply with the Written Scheme of Investigation (Headland 2021), guidelines outlined by Europae Archaeologia Consilium (EAC 2016) and by the Chartered Institute for Archaeologists (CIFA 2014). All illustrations from Ordnance Survey (OS) mapping are reproduced with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

The illustrations in this report have been produced following analysis of the data in 'raw' (minimally processed) and processed formats and over a range of different display levels. All illustrations are presented to display and interpret the data to best effect. The interpretations are based on the experience and knowledge of management and reporting staff.

4. RESULTS AND DISCUSSION

Magnetometry is the most widely used geophysical survey technique in archaeology as it can quickly evaluate large areas and, under favourable conditions, identify a wide range of archaeological features including infilled cut features such as large pits, gullies and ditches, hearths, and areas of burning and kilns and brick structures. It is therefore good at locating settlements of all periods, prehistoric field systems and enclosures and areas of industrial or modern activity, amongst others. It is less successful in identifying smaller features such as post-holes and small pits (except when using a nonstandard sampling interval), unenclosed (prehistoric) settlement sites and graves/burial grounds. However, it is by far the single most useful technique and was assessed as the best non-intrusive evaluation tool for a site of this size.

All the land within the PDA was under short, closely grazed pasture (Illus 2 to Illus 7 inclusive) so ground conditions were ideal throughout, except around the western margins of the PDA and adjacent to watercourses where areas of poorly draining ground with intermittent presence of tussocky rush (Illus 6) were common. Data quality was consequently also good with only minimal post-processing being required.

As across much of Anglesey the prevailing geology has had a big influence on the data. The magnetic background across the PDA is extremely variable being very 'noisy' where the bedrock geology is closest to the surface, for example in F2, F7 and F59 (see Illus 9). In these areas linear anomalies can appear very clearly but lower magnitude, particularly discrete, anomalies may be difficult to identify against such a variable background. Conversely, where the bedrock does not outcrop so close to the surface (western half of F35 or northern half of F19) or there are overlying deposits of alluvium such as on the lower lying ground adjacent to a watercourse (northern part of F1), the magnetic background is very 'quiet' (homogenous) resulting in the grey monotone shading of the data plot.

Against this background numerous anomalies, agricultural, geological, archaeological, and modern have been identified throughout the PDA. Overall, it is considered that the soils and geology are suitable for magnetometry and that the results of the survey likely provide a good indication of the extent of subsurface archaeological features within the PDA, subject to the limitations of magnetometry described above.

The anomalies can be classified into categories depending on their type or origin/cause and are discussed below by Sector.

It has been extremely difficult to distinguish between those anomalies that may represent former boundaries, drains or ploughing due to the sheer number of recorded linear anomalies but in all cases these anomalies are interpreted as having an agricultural (probably post-medieval) origin. Where possible these agricultural anomalies are subdivided into three categories; boundaries that are recorded on the 1901 Ordnance Survey (OS) map, likely earlier boundaries (based on alignment or subdivision of extant or 1901 boundaries) and likely drains some of which meander across several fields. Where it has not been possible to confidently ascribe an anomaly to one of these categories a generic 'agricultural' interpretation is preferred. More detail and examples are provided in Section 4.2 below.

4.1. FERROUS AND MODERN ANOMALIES

Ferrous anomalies, characterised as individual 'spikes', are typically caused by ferrous (magnetic) material, either on the ground surface or in the plough-soil. Little importance is normally given to such anomalies, unless there is any supporting evidence for an archaeological interpretation, as modern ferrous debris is common on most sites, often being introduced into the topsoil during manuring or tipping/infilling. There is no obvious clustering to the ferrous anomalies within any of the fields or across the PDA more generally to indicate an archaeological origin. Far more probable is that the 'spike' responses are likely caused by the random distribution of ferrous debris in the upper soil horizons.

4.2. AGRICULTURAL ANOMALIES

Across the whole of the PDA scores of linear anomalies varying greatly in magnitude are identified. These have been interpreted in four categories.

The first category comprises boundaries that are recorded on the 1901 Ordnance Survey (OS) map, but which are no longer extant. These former boundaries typically (but not always) present as two parallel linear responses caused by a ditch either side of a bank and are recorded as a thick green line on the interpretation illustrations. Typical examples are recorded in F17 (Illus 30 - 32) and F29 (Illus 27 - 29). Some of these former boundaries are also visible as very slight earthworks on the LiDAR data (where available). These boundaries have clearly either been removed or have fallen out of repair and so lost over the last 120 years as the field sizes have been increased, pasture improved and some of the more marginal lands, particularly adjacent to the water course forming the western edge of the PDA, brought into agricultural production.

The second category of anomalies are also interpreted as being caused by probable former boundaries although these features are not recorded on the 1901 mapping and are not readily identifiable on the 1844 tithe mapping. The anomalies are of a similar magnitude to those in the first category and they also fit the overall pattern of land division being on the same alignment and orientation as the overall pattern exhibited by the 1901 and current system of field division; often these anomalies sub-divide existing fields or former fields still extant in 1901. Examples include in F3, F4 and F7 (Illus 12 to Illus 17 inclusive).

The third category comprise linear and curvilinear anomalies which are interpreted as field drains. Some drains are identified as clear, regularly spaced patterns of anomalies constrained within extant field boundaries and these are assumed to be relatively modern drains laid during the 20th century as part of the process to improve the quality of the pasture. Other irregular or curvilinear anomalies may be much older, perhaps stone lined, drains.

The final category includes linear and curvilinear anomalies that cannot be confidently interpreted in any of the three categories described above and which are therefore interpreted as of uncertain (but likely agricultural) origin. They are considered most likely to be caused by ploughing or drains.

4.3. GEOLOGICAL ANOMALIES

As mentioned previously although the bedrock geology is the same across the PDA and, with the exception of bands of alluvium adjacent to watercourses, so are the superficial deposits. However, the effects of how close the bedrock is to the ground surface clearly has a big effect on the data. It is not possible to mark individually each anomaly interpreted as having a geological origin. Larger, clearly defined anomalies have been marked but the extent of broader more amorphous areas of geological variation are indicated by a dashed line.

Of particular note is a broad circular anomaly on the eastern edge of F36 (Illus 36 – 38) which is not thought to be archaeological.

4.4. ANOMALIES OF ARCHAEOLOGICAL POTENTIAL

Sector 1 (Illus 12 to Illus 14)

No anomalies of archaeological potential have been recorded in this sector.

Sector 2 (Illus 15 to Illus 17)

A cluster of possible enclosures is recorded in the eastern half of F5 aligned broadly north-northeast/south-south-west. The enclosures are much smaller than the mapped 19th century fields and are also aligned slightly oblique to the mapped boundary immediately to the west although they are aligned parallel with the unmapped boundaries in F6 immediately to the north. For these reasons these enclosures may be indicative of an older system of land division and have consequently been interpreted as of possible archaeological origin although this is far from certain. These enclosures are assessed as of low to moderate archaeological potential.

On the western edge of F11 and F12, where the fields border a watercourse, are two or possibly three small adjoining irregularly shaped enclosures, one of which is bisected by the extant boundary between F11 and F12. Neither the shape nor orientation of these enclosures matches those of the current boundaries, and they are also significantly smaller than the current and or former fields. Several discrete anomalies within or immediately adjacent to the enclosures, possibly indicative of pits, are also interpreted as of possible archaeological origin of moderate potential.

On the opposite side of the watercourse in F7 are several small sub-circular anomalies with a distinct 'spiked' response in the centre. Their location adjacent to a stream could indicate that they may be due to prehistoric burnt mounds although this interpretation is again considered tentative especially given the highly variable magnetic background evident throughout F7. Nevertheless, an archaeological origin must be considered, and these anomalies are also assessed as of moderate potential.

Sector 3 (Illus 18 to Illus 20)

No anomalies of archaeological potential have been recorded in the immediate vicinity of the scheduled monument which is located immediately outside the edge of the PDA in F21. Transient, unenclosed prehistoric activity in this area, as suggested by the recorded flint scatter in the centre of F21, is not likely to be identified by magnetometer survey, as noted in Section 4 above.

A possible trackway previously identified in F22 is also not identified in the magnetic data although a possible former boundary, aligned southwest/north-east, has been recorded immediately to the east.

A single anomaly, interpreted as a possible area of burning is identified close to the south-western

corner of F9. It is located on the line of a former boundary. Another similar anomaly is recorded 0.5km to the east in F11 adjacent to a watercourse and may possibly locate another burnt mound although the interpretation is tentative.

Sector 4 (Illus 21 to Illus 23)

A possible enclosure entered on the HER (placed in the centre of F25) is not recorded in the survey data although its location falls within a very 'noisy' area due to the near-surface outcropping of the bedrock. No anomalies of archaeological potential have been recorded in this sector.

Sector 5 (Illus 24 to Illus 26)

In F28 a sub-circular anomaly, approximately 10m in diameter, is recorded and interpreted as a small probable enclosure. Several discrete anomalies within the interior of the enclosure are also recorded and interpreted as of possible archaeological origin based on their location within the interior of the feature. This feature is also previously unknown. No other anomalies of archaeological potential are recorded anywhere in the vicinity of this feature and it is assessed as of moderate archaeological potential.

Sector 6 (Illus 27 to Illus 29 inclusive)

At the northern end of the PDA in F29 a large circular feature (enclosure?) approximately 75m in diameter is recorded. The northern half of the feature is defined by two parallel anomalies (infilled ditches) although only one ditch is recorded around the southern arc of the feature. Breaks in the response on the eastern side suggest a possible entrance here. The feature is clearly cut by a former boundary recorded on the 1901 mapping and by other anomalies of agricultural origin. A few discrete anomalies within the interior of the monument have been interpreted as of possible archaeological origin (possibly small pits) although non-archaeological causes are considered equally plausible. This feature is not previously known, and it is interpreted as of high archaeological potential.

One hundred and fifty metres south of the possible enclosure is a sinuous irregular linear anomaly, broadly aligned south-west/north-east. This anomaly is interpreted as a likely drain although based on its proximity to the enclosure and the fact that it does not obviously fit the surrounding pattern of field division or cultivation/drainage an archaeological origin cannot be entirely dismissed. However, a non-archaeological origin, possibly a stone drain, is also considered possible. It is assessed as of low/moderate archaeological potential.

Sector 7 (Illus 30 to Illus 32)

Predominantly in F31, but also possibly extending into F30, are a conjoined series of small enclosures aligned along a north-north-east/south-south-west axis. These enclosures are interpreted as of possible archaeological potential on the basis that none of these features are recorded on the 1901 mapping. It is acknowledged, however, that the basic alignment of this cluster of enclosures does reflect the broader pattern of (later) field division and that therefore an 18th or 19th century origin cannot be discounted. The magnitude of the anomalies is clearly seen to be linked to the underlying geology; the anomalies are 'stronger' (of higher magnitude) where the bedrock outcrops closer to the surface becoming very 'weak' where the effects of the geology are reduced. Several discrete anomalies also stand out against the magnetic background including a possible line of pit like responses aligned north-west/south-east near the southern boundary of F30 and a single anomaly indicative of burning. These features are considered of possible archaeological potential and therefore also assessed as of moderate potential.

An isolated sub-square shaped anomaly of possible archaeological origin is also identified in this sector in the centre of F17.

Sector 8 (Illus 33 to Illus 35 inclusive)

Another cluster of small enclosures is identified towards the southern end of F33 in this sector. Here too the overall alignment of the enclosures is not dissimilar from the broader pattern of 19th century land division, but the size of the enclosures is significantly smaller, and they are of varying shape. Of particular note in this sector is an east/west arc comprising at least six enclosures. However, the possibility that they are part of post-medieval land divisions cannot be discounted.

Further to the north in F33 a very small square enclosure with a discrete pit type anomaly in the centre is recorded. This 'enclosure' correlates precisely with the recorded position of a circular cropmark, interpreted as an enclosure (HER Ref. No. 5801), south-east of Nantanog.

In F36, at the southern end of the sector a single rectangular anomaly on a north-west/south-east axis clearly stands out as a feature of possible archaeological interest. The magnetic response is indicative of an area of firing/burning.

Sector 9 (Illus 36 to Illus 38 inclusive)

At the south-eastern edge of F36 a very broad high magnitude circular anomaly stands out in the data. Whilst this anomaly is interpreted as most likely a natural geological feature an archaeological origin cannot be discounted.

Approximately 50m to the east in F46 is an amorphous area characterised by elevated magnetic readings which may be indicative of burning or firing. An archaeological origin is considered possible although a modern cause is considered equally plausible.

Sector 10 (Illus 39 to Illus 41 inclusive)

No anomalies of archaeological potential are recorded in this sector.

Sector 11 (Illus 42 to Illus 44 inclusive)

Other discontinuous linear anomalies are recorded in the north-eastern corner of F30 which may be part of the same 'activity' recorded in F30 to the southwest in Sector 7.

Sector 12 (Illus 45 to Illus 47 inclusive)

A third possible enclosure is recorded in F61. This feature is also defined by a single ditch type anomaly and is approximately 40m in diameter. It is bisected by a probable former boundary aligned northwest/south-east and has a possible entrance (break in the magnetic response) on its southern side. This feature is located in an area of outcropping geology, and it is therefore not possible to resolve any discrete anomalies of possible archaeological origin, if present, against such a variable magnetic background. No other anomalies of archaeological potential are recorded anywhere in the vicinity of this feature and it is interpreted as of moderate archaeological potential, possibly of prehistoric origin.

5. CONCLUSION

The survey has identified a plethora of linear anomalies across the PDA. The overwhelming majority of these anomalies locate probable 18th and 19th century field boundaries, enclosures, and field drains. Numerous other linear trend anomalies are considered highly likely to be also indicative of agricultural activity, mostly ploughing and drainage, undertaken to improve the quality of the pasture. Against this background of post-medieval and modern agricultural activity are a handful of other anomalies and areas of possible archaeological activity which may be of earlier origin. These include smaller and irregularly shaped enclosures that do not obviously fit the later pattern of field division and which includes three circular/sub-circular 'enclosures' one of which corresponds with a previously recorded cropmark. These features are all interpreted as of possible archaeological origin and are assessed as of moderate potential.

Also of possible archaeological origin is a rectangular anomaly that may be indicative of an area of burning or firing and a cluster of discrete anomalies adjacent to a watercourse which may be indicative of prehistoric burnt mounds. All these anomalies are relatively limited in extent.

The only feature of probable (rather than possible) archaeological origin is a double-ditched 'enclosure' at the northern end of the PDA, previously unknown, which is considered likely to be of prehistoric date and therefore of high archaeological potential.

The geology has had a big impact on the data and, in the areas where it outcrops closest to the surface, results in a very strong magnetic background against which it may be difficult to resolve 'weaker' archaeological responses. However, it is considered likely that the survey would have identified any extensive areas of archaeological activity, subject to the limitations of the technique.

Overall, the results of the geophysical survey and the types of anomalies recorded show the PDA to be situated within a landscape reflective of postmedieval farming comprising various phases of enclosure and land improvement based on draining marginal areas and increasing the quality of the pasturage thereby created. Underlying this relatively recent activity is perhaps a much older, system of land division with features perhaps indicative of potentially pre-historic activity.

6. REFERENCES

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proposed development area



Illus 2. Field 9, looking north



Illus 3. Field 18, looking north-west



Illus 4. Field 29, looking north-east



Illus 5. Field 44, looking south-east



Illus 6. Field 50, looking east



Illus 7. Field 58, looking north-east



ILLUS 8 Geophysical survey location showing GPS swaths and photo locations



ILLUS 9 Processed greyscale magnetometer data showing HER data and scheduled monuments



ILLUS 10 Interpretation of magnetometer data