MOLLESTON BACK GEOPHYSICAL AND TOPOGRAPHICAL SURVEY 2018

Molleston Back Defended Enclosure

Prepared by Dyfed Archaeological Trust
For: Cadw

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CRYNODEB GWEITHREDOL

Cafodd arolwg geoffisegol ei ysgogi yn sgil adroddiad ynglŷn â darganfod arteffactau canoloesol cynnar Ffrancaidd yn Molleston Back. Ni ddatgelodd yr arolwg unrhyw dystiolaeth gyd-destunol ar gyfer lleoliad yr arteffactau.

Gwnaed arolwg hefyd o Molleston Back, y lloc amddiffynedig o'r Oes Efydd sydd gerllaw. Dangosodd y gwaith hwn fod y safle lawer yn fwy cymhleth na'r hyn a awgrymir gan dystiolaeth ar yr arwyneb, gyda'r posibilrwydd y gallai cofadail ffurf 'hengoraidd' fod dan yr wyneb yn y lloc.

EXECUTIVE SUMMARY

A geophysical survey was prompted by a report of the discovery of early medieval Frankish artefacts at Molleston Back. The survey revealed no contextual evidence for the location of the artefacts.

The nearby Iron Age defended enclosure of Molleston Back was also surveyed. This work showed that the site is much more complex than is suggested by surface evidence, with the possibility that a Neolithic 'hengiform' monument may underlie the enclosure.

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SUMMARY

In 2012 two early medieval artefacts dating to the 6th and 7th centuries were reportedly found near Molleston Back Defended Enclosure. The artefacts included a Frankish vessel and a Frankish radiate headed brooch. These artefacts are well beyond their expected distribution but it is not impossible for them to have been deposited in a furnished grave of an 'incomer' in west Wales. However, there is some doubt surrounding the location of the find spot. Therefore in 2017 Cadw grant aided a project to evaluate the site to ascertain whether the early medieval artefacts could have been found at Molleston Back and possibly provide an archaeological context for the artefacts. The assessment consisted of a geophysical survey across the entirety of the field the artefacts were reported found in. As the finds are expected to have come from a furnished burial it was hoped that a cemetery would provide the necessary context. The geophysical survey results have not been able to provide a context for the artefacts but it has identified a number of possible enclosures; these are not characteristic of a cemetery.

In addition to the primary aims the project has also provided an invaluable opportunity to examine the Molleston Back enclosure in detail. Although the defenses of the enclosure have previously been planned by the Ordnance Survey the topographical and geophysical survey has revealed significant new information about the construction of the enclosure, in particular identifying a number of previously unknown attributes. The surveys show that the enclosure appears to be defined by two distinct components, suggesting that a possible 'hengiform' type monument has been incorporated and adapted into the defences of the enclosure. This provides an interesting glimpse into the mind-set of the inhabitants and how they weighed up their needs for a defended enclosure against their desire to preserve an earlier monument, demonstrating careful planning and thoughtfulness. This may provide a unique opportunity into how a presumably peaceful early ritualistic site has transitioned into an Iron Age defended enclosure in such a way, through careful thought, that the people were able maintain their special connection with its original purpose.

It is also worth noting that with a better understanding of the extent of the enclosure it appears that the scheduled area may not entirely cover its full extent, with its most southern edge and outer defences lying in an adjacent field outside of the scheduled area.

1. INTRODUCTION

1.1 Project Commission

1.1.1 In 2012 two early medieval artefacts were reportedly found near Molleston Back Defended Enclosure. The artefacts, a Frankish vessel and a Frankish radiate headed brooch, date to AD 6th and 7th centuries, with examples known from northern France/Belgium. Similar brooches are also known from eastern England. Both artefacts occur in funerary contexts. The Molleston Back artefacts are well beyond their normal expected distribution, but it not impossible for them to have been deposited in a furnished grave of an 'incomer' in west Wales. However, there is some doubt surrounding the location of the find spot. It was therefore proposed to undertake a geophysical survey of the reported find spot and of Molleston Back Defended Enclosure in order to provide a context for the artefacts.

1.1.2 The artefacts, if from Molleston Back, are unique in Wales, and could represent a previously unknown site type. Because the actual location and character of the site is unknown it is under potential threat for a variety of sources, in particular continuing metal detecting. If the artefacts can be proven to be from where the finder has suggested, then the site may be worthy of scheduling.

1.1.3 In 2017 Cadw grant aided a project to evaluate the site to determine whether the early medieval artefacts were found at Molleston Back and provide an archaeological context for the artefacts.

1.2. Project Aim and Objectives

1.2.1 The aim of the project was:

- to determine whether the early medieval artefacts were found at Molleston Back,
- To provide an archaeological context for the artefacts.
- To report on the artefacts and fieldwork.

The objectives of the project were:

- To characterise archaeological context by survey and additional fieldwork.
- To improve our understanding and knowledge of early medieval migration study in Wales.
- To disseminate the results of the project to a wide audience.
- To produce an archive and deposit with the NMR.
- Possible scheduling recommendation.

1.3 Report Outline

1.3.1 This report provides a summary and discussion of the survey and its results, and puts those results within their regional and national context.

1.4 Abbreviations

1.4.1 Sites recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) are identified by their National Primary Record Number (NPRN). Scheduled Monument (SM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and documentary

evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.5 Illustrations

1.5.1 Printed map extracts are not necessarily produced to their original scale.

1.6 Timeline

1.6.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	*c.*450,000 – 10,000 BC	Prehistoric
Mesolithic –	*c.* 10,000 – 4400 BC	
Neolithic –	*c.*4400 – 2300 BC	
Bronze Age –	*c.*2300 – 700 BC	
Iron Age –	*c.*700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – *c.* AD 410	Historic
Post-Roman / Early Medieval Period –	*c.* AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period[1] –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and Historical Timeline for Wales.

[1] The post-medieval and industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

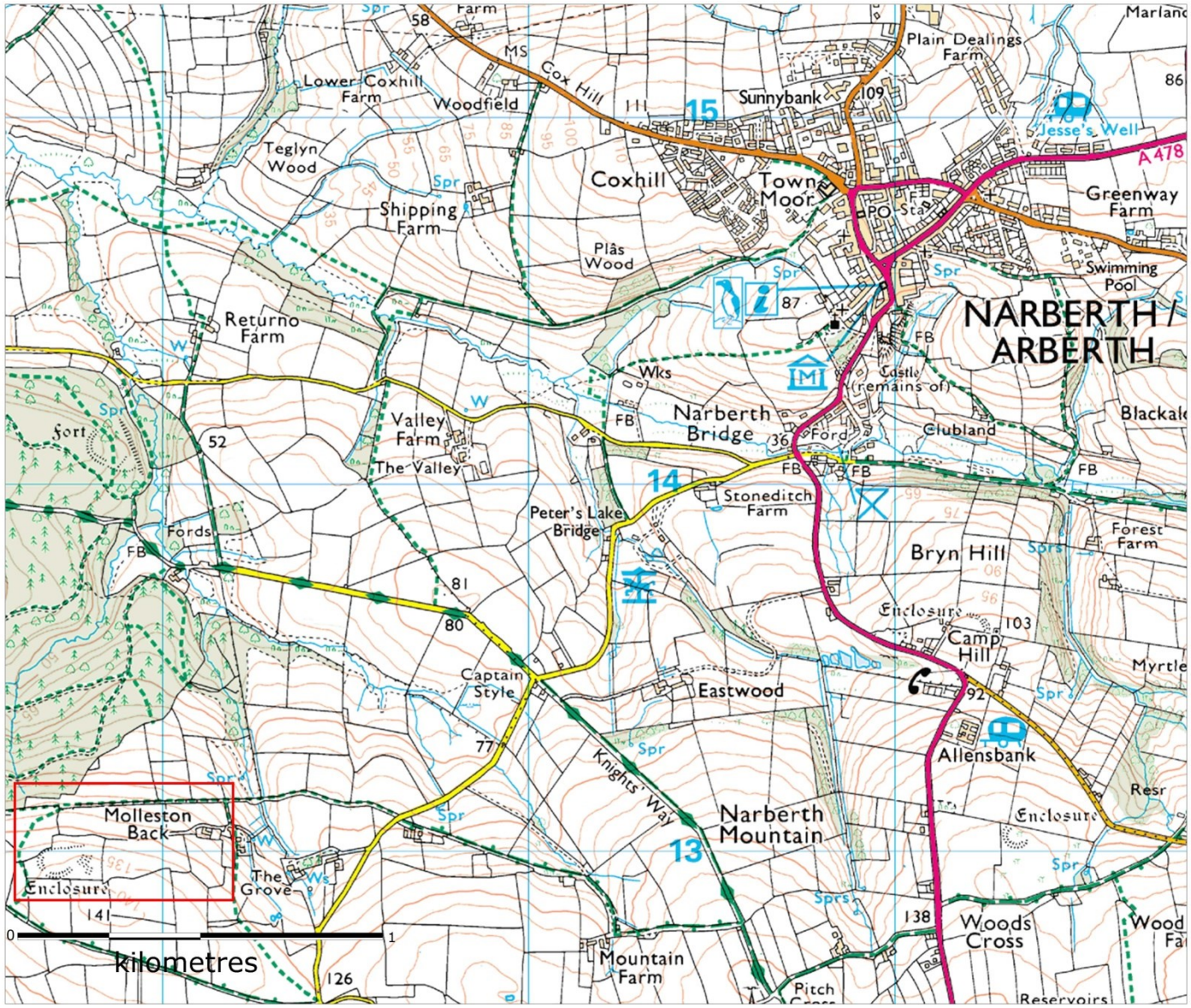

Figure 1: Site Location

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Site Location

DAT Archaeological Services

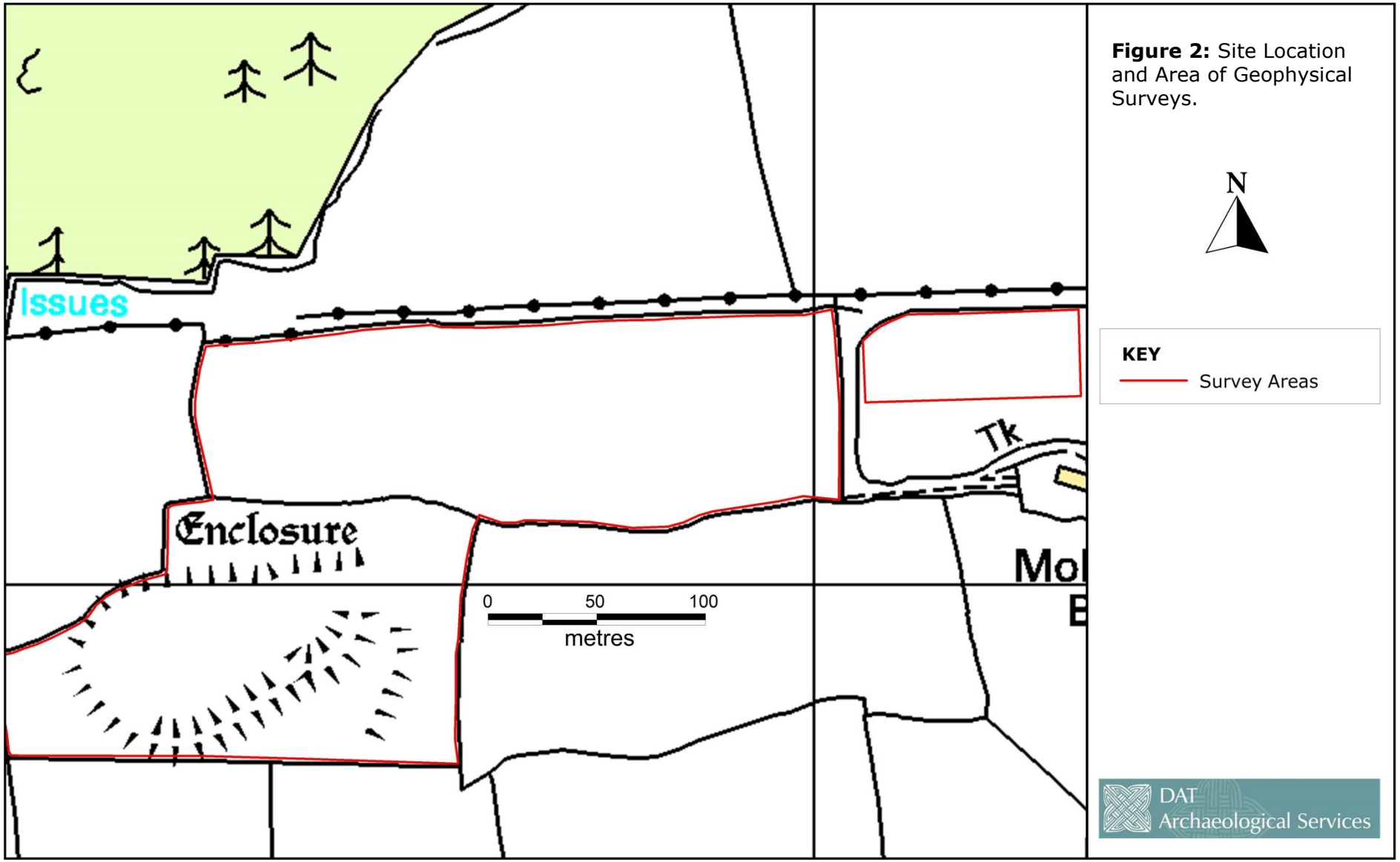


Figure 2: Site Location and Area of Geophysical Surveys.

2. THE ARTEFACTS (PRN 112083) Artefact descriptions by Mark Redknap, National Museum Wales

2.1.1 In 2012, two early medieval artefacts of continental type were reportedly found near Molleston Back enclosure while 'digging in the corner of a field'. Mark Lodwick, Finds-Co-ordinator PAS Cymru and Mark Redknap were contacted by a friend of the finder, and preliminary identifications made on the basis of photographs provided. In July 2016 Mark Redknap spotted the pot in an online auction at Timeline Auctions. He made contact with the auction company, who allowed him to record the pot. The friend of the finder was contacted again for more information on the find-spot, which was reported to lie in the field to the north of Molleston Back enclosure (PE274), outside the scheduled area.

2.1.2 In December 2016, Ken Murphy (Director of the Dyfed Archaeological Trust) contacted the farmer, Rhys Watkins. He had no knowledge of the finds, but has given permission for metal detectorists to work on his land. He would be willing for the survey to take place. The land is owned by the Henllan Estate. Permission was sought, and granted, from the estate.

Bioconical black burnished pot

2.1.3 Similar examples of this common Frankish vessel form occur in northern France, Belgium and Nordrhein-Westfalen. Close profile similarities are shared with biconical pots from the Merovingian cemetery at Sint-Gillis-bij-Dendermode (between Ghent and Brussels; Van Dorselaer) and another from Rosmeer had a similar profile but some differences. Date: 6th or 7th century.

Photo 1: The bioconical black burnished pot

Frankish radiate headed bronze brooch

2.1.4 The repeating scroll motif resembles that on a brooch from Picardy/Artois region in the Boulanger collection. The same decorative field occurs on a bow brooches from Weimar, Germany, with oval footplates. This form of brooch with 5 knobs was developed in the Alamannic/German area in the 6th century, and later in North France/Belgium. Examples occur in Kentish graves as well as Cambridgeshire and Warwickshire providing a link between British and Continental chronologies. The 'Molleston' brooch

represents an example of a Continental 'import' into southern Britain in the early medieval period. Such 'imports', mainly of jewellery, are most common in Kent.

Photo 2: The Frankish radiate headed bronze brooch

Molleston Back Enclosure (PRN3615)

2.1.5 Molleston Back is a pear-shaped, univallate defended enclosure with a second, short rampart at its eastern end protecting the entrance. It occupies a northwest-facing slope at 130m above sea level, approximately 150m from a rounded hilltop which lies to its southwest. The enclosure measures 120m east-west and 70m north-south. The rampart consists of a bank up to 2m high externally and 1m-1.2m high internally with traces of an external ditch. A wide gap in the west end may be an entrance. However, a gap in the east end is more likely to be the original entrance. A 40m section of a second rampart lies concentric to the inner one and c.20m from it on the south-east side of the entrance. The enclosure, including the ramparts, is under improved pasture.

Photo 3: Aerial photograph of Molleston Back Enclosure (DAT AP93-28.57)

3. GEOPHYSICAL SURVEY

3.1 Methodology

3.1.1 A fluxgate gradiometer with a DL601 data logger was used to conduct the detailed geophysical survey, which detects variations in the earth's magnetic field. In Field A (The artefact field) a sample interval of 0.25m (four readings per metre) was used with 0.5m wide traverses across 20m x 20m grids using the zigzag traverse method of collecting data. In Fields B (The Iron Age Fort) and Field C a sample interval of 0.25m (four readings per metre) was used with a 1.0m wide traverses across 30m x 30m grids using the zigzag traverse method of collecting data. The gradiometers sensitivity was set to detect a magnetic variation in the order of 0.1 nanoTesla.

3.1.2 The survey grid was tied in to the local Ordnance Survey grid using a Trimble 5600 electronic distance measuring total station and theodolite (TST).

3.1.4 The data was processed using *Terrasurveyor 3.0* and is presented with a minimum of processing. The presence of high values caused by ferrous objects, which tend to hide fine details and obscure archaeological features, have been 'clipped' to remove the extreme values allowing the finer details to show through.

3.1.5 The processed data has been presented as a grey-scale plot, overlaid on local topographical features. The main magnetic anomalies have been identified and an interpretation of those results is also given.

3.1.6 The resulting survey results and interpretation diagrams should not be seen as a definitive model of what lies beneath the ground surface, not all buried features will provide a magnetic response that can be identified by the gradiometer. In interpreting those features that are recorded the shape is the principal diagnostic tool, along with comparison with known features from other surveys. The intensity of the magnetic response could provide further information, a strong response for example indicates burning, high ferric content or thermoremnancy in geology. The context may provide further clues but the interpretation of many of these features is still largely subjective.

3.1.7 All measurements given are approximate as accurate measurements are difficult to determine from fluxgate gradiometer surveys. The width and length of identified features can be affected by its relative depth and magnetic strength.

3.1.8 The bedrock geology of Molleston Back consists of Argillaceous rocks and sandstone and conglomerate. These sedimentary bedrocks formed approximately 408 to 427 million years ago in the Devonian and Silurian periods. The local environment was previously dominated by rivers. No superficial layers are recorded for the area (British Geological survey).

3.2 Results

3.2.1 The geophysical survey was conducted on the 12th of January 2018 in dry weather. A greyscale plot of the overall geophysical survey results can be seen in Figure 3. Individual greyscale plots of each survey area can be seen in Figures 4, 6 and 8 and interpretations plots in Figures 5, 7 and 9. Processed trace plots can be viewed in Appendix A.

3.2.2 Each area has been discussed below individually but certain elements are best dealt with *en masse* to avoid repetition.

3.2.3 Throughout the survey area a number of isolated dipole anomalies (shaded red) can be seen across each of the survey areas. Such anomalies consist of a single positive response with an associated negative response forming a 'halo effect'. The negative and positive response is of equal magnitude but opposite polarity and are caused by the same feature. Dipole anomalies are very commonly observed across a range of sites, particularly agricultural land. Generally, unless the dipoles form part of a larger pattern or feature they are regarded as not significant. They are usually the result of modern ferrous rich debris such as brick and tile fragments as well as horse shoe and plough shares, which lie just below or on the surface.

3.2.4 Positive features are shaded in blue, generally speaking these occur in places of pits and ditches. Throughout the survey area discrete pit-like features can be observed. Although there is some potential for them to be of archaeological origin it is also possible that they are a natural feature of the geology or a tree throw. Unless they form part of a larger pattern it can be difficult to differentiate between archaeological or natural phenomenon without intrusive groundwork.

3.2.5 Where a field boundary contains ferrous material such as wire-fencing, a dipolar effect can be seen where the survey encroaches near to it. This dipolar 'shadow' is visible in nearly all instances where the survey meets the field boundaries.

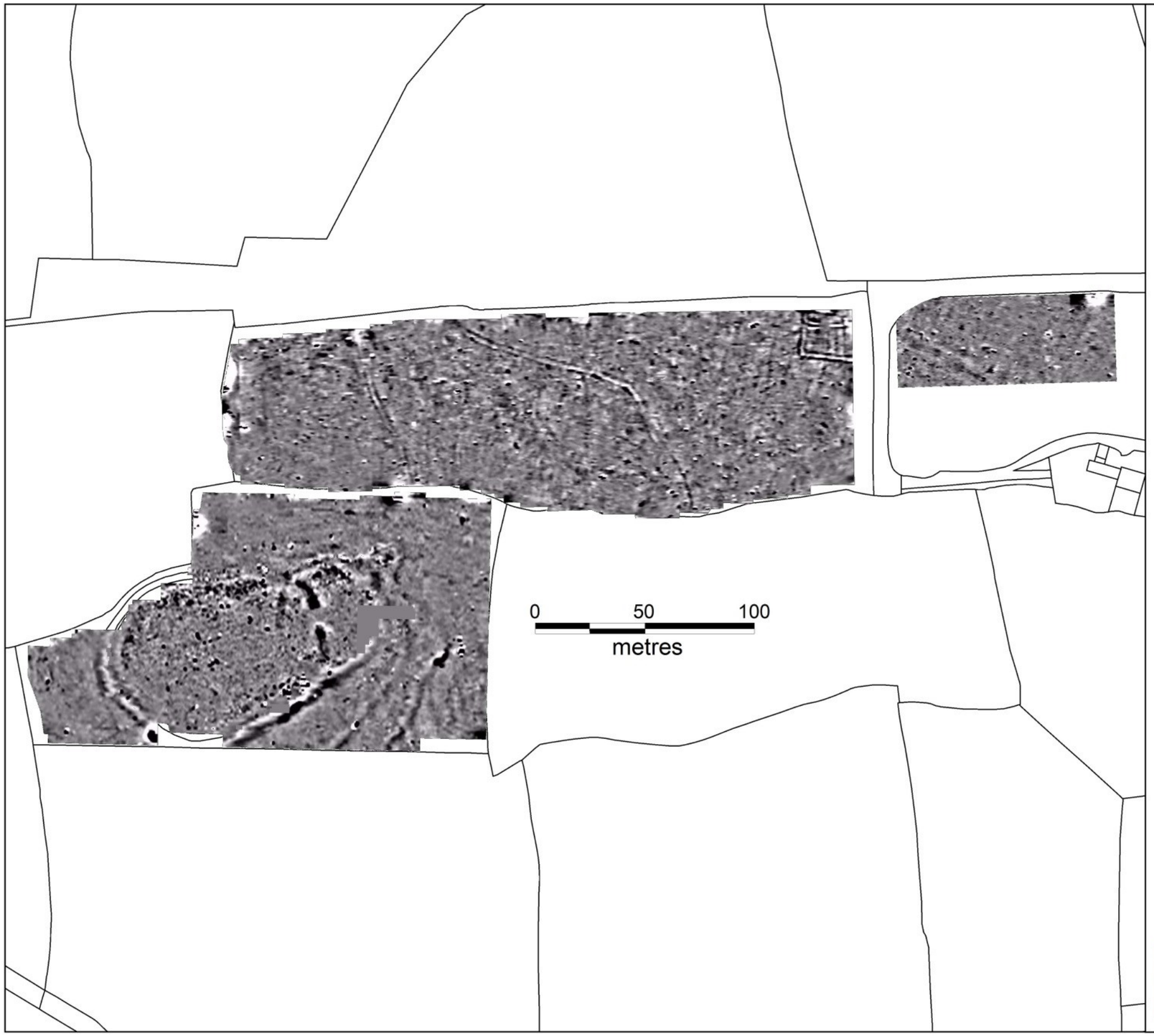


Figure 3: Greyscale plot of geophysical survey results Fields A - C.

Field A (Figures 4 and 5)

3.2.6 In the northeast corner of this survey area what appears to be three sets of linear anomalies with a 90° turn defining a possible enclosure (PRN 112039) that has been truncated by the current hedge and trackway. The outer and inner most linear anomalies both exhibit a positive magnetic response, indicating a buried ditch, whereas the central linear exhibits a negative response indicating a buried bank material. This would suggest a double ditched enclosure (i.e. ditch – bank – ditch). The southern edge of the enclosure runs in a continuous line but on the west facing edge there is a break in the line of the 'ditch-bank-ditch', suggesting a possible entrance. The extent of the enclosure surveyed would suggest it measures at least 19m north – south and 21m east – west.

3.2.7 Within the enclosure a number of positive pit-'like' features have been detected which may indicate archaeological activity. Interestingly, two rather large dipoles have also been detected, one of these lies adjacent to the possible entrance way and the other close by. The large size would suggest they are not stray ferrous objects but possibly something more substantial such as a kiln or hearth.

3.2.8 Orientated roughly north to south across Field A are two sinuous linear anomalies consisting of a negative response flanked by a positive response either side. These responses are likely to reflect trackways. The most western trackway actually coincides with the position of gateways in the current field boundary and is likely to be fairly modern. The eastern trackway does not correspond to any present gateways and might be of an older origin. At the midsection of the field the trackway takes a sharp turn in direction and from this point south its response is much more subtle. At this point also the trackway appears to 'fork' with one branch taking an easterly direction, this response is also very subtle. The lack of detection might suggest that the plough soil is very deep in places which would mask the readings of any subtle archaeological features.

3.2.9 Located on the west side of the eastern trackway a small rectilinear positive anomaly has been detected (c. 5.7m x 3.0m). The response is very subtle but could tentatively be interpreted as a small enclosure.

3.2.10 Towards the western boundary of Field A a positive linear anomaly has been detected orientated roughly north to south. At its most northern end this appears to have a rounded corner where it may extend to the east. This may represent the boundaries of a former enclosure but the southern and western boundaries have not been detected.

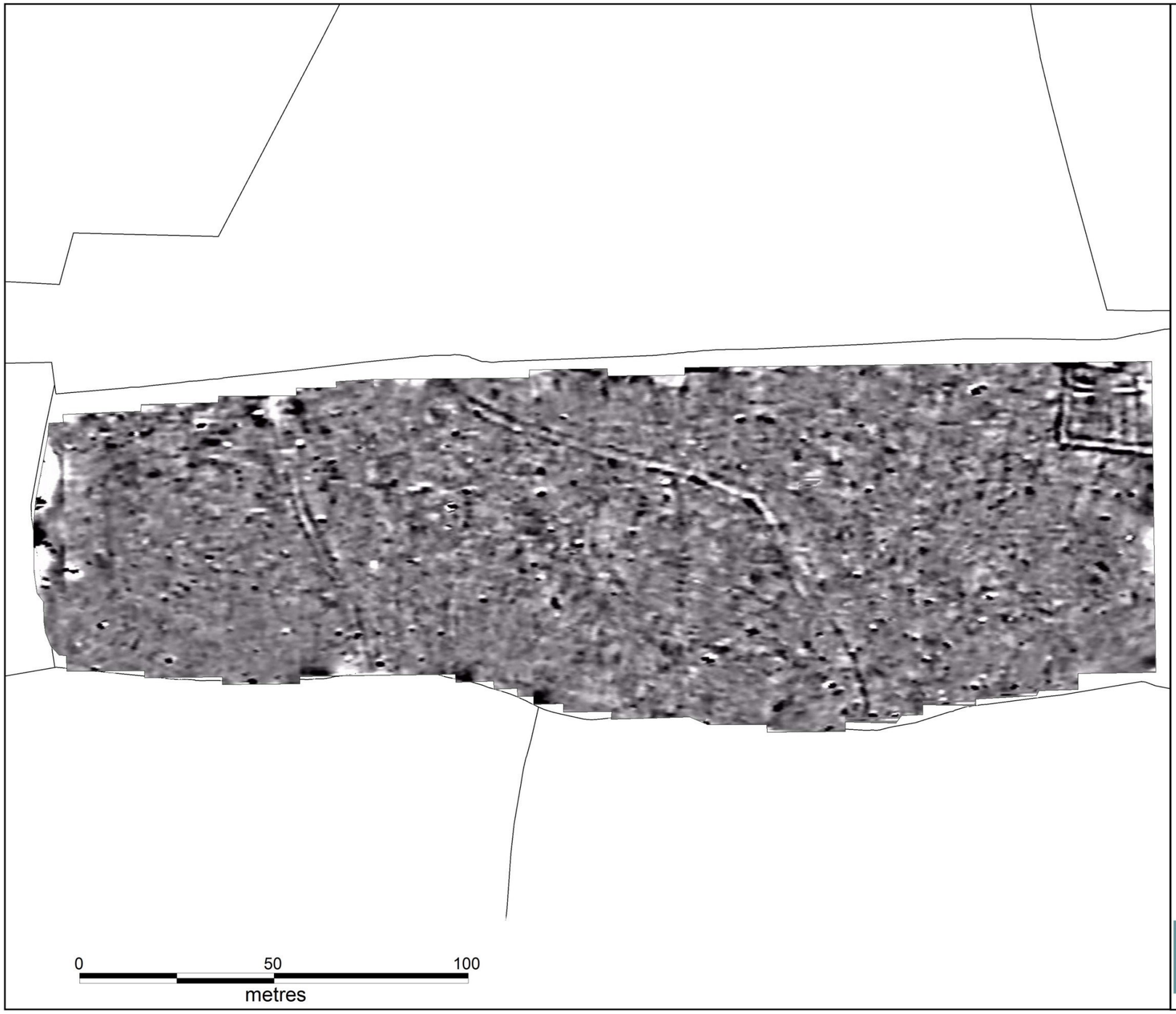


Figure 4: Greyscale plot of geophysical survey results for Field A.

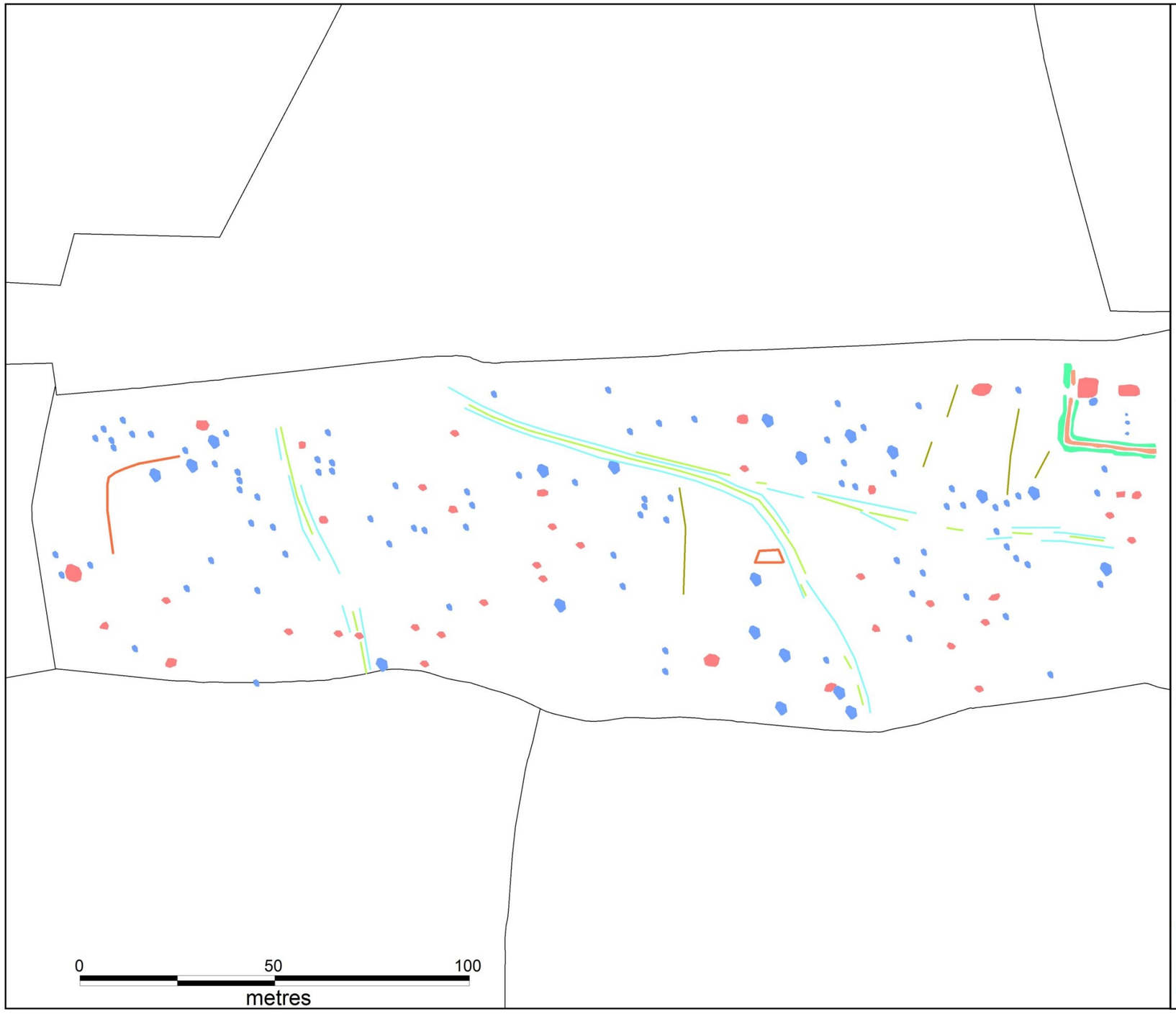


Figure 5: Interpretation plot of geophysical survey results for Field A.

Field B (Figures 6 and 7)

3.2.11 The geophysical survey results show a complex range of archaeological activity surrounding the Molleston Back enclosure. The interpretation regarding context and phasing is purely speculative.

3.2.12 The results appear to show Molleston Back enclosure defined by two distinct components, a large sub circular enclosure (measuring 62m north to south and 91m east to west) superimposed over a circular enclosure (45m in diameter). Each component appears to be composed of a series of positive and negative curvilinear features representing banks and ditches.

3.2.13 Where the northern edge of the enclosure meets the steep downhill slope apparent slippage has occurred resulting in it being difficult to discern individual features with any clarity.

3.2.14 The first phase of activity would appear to be the circular ditch (ditch no. 1) that sits on the eastern edge of the overall enclosure. The ditch measures c.40m in diameter. The ditch appears to be continuous, except for one obvious opening on its western edge. It is likely that there is a second entrance on the eastern side, which acts as the first entrance into the enclosure, but this is difficult to discern on the geophysics results with any certainty.

3.2.15 Bank no.2 represents the banks that are readily visible on the ground and these appear to define the larger sub circular enclosure. The eastern edge of this enclosure sits entirely within the earlier circular ditch (ditch no.1), a significant break along this edge suggests a possible entrance, and this correlates with the possible entrances of ditch no.2 making up to three entrances into the enclosure. The bank appears to run continuously along the perimeter of the enclosure except for on the southern edge where a significant break occurs at the point of the circular ditch (ditch no.1), the bank then picks up again along the edge of ditch no.1 that sits outside of the main body of the enclosure. Where the circular ditch sits inside of the main enclosure there is no evidence of any banks being added.

3.2.16 The outer curvilinear anomaly exhibits a positive response indicative of a buried ditch (ditch no. 2). The ditch appears to run along the perimeter of the enclosure but appears to remain distinct from that of ditch no.1 by a distinct break and different magnetic variation.

3.2.17 The geophysics suggests that bank no.1 and ditch no.2 were added at a later date to ditch no.1. The break in bank no.1 and distinct difference in ditches suggests that ditch no.2 was open during this second phase of construction but appears to respect the line of ditch no.2 whilst also incorporating it into the defences of the enclosure creating the 'unusual' pear shape, demonstrating careful planning.

3.2.18 There are subtle traces of other curvilinear anomalies (Ditch no.3 and bank nos. 1 and 3) which may or may not reflect further buried banks and ditches. Their responses are weak and they may simply represent an accumulation of magnetically different material along the edges of the enclosure.

3.2.19 Interestingly, a number of dipoles (magnetic spikes) appear to be within the line of the banks and ditches of the enclosure, these may represent magnetically rich deposits within the fill of the ditches or areas of intense burning activity such as a kiln.

3.2.20 To the southwest of the enclosure lies two sets of outer defences each consisting of a bank and ditch. At their most northern end these appear to peter out and become difficult to discern. To the south they extend beyond

the survey area into the adjacent field, but presumably run parallel with the enclosure.

3.2.21 On the northeastern edge of the enclosure a large pit anomaly has been detected, this was also visible on the ground and likely represents a modern pit, possibly associated with quarrying.

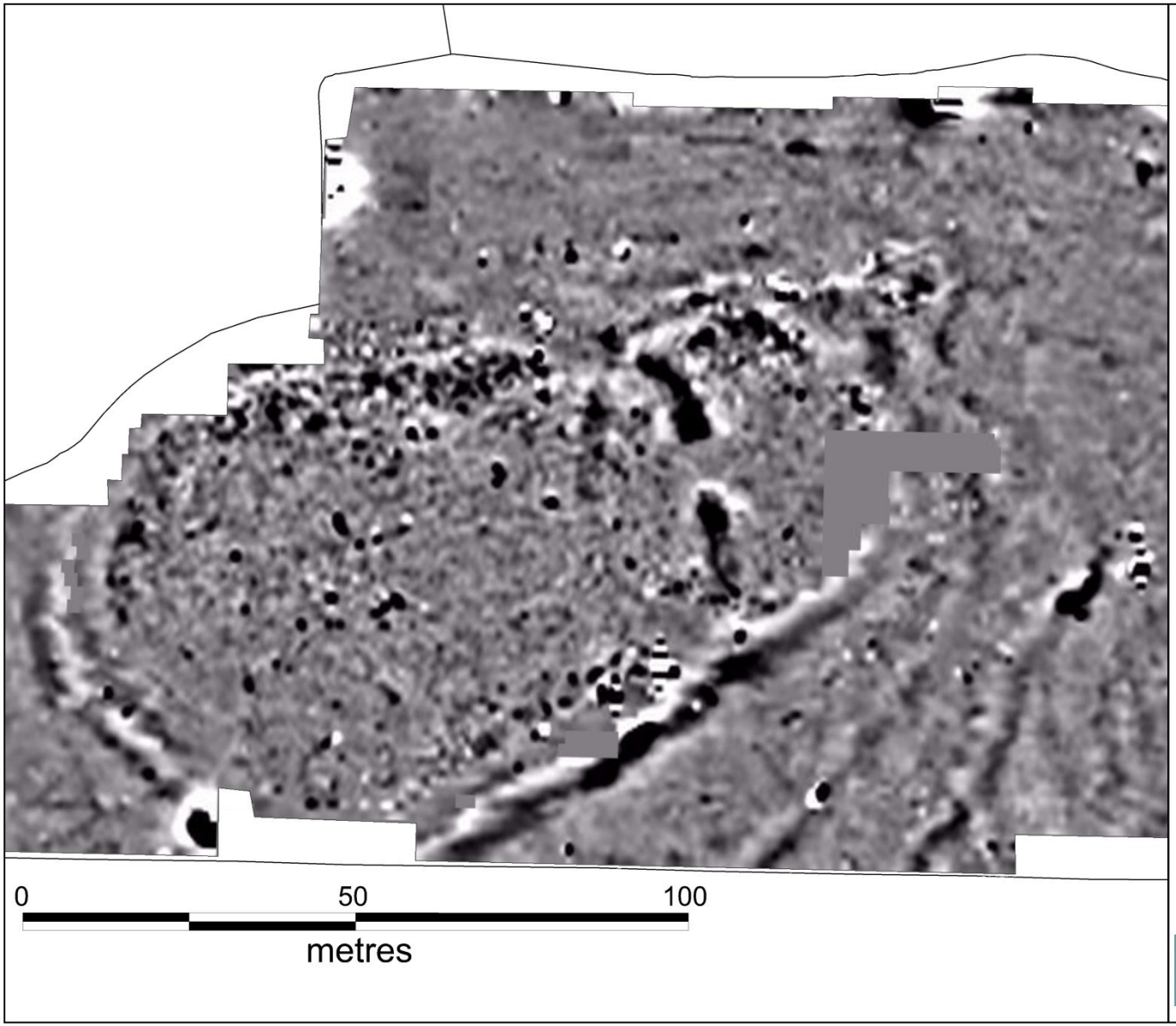


Figure 6: Greyscale plot of geophysical survey results for Field B.

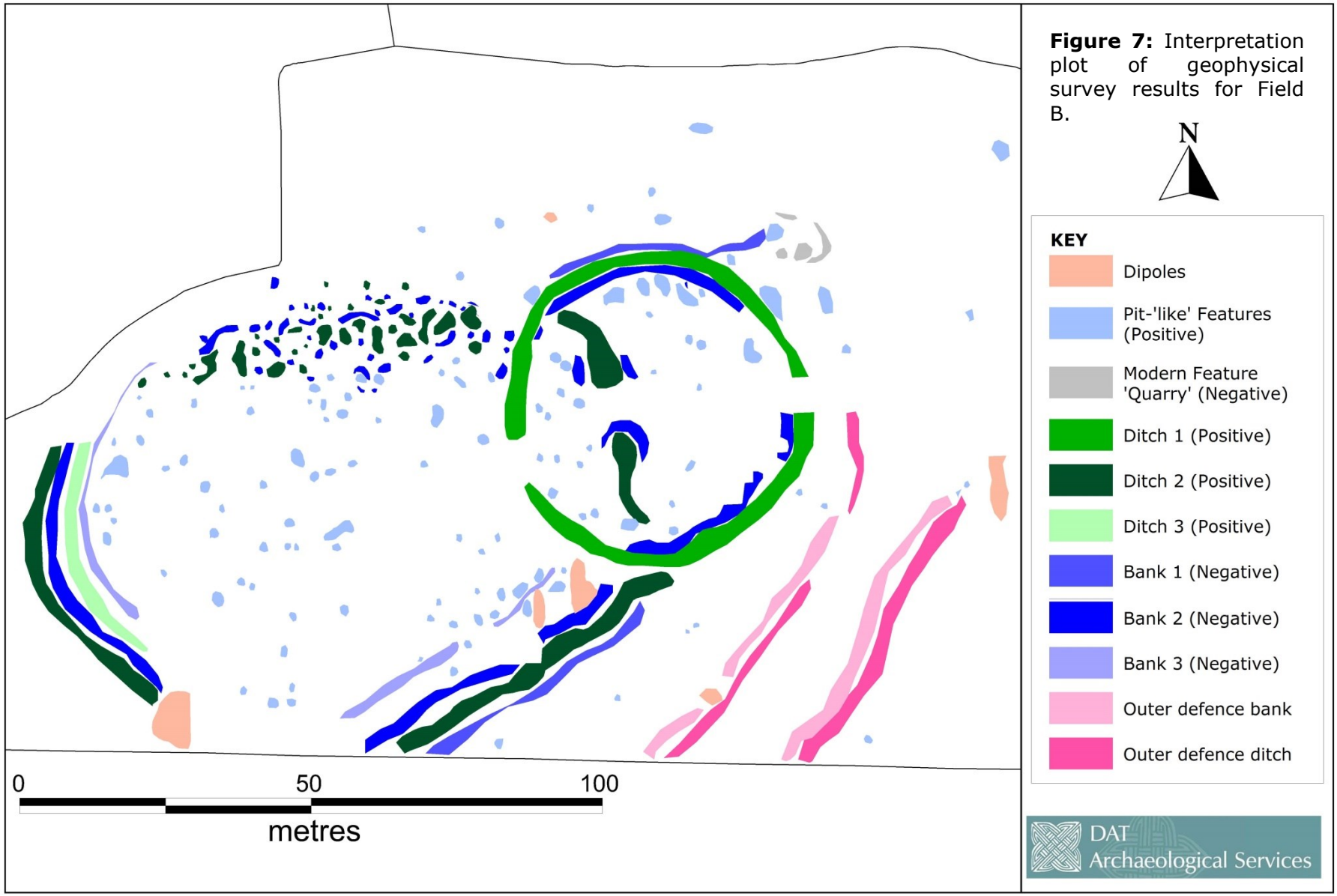


Figure 7: Interpretation plot of geophysical survey results for Field B.

Field C (Figures 8 and 9)

3.2.22 Field C was added as an additional area to survey to see if the enclosure observed in Field A continued.

3.2.23 Nothing of potential archaeological significance has been detected in this field.

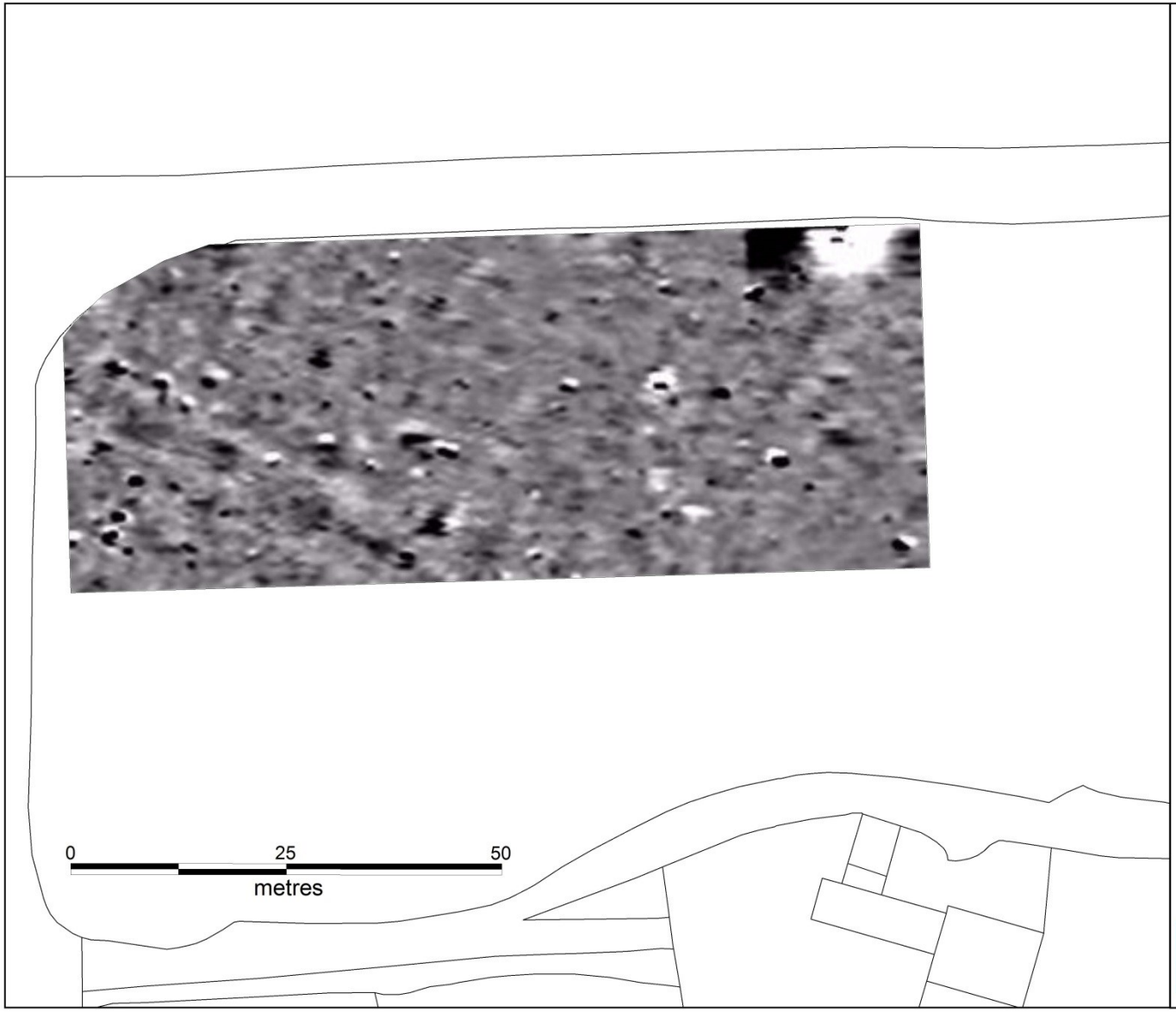


Figure 8: Greyscale plot of geophysical survey results for Field C.

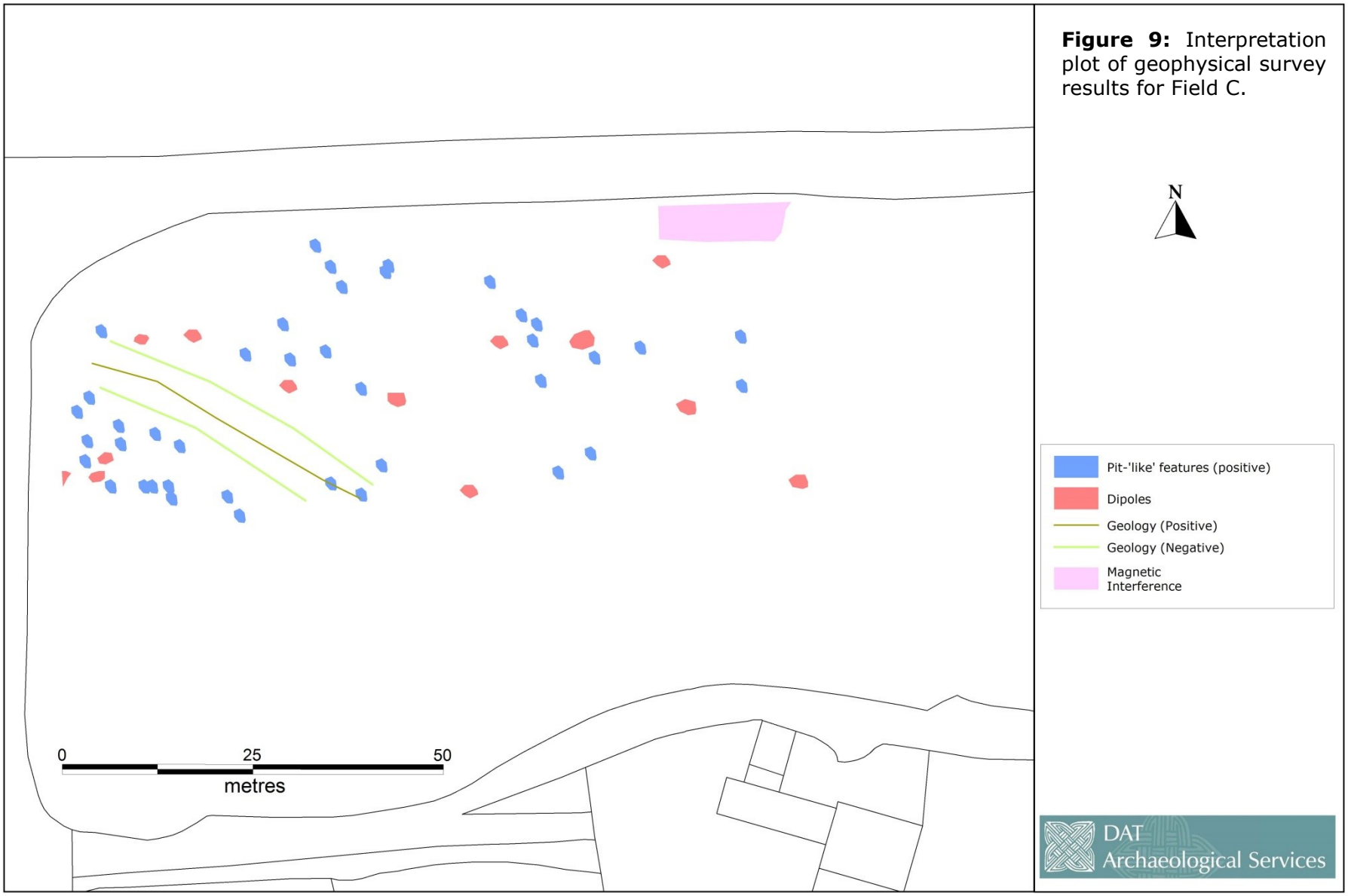


Figure 9: Interpretation plot of geophysical survey results for Field C.

4. TOPOGRAPHICAL SURVEY

4.1 Methodology

4.1.1 The topographical survey was conducted using a Trimble 5600 TST to acquire 3-dimensional data. It was conducted across the Molleston Back enclosure and its immediate vicinity to record changes in ground level across the site area and also to record the profile and layout of the visible remains of the banks.

4.1.2 Transects were recorded across the entire site area from east to west, with more detailed recording within the area of enclosure.

4.1.3 The TST records 3-dimensional coordinates of the tops and bottoms of slopes and visible earthworks in the field. The data has been used to produce a contour map using approximate levels in relation to ordnance datum.

4.2 Results

4.2.1 Figure 10 shows the contour map that has been produced from the topographic survey (contours at 1m and 0.10m intervals). The contour map has been overlaid on the greyscale plot of the geophysical survey results in Figure 11 and the interpretation of the geophysical survey results in Figure 12.

4.2.2 The visible earthwork banks (Bank no. 1) of the defended enclosure are readily identifiable on the topographical survey as well as subtle traces of the external ditch. The results are largely supportive of the geophysical survey results which is evident in the illustrations produced (Figures 11 and 12), although limitations in georeferencing cartographic sources can be seen by the discrepancies in the overlaid images.

4.2.4 Three distinct breaks in the bank (bank no.1) can be seen in the results. The first break occurs on the eastern edge of the banks and presumably the originally entrance was located here. The second break along the southern edge correlates with where the two components of the enclosure cross, and the third break is located on the western edge of the enclosure, this break is not visible in the geophysical survey results.

4.2.4 The interior of the hillfort is undulating but no obvious archaeological features are apparent.

4.2.5 The two sets of outer defences recorded in the geophysical survey also appear in the topographic survey as slight earthworks. These appear to be located along the edge of the enclosure where the natural slope is most gentle. To the north of the enclosure the natural slope is very steep.

4.2.6 A general hachure plan and profile of the site have also been produced in Figures 13 and 14.

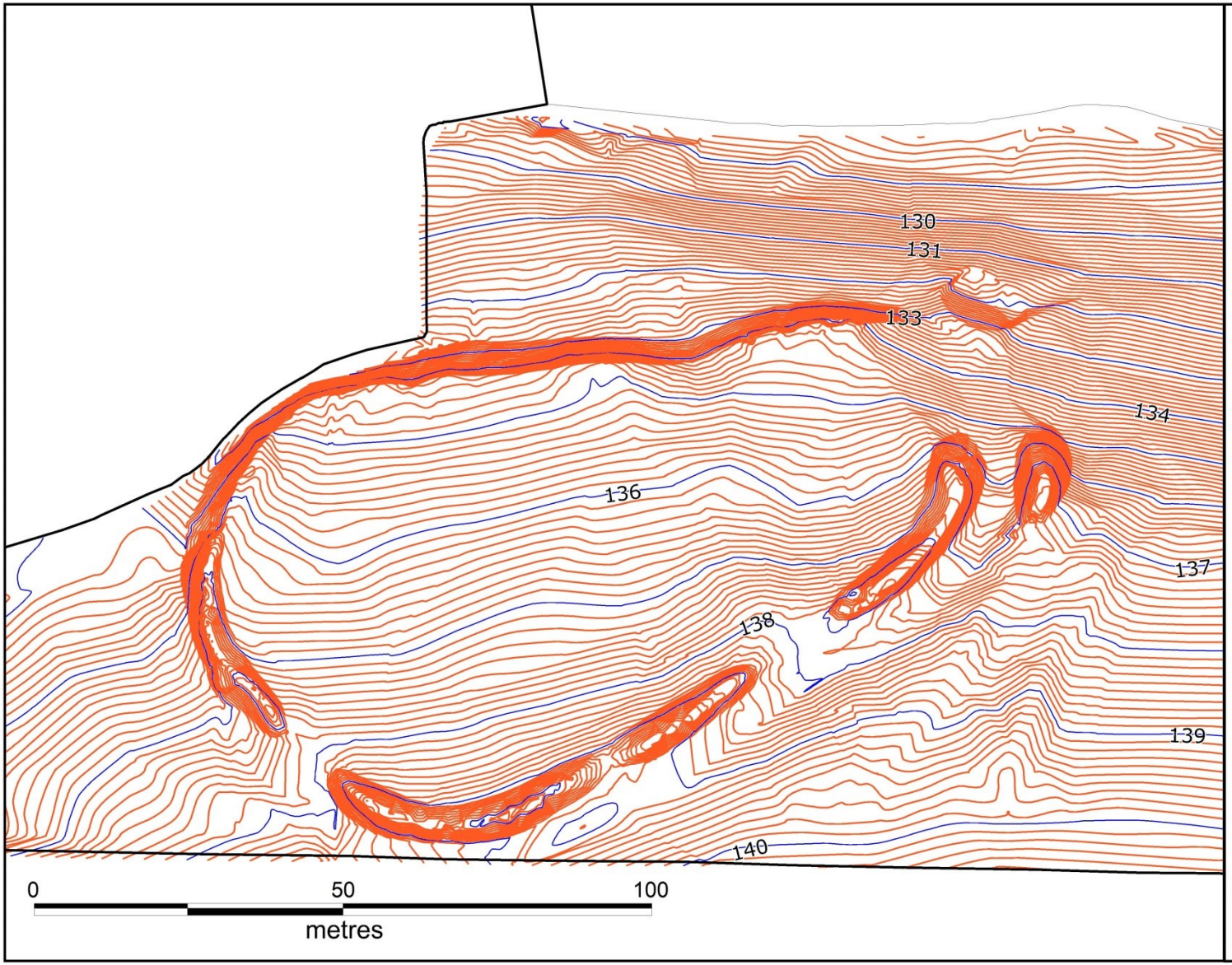


Figure 10: Contour plot of site area showing topography of Molleston Back enclosure.

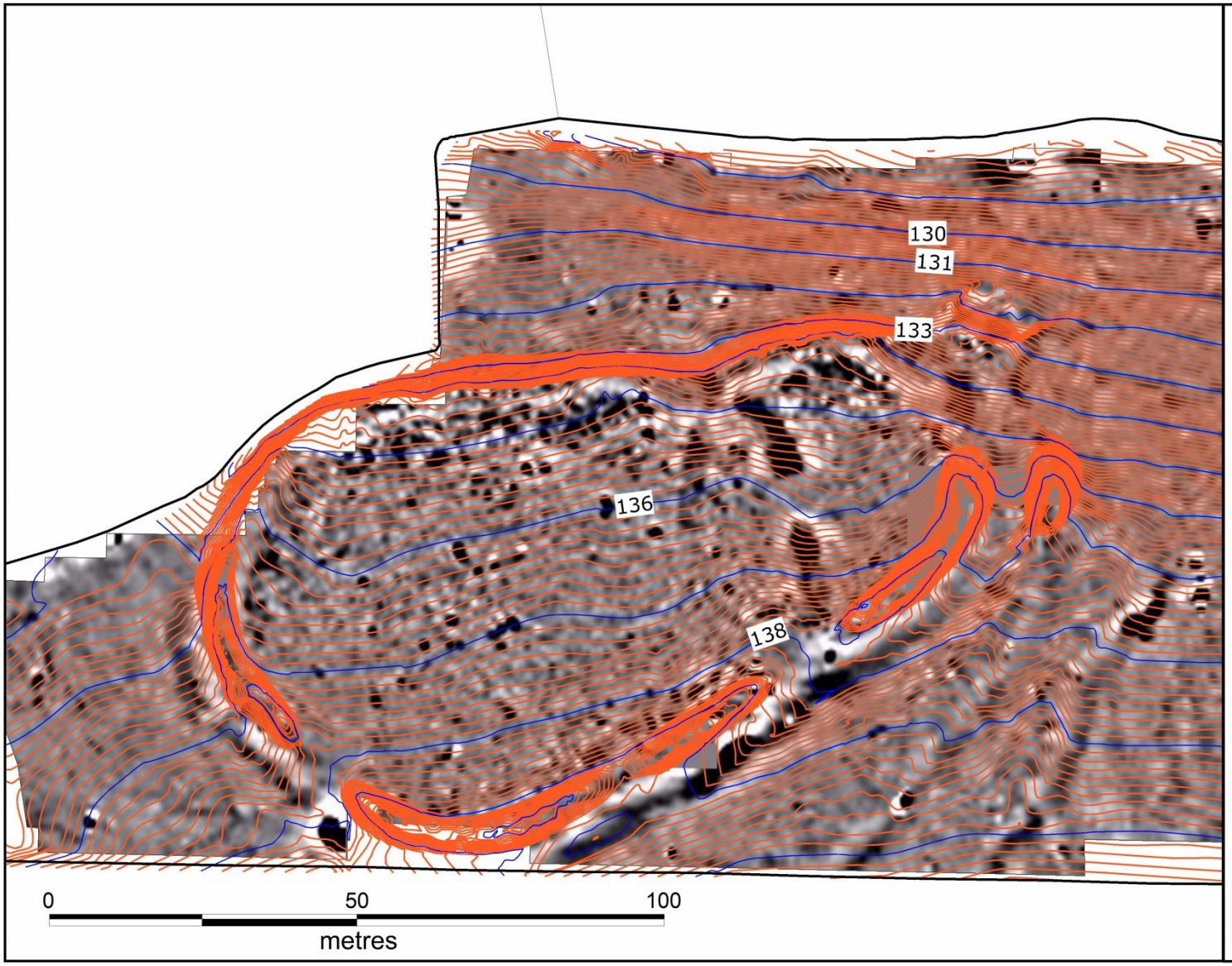


Figure 11: Contour plot of site area overlaid on greyscale plot of geophysical survey results

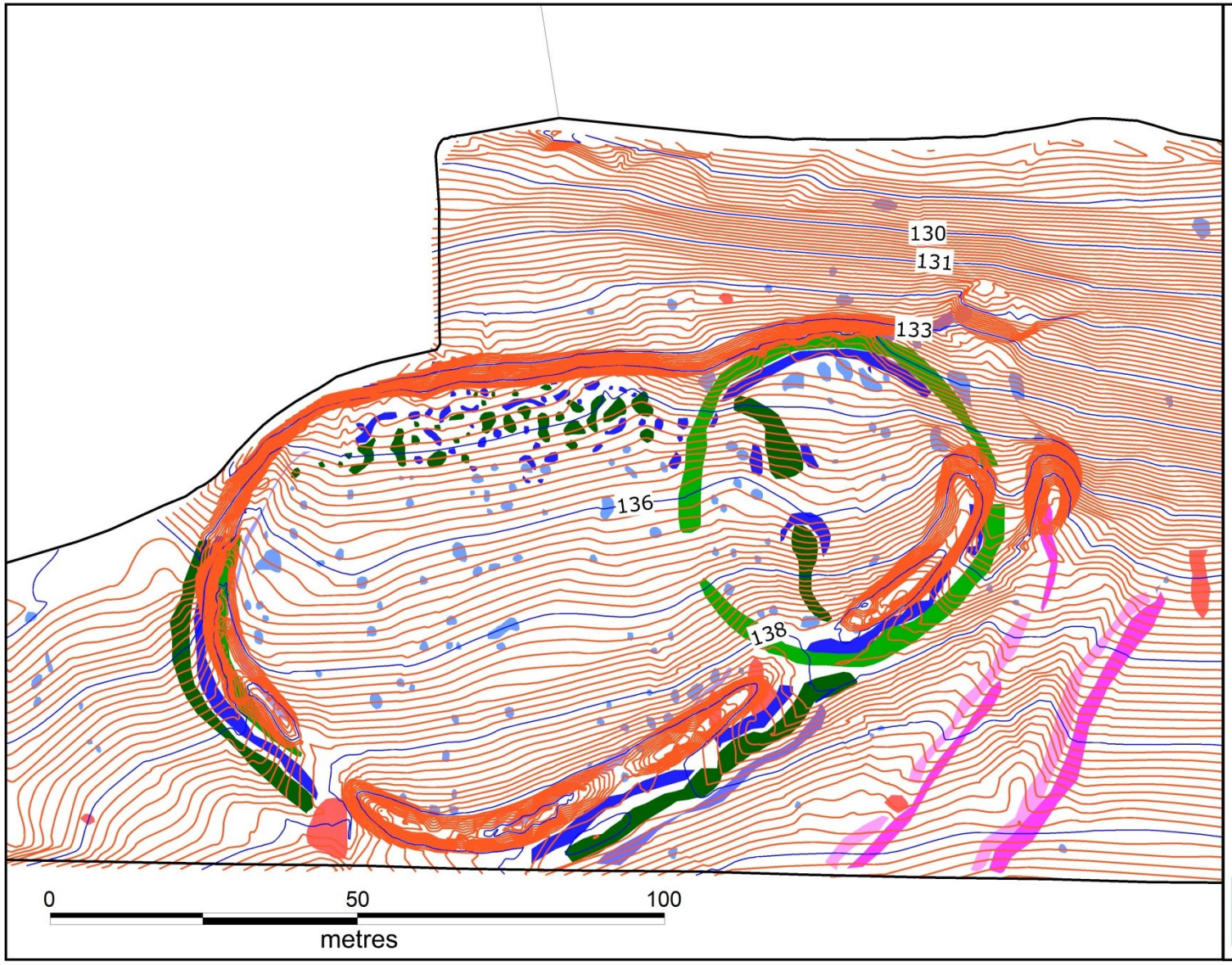
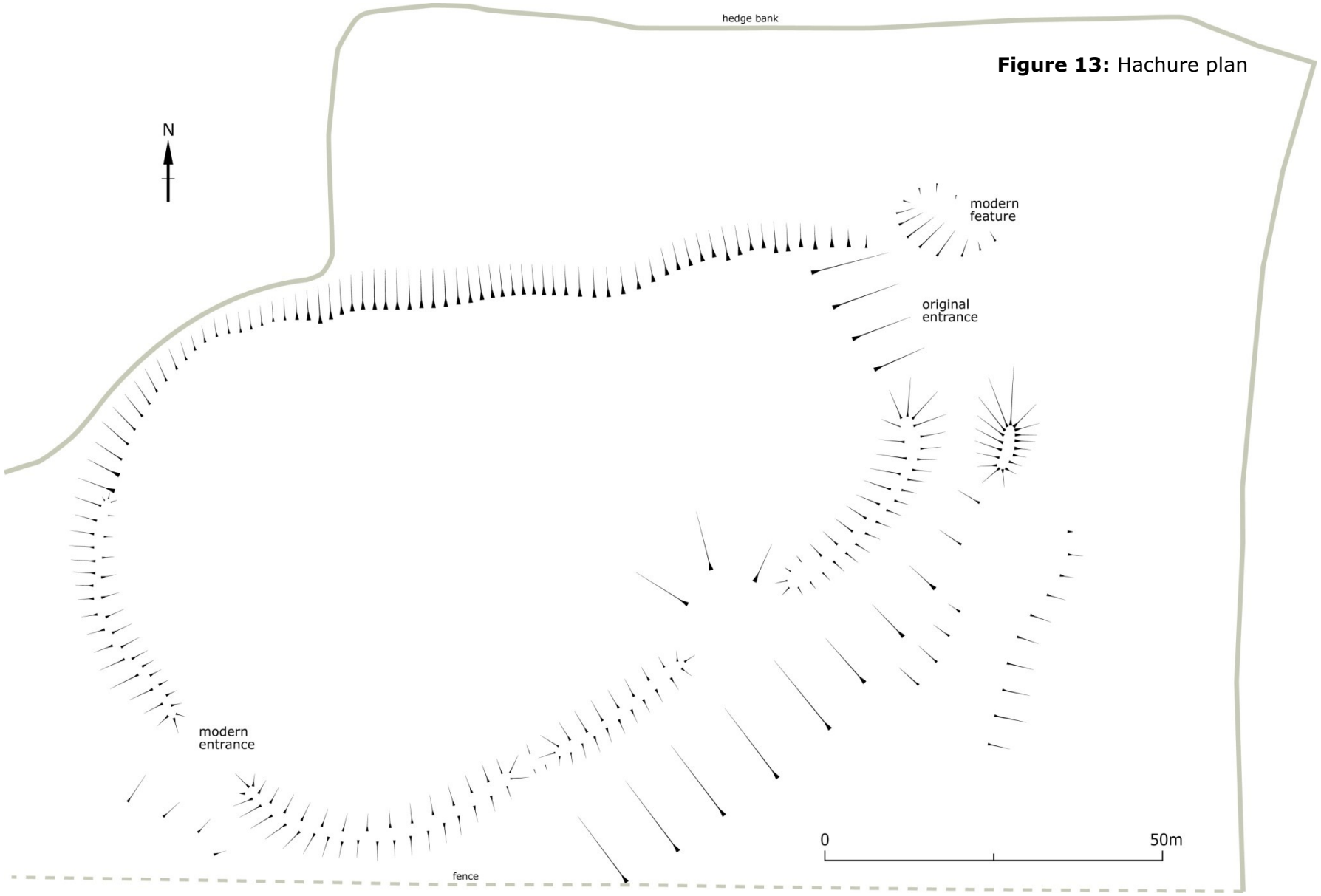


Figure 12: Contour plot of site area overlaid on interpretation plot of geophysical survey results.

Figure 13: Hachure plan



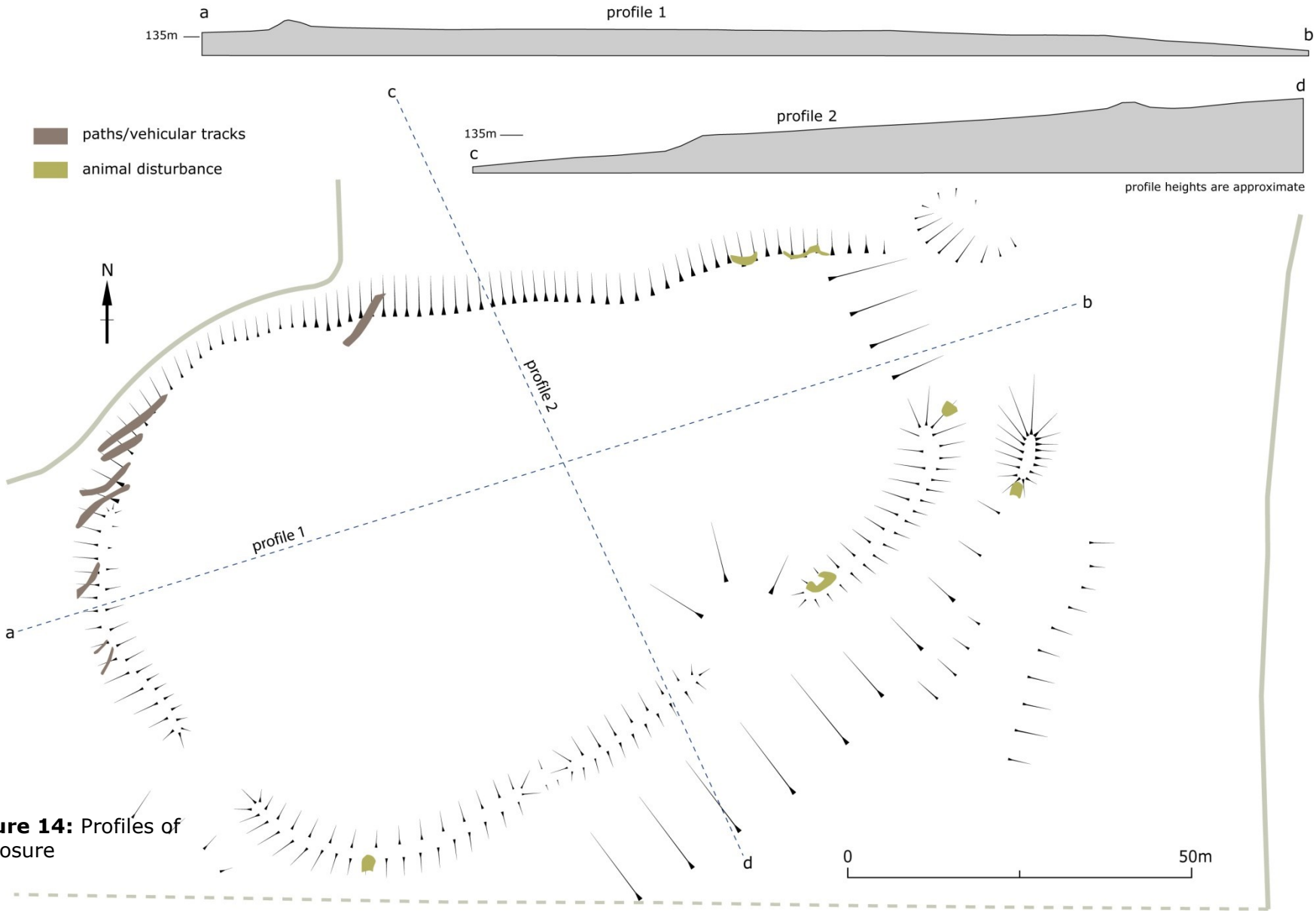


Figure 14: Profiles of enclosure

6. CONCLUSIONS

6.1 The overall aim of the project was to determine whether the early medieval artefacts could have been found at Molleston Back and provide some form of archaeological context for them. This was always going to be a difficult aim to achieve as the geophysical survey would need to identify a distinctly identifying characteristic of a particular archaeological feature, in this instance, as the finds are likely to have come from a furnished burial, a cemetery would have provided the necessary context. Although no evidence of such a feature has been identified what the geophysical survey has identified is the substantial remains of a previously unknown enclosure (PRN 112039) located in the northeast corner of the field of unknown date and function. It is pre 19th century as the current farmer was not aware of anything located in that corner of the field and it is not shown on any mapping including tithe maps. It appears that only a small area of the enclosure has been identified in the geophysics and it looks as though it may have extended beyond the current field boundaries, although this would mean it has been truncated by the current trackways. No evidence of it was found in the additional field surveyed (Field C) so it presumably stopped somewhere beneath the track. Internally, a number of possible pit-like' features were identified but more interesting were the two large 'magnetic spikes' that may represent a thermormanent feature, reflecting the site of an intense fire such as furnace, oven or kiln. It is most likely the site of a small house or cottage. The remnants of two more possible enclosures have also been identified in the geophysics but their interpretation is more tentative.

6.2 Other features identified in the field include the trackways, the most western of which appears on the tithe map and corresponds to current access routes between fields. The second trackway that 'forks' does not appear on any mapping sources and could predate the mid-19th century.

6.3 In order to determine any relationship between the finds and the archaeological features identified via the geophysical surveys intrusive investigation would be required. This may help to ascertain the true nature, character and extent of the features and potentially provide dating evidence.

6.4 In addition to the aims of the project discussed above the project has also provided an invaluable opportunity to examine the Molleston Back enclosure in detail, located to the south of the finds field. Although the defences of the enclosure have previously been planned by the Ordnance Survey the topographical and geophysical survey has revealed significant new information about the construction of the enclosure, in particular identifying a number of previously unknown attributes.

6.5 The geophysical and topographical surveys show that the enclosure appears to be defined by two distinct components that appear to account for its unusual 'pear' shape.

6.6 The first component is the circular ditch located on the eastern end of the enclosure. This may represent an earlier phase of activity and represent the remnants of a hengiform monument. Such monuments typically date from the Late Neolithic / Early Bronze Age. The second phase of activity appears to be the sub circular enclosure with defensive banks and ditches. These banks and ditches appear to respect the earlier circular ditch whilst also incorporating and adapting it into its defences. Banks appear to have been added where necessary and the ditch appears to have been turned defensive in nature where it now runs along the perimeter of the defended enclosure.

6.7 In general the banks of the enclosure are in good condition with evidence of a substantial external ditch detected by the geophysical survey. Further possible banks and ditches were also detected but their interpretation is more tentative. Along the northern edge of the enclosure the inhabitants appear to have made use of the natural steep slopes, constructing the banks atop of it. This would have been strategically advantageous. Unfortunately though, in regards to the geophysics, where the northern edge of the enclosure meets the downhill slope apparent slippage has occurred resulting in it being difficult to discern individual features with any clarity.

6.8 The entrance into the enclosure sits on the eastern side and may have been augmented by up to three distinct entrances as a result of the juxtaposition of the circular ditch and defended enclosure. The site description describes a wide gap in the banks on the western edge of the enclosure that may possibly be a second entrance. This gap is clearly evident on the topographic survey but the geophysics shows the banks and ditches in this area as continuous. This would suggest that originally there was no entrance here and the banks have been breached at a later date.

6.9 This investigation has provided an interesting glimpse into the mind-set of the inhabitants of this defended enclosure. The large surviving banks are clearly defensive in nature, but the large break in the banks along the southern edge makes little sense. One would probably assume, based on the surviving physical evidence, that this is a later breach. This is because it would make little sense to leave such an exposed vulnerable point, particular located on the upper slopes where the gradient is much gentler where any attack would be much easier. However, the geophysics results show that the break in the bank corresponds to the position of the possibly earlier circular ditch. Does this suggest that the break was intentional? Perhaps it shows an apparent consideration for their own heritage and a desire to preserve an earlier monument, which demonstrates careful planning and thoughtfulness. So much so that the inhabitants were prepared to compromise their own defences but mitigated against it by constructing two sets of outer defences?

6.10 In light of the geophysical and topographical survey it has been possible to compare the extent of the enclosure with that of the scheduled area (Figure 15), This shows that although the main area of the enclosure is captured, its most southern point may extend beyond this boundary into the adjacent field. The outer defences are also likely to extend into this adjacent field and therefore not included in the scheduled area.

6.11 In conclusion, although the geophysical survey has not been able to provide any context to the artefacts at this time, it has identified a number of features that, with further investigation, could provide some context to the artefacts supposedly found here. In addition to this, the project provided the opportunity to examine Molleston Back enclosure which has resulted in significant new information about the site. Defended enclosures are a common Iron Age feature found throughout south Wales, but the possible earlier circular enclosure or 'hengiform' are much rarer, but perhaps this could be a result of few opportunities to study them as opposed to a true reflection on their distribution. If this is the case then the example at Molleston Back may offer an insight into how a presumably peaceful early ritualistic site has transitioned into an Iron Age defended enclosure in such a way, through careful thought, that the people were able to maintain their special connection with its original purpose.

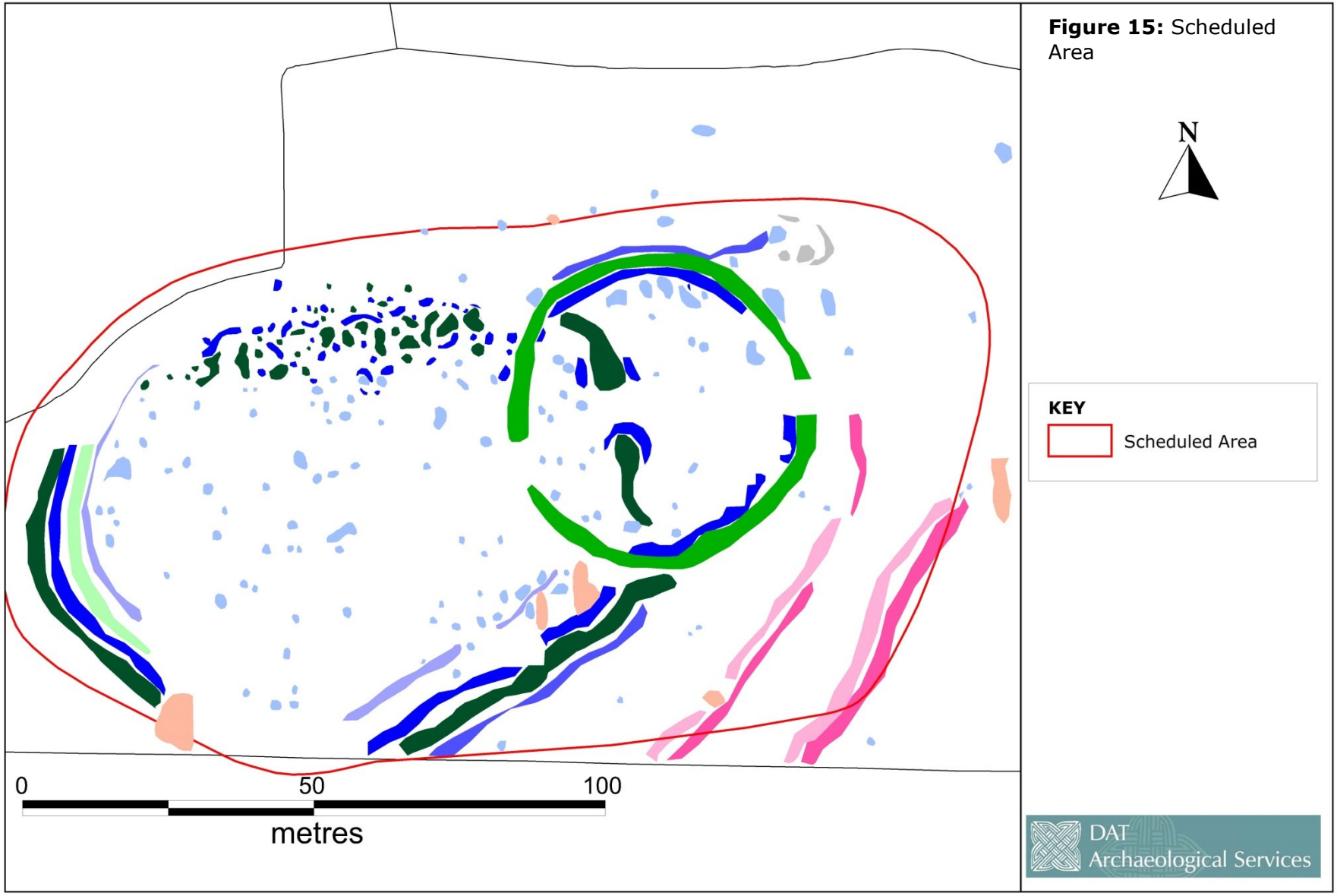


Figure 15: Scheduled Area

7. SOURCES

Publications

CIFA, 2014 *Chartered Institute of Field Archaeologists Standards and Guidance for Archaeological Field Evaluation.*

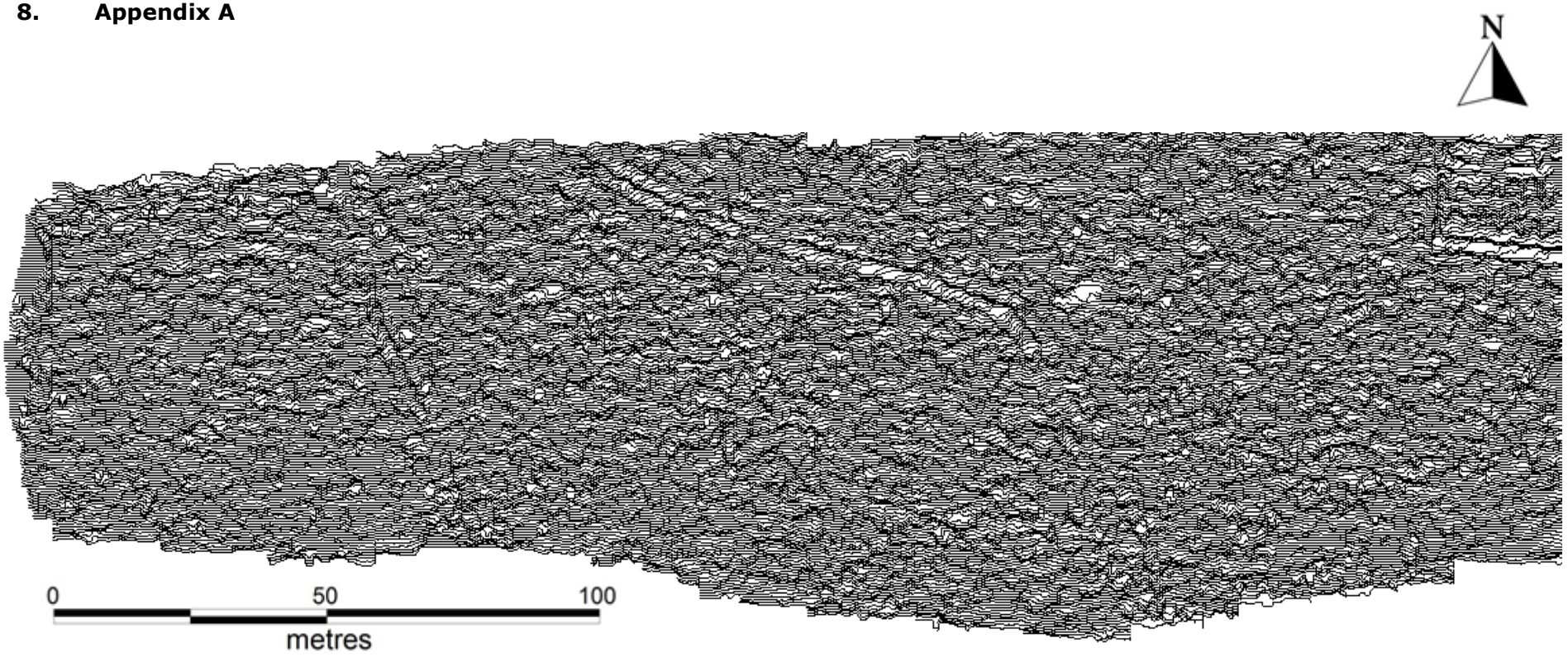
National Standard and Guidance for Collecting and Depositing Archaeological Archives in Wales 2017. http://www.welshmuseumsfederation.org/en/news-archive/resources-landing/Collections/national-standard-and-guidance-for-collecting-and-depositing-archaeological-archives-in-wales-2017.html

British Geological Survey mapping portal. Available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html [Accessed March 2018]

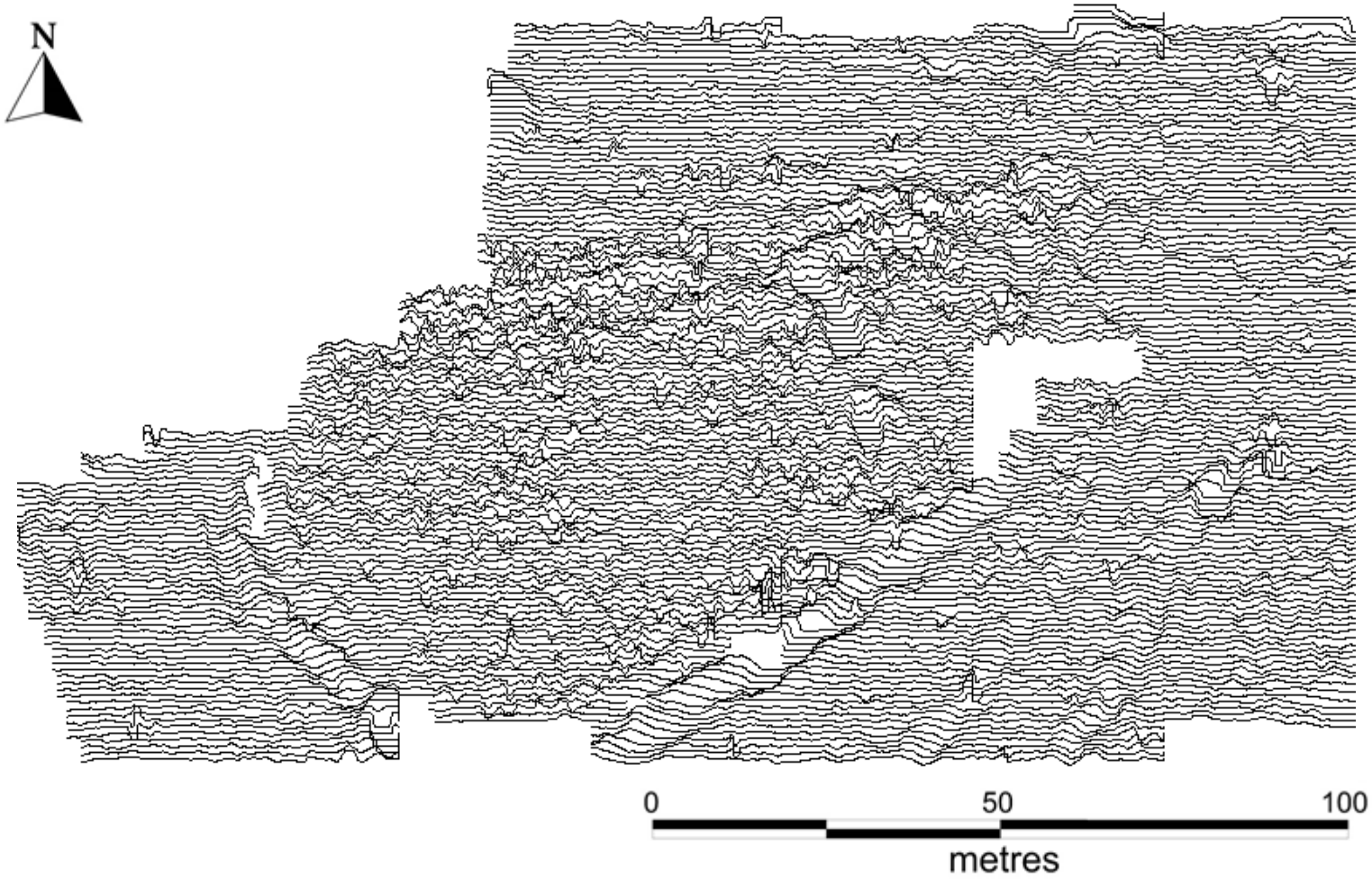
Database

Dyfed Archaeological Trust Historic Environment Record

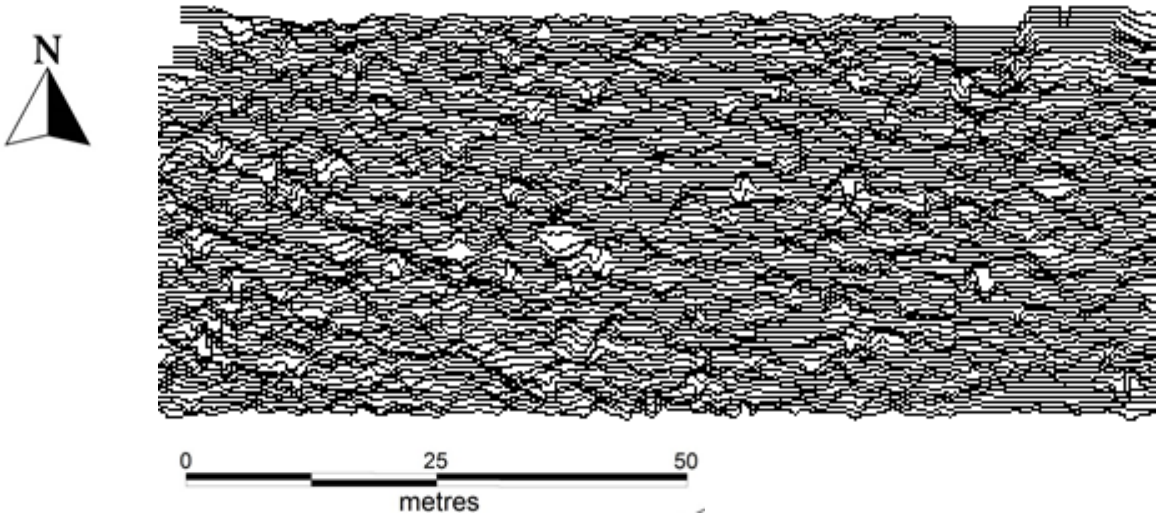
8. Appendix A



Field A: Scale Interval 20 nT/cm.



Field B: Scale Interval 26 nT/cm.



Field B: Scale Interval 8 nT/cm.

MOLLESTON BACK GEOPHYSICAL AND TOPOGRAPHICAL SURVEY 2018

RHIF YR ADRODDIAD / REPORT NO. 2018/12
RHIF Y DIGWYDDIAD / EVENT RECORD NO. 111452

CADW PROJECT NO. DAT 148

Mawrth 2018
March 2018

Paratowyd yr adroddiad hwn gan / This report has been prepared by

Charles Enright

Swydd / Position: DAT Archaeologist

Llofnod / Signature ..... Dyddiad / Date 15/3/18

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

James Meek

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: **Director Dyfed Archaeological Trust**

Llofnod / Signature ..... Dyddiad / Date 15/3/18

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

ymddiriedolaeth archaeolegol

DYFED

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