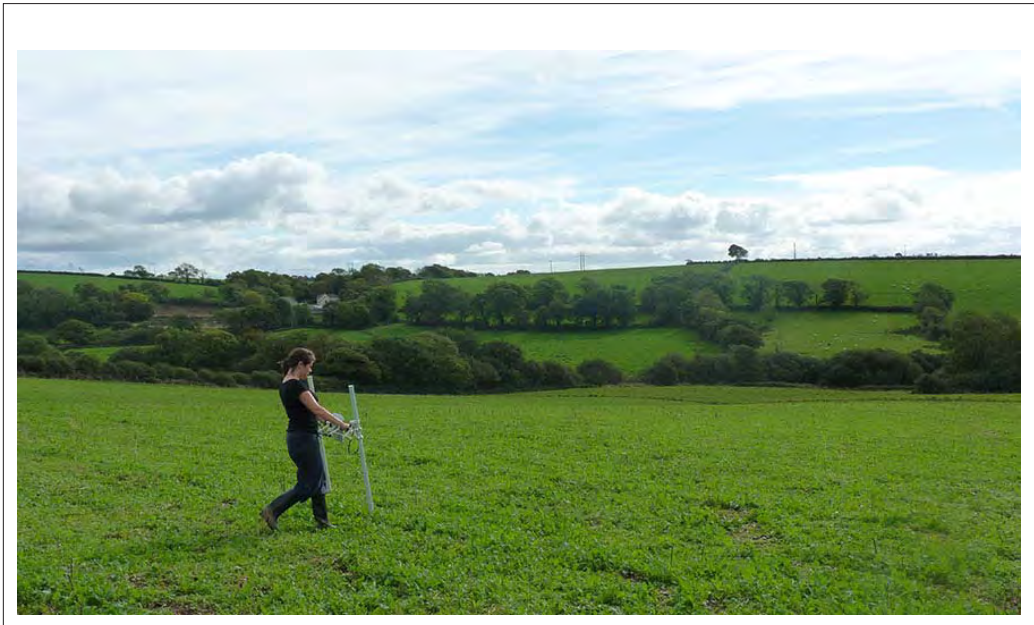


Archaeology Wales

Fenton Home Farm, Crundale, Haverfordwest

Geophysical Survey



By
Philip Poucher

Report No. 1170



Archaeology Wales Limited,
Rhos Helyg, Cwm Belan,
Llanidloes, Powys SY18 6QF
Tel: +44 (0) 1686 440371
E-mail: admin@arch-wales.co.uk

Archaeology Wales

Fenton Home Farm, Crundale, Haverfordwest

Geophysical Survey

Edited by: Mark Houliston

Signed:

Position: Managing Director

Date:

Authorised by: Mark Houliston

Signed:

Position: Managing Director

Date:

By
Philip Poucher

Report No. 1170

October 2013



Archaeology Wales Limited,
Rhos Helyg, Cwm Belan,
Llanidloes, Powys SY18 6QF
Tel: +44 (0) 1686 440371
E-mail: admin@arch-wales.co.uk

CONTENTS

Non-Technical Summary	1
1. Introduction	1
1.1 Project Commission	1
1.2 Project Objectives	2
2. The Site	2
2.1 Location and Archaeological Potential	2
3. Methodology	3
4. Results	4
4.1 Limitations	4
4.2 Processing and Presentation	4
4.3 Field 1	5
4.4 Field 2	6
4.5 Field 3	7
4.6 Field 4	8
4.7 Field 5	10
4.8 Field 6	11
4.9 Field 7	14
4.10 Field 8	16
4.11 Field 9	18
5. Conclusions	20
6. Sources	22
Appendix I: Written Scheme of Investigation	

List of Figures

Figure 1	Site location
Figure 2	Proposed development plan
Figure 3	Survey area
Figure 4	Extract from the 1889 Ordnance Survey map
Figure 5	Field 1, processed geophysical survey results
Figure 6	Field 1, interpretation
Figure 7	Field 2, processed geophysical survey results
Figure 8	Field 2, interpretation
Figure 9	Field 3, processed geophysical survey results
Figure 10	Field 3, interpretation
Figure 11	Field 4, geophysical survey results
Figure 12	Field 4, interpretation
Figure 13	Field 5, geophysical survey results
Figure 14	Field 5, interpretation
Figure 15	Field 6, geophysical survey results
Figure 16	Field 6, interpretation
Figure 17	Field 7, geophysical survey results
Figure 18	Field 7, interpretation
Figure 19	Field 8, geophysical survey results
Figure 20	Field 8, interpretation
Figure 21	Field 9, geophysical survey results
Figure 22	Field 9, interpretation

List of Photos

Photo 1	Looking NW across Field 3
Photo 2	Looking SW across Field 4
Photo 3	Looking SW across Field 5
Photo 4	Looking SSW across Field 6 (east)
Photo 5	Looking SW across Field 6 (west)
Photo 6	Looking SE across Field 7
Photo 7	Looking NW across Field 8
Photo 8	Looking SE across Field 9

Copyright Notice:

Archaeology Wales Ltd. retain copyright of this report under the Copyright, Designs and Patents Act, 1988, and have granted a licence to Parker Dann Chartered Town Planning Consultants, to use and reproduce the material contained within.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. AL 52163A0001) to reproduce map information; Copyright remains otherwise with the Ordnance Survey.

Non-Technical Summary

This report results from work undertaken by Archaeology Wales Ltd for Parker Dann on behalf of their clients Vogt Solar Ltd. It presents the results gained from a geophysical survey, using a gradiometer, on the site of a proposed solar farm at Fenton Home Farm, Crundale, Haverfordwest. The geophysical survey covered an area of nine fields comprising 52.5 ha.

One field, Field 8, contained clear evidence of a probable prehistoric enclosure typical of the Iron Age. The remaining fields also contained features of probable archaeological potential, although their context, function and state of preservation is uncertain and cannot be determined by the results of the geophysical survey alone. In addition, numerous features of limited archaeological potential were revealed. These can be interpreted as post-medieval field boundaries, modern features, and features of natural origin.

1. INTRODUCTION

1.1 Project commission

- 1.1.1 The proposed development is for a solar power farm (Photovoltaic panels) on land at Fenton Home Farm, Crundale, Haverfordwest (Henceforth – the site) and comprises the construction of PV panels across nine fields comprising 52.5ha. The development proposal has been submitted by Parker Dann Chartered Town Planning Consultants on behalf of their clients, Vogt Solar Ltd. The local planning authority is Pembrokeshire County Council and the planning application number is 13/0278/PA. The site is located at SM 9861 1723 (Figure 1).
- 1.1.2 Dyfed Archaeological Trust Planning Services (Henceforth – DAT PS), in their capacity as archaeological planning advisors to Pembrokeshire County Council (Henceforth – PCC) have determined that the proposed development may potentially affect buried archaeological remains, but that they have insufficient information to identify the form, character, type, date or relative significance of the buried archaeology. Consequently, PCC were informed that further information on the historic asset would be required before the determination of the planning application.
- 1.1.3 The archaeological planning advisor therefore recommended that an archaeological evaluation should be undertaken (in accordance with Planning Policy Wales, March 2002, Section 6.5 and Welsh Office Circular 60/96, and in line with Policy GN.38 of the Pembrokeshire Local Development Plan, adopted 2013), consisting in the first instance of a Geophysical Survey.
- 1.1.4 Archaeology Wales Ltd (Henceforth - AW) were commissioned to undertake the archaeological work. A Written Scheme of Investigation (WSI) was produced by AW and approved by DAT PS, a copy of which is included to the rear. This WSI was for a geophysical survey across the proposed development site, designed to detect archaeological features within the proposed development site using a gradiometer.

1.2 Project objectives

- 1.2.1 The primary objectives of the work was to locate and describe, by means of geophysical survey, archaeological features that may be present within the development area. The proposed archaeological work will attempt to elucidate the presence or absence of archaeological material that might be affected by the scheme, in particular its character, distribution, extent and relative significance. This work was undertaken in September and October 2013.
- 1.2.2 AW is a Registered Organisation with the Institute for Archaeologists (IfA). All field-work will be undertaken by suitably qualified staff and in accordance with the standards and guidelines of the IfA.

2. THE SITE

2.1 Location and Archaeological Potential

- 2.1.1 The proposed development occupies several fields to the south, east and west of Fenton Home Farm, Crundale, which lies to the northeast of Haverfordwest (SM 9861 1723). The fields are currently in agricultural use, surrounded by hedegrows, with a general south to south-westward slope towards Fenton Brook.
- 2.1.2 A previous archaeological Desk-Based Assessment has been undertaken on the site by Wessex Archaeology in 2013 (Wessex Archaeology 2013). This work identified a possible Iron Age enclosure, visible as a crop mark identified from aerial photographs, within the northeast of the site (Field 8). No further archaeological sites were identified within the bounds of the proposed development area, however a possible Bronze Age burnt mound (PRN 3332) lies close to the western edge of the site and several Iron Age defended enclosures are also recorded in this general area both to the north and south of the site. A short distance to the southeast lies a moated platform (PRN 10389), possibly of medieval origins, which is now a designated Scheduled Ancient Monument (Pe465). Fenton Home Farm itself is recorded as a post-medieval mansion site (PRN 17762). The potential for further buried archaeological remains within the proposed development area has been highlighted by the archaeological advisors to the planning authority.
- 2.1.3 The underlying geology comprises Ashgill shales and Llandovery conglomerates overlain by freely draining slightly acid loamy soils.

3. METHODOLOGY

- 3.1 The area surveyed included all of the development area (see the attached plan, Figures 2 & 3). The site was located by GPS and all survey points were located with a Topcon GRS 1 GPS surveyor and plotted onto an O.S. base map.
- 3.2 The on-site survey was undertaken in a single phase lasting approximately four to five weeks. The survey was carried out using a pair of Bartington Grad601 Magnetometers. This detects variations in the earth's magnetic field. Each survey area was divided into 30m square grids along a common north – south alignment.
- 3.3 Within each grid, parallel traverses 1m apart were walked at rapid pace along the same orientation. Instrument readings were logged at 0.25m intervals, with an average cycle of 4 using an ST1 internal sample trigger. Incomplete survey lines resulting from irregular area boundaries or obstacles were completed using the "dummy log" key.
- 3.4 All data was downloaded in the field into a laptop computer. The location of the grid corners was recorded using a Topcon GRS 1 GPS surveyor so that the results could be accurately placed onto an OS map.
- 3.5 A composite of each detailed survey area was created and processed using the software package Terrasurveyor. A variety of processing tools were used to enhance any potential archaeology. The final results are presented at an appropriate scale tied to the Ordnance Survey National Grid, see figures 5 to 22.
- 3.6 Due to the large areas covered by the survey the results are described and presented on a field-by-field basis. For field numbering see Figure 3.

4. RESULTS

4.1 Limitations

- 4.1.1 The survey was undertaken over a total of five weeks in September and October 2013. Weather conditions over such a long period were mixed, generally mild but with both dry and wet spells. The fields were under a mix of agricultural regimes. Fields 1, 3 & 4 were under a recently cut arable crop, fields 2 & 6 (west) had recently been ploughed after having a potato crop, fields 5, 6 (east) and 7 were under improved grazed pasture, field 8 contained a beet crop and was being grazed and field 9 contained a crop of small leafy plants.
- 4.1.2 Each field contained various features that either limited the survey or potentially affected the results, these are described on a field-by-field basis.
- 4.1.3 The underlying geology was shale of the Ashgill group and conglomerates of the Llandovery group; these did not appear to cause any geological distortions of the geophysical survey results.

4.2 Processing and presentation

- 4.2.1 Processing was performed using the latest version of *Terrasurveyor*. The data is presented with a minimum of processing but the presence of high values caused by ferrous objects, wire fencing and electricity poles tends to hide fine details and obscure archaeological features, thus the values were 'clipped' to a range from 10nT to -10nT to remove the extreme values allowing the finer details to show through.
- 4.2.2 The processed data is presented as grey-scale plots overlaid on local topographical features (Figures 5 – 22). The main magnetic anomalies have been identified and plotted onto local topographical features as a level of interpretation.

4.3 Field 1

(Figures 5 & 6)

- 4.3.1 Field 1 lies at the north-western corner of the whole proposed development site, covering approximately 5.8 hectares. The field had recently been harvested, and was covered in low stubble and hay bales at the time of survey. The field was relatively flat, with a slight south and westward slope. It was bounded to the east and south by straight hedgerows, and to the north and west by trees bounding a small stream. The main access to the field was from the southeast corner, the compacted trackway and a pile of dumped soil or manure prevented surveying in this corner. This field has clearly been deep ploughed and has regularly been used for arable crops.
- 4.3.2 A short distance beyond the western boundary of this field lies a potential Bronze Age burnt mound (PRN 3332). Comparisons with the 1889 Ordnance Survey map (Figure 4) demonstrate very little change in the layout of this field since the later 19th century. Surface finds were collected from this field during the course of the survey. These comprised one flint core and two waste flint flakes.
- 4.3.3 The geophysical survey results contained an unusual amount of background 'noise' and striping within this field. This would appear to be a combination of modern disturbance within the field but also technical issues within the survey machines themselves and the data they collected. As a consequence the survey results for this field underwent a greater degree of processing. However, the survey results did still produce four features of possible interest within this field.
- 4.3.4 Crossing the southern end of the field in a roughly east –west direction is a curvilinear feature (**101**). The feature is identified largely as an area of magnetically positive (darker) readings, often indicative of buried features such as ditches. The origin and function of this feature is unclear. It is possible this represents a naturally occurring change in the underlying geology, but there is the potential that it may represent an archaeological features such as a drainage feature, a former boundary or possibly part of an enclosure. However, as this feature does not appear to extend into the field to the south (Field 2) it seems unlikely that it forms part of an enclosure.
- 4.3.5 Another almost curvilinear area of mostly magnetically positive readings is visible midway along the northwest side of the surveyed area (**102**), running in a roughly NW – SE direction. This feature appears similar to feature 101, and it is possible therefore that the two are connected. However, in isolation this feature has the appearance of a naturally occurring feature within the underlying geology.
- 4.3.6 At the northern end of the surveyed area another area of magnetically positive (darker) readings (**103**) extends in from the west. The apparent width and strength of the readings is very similar to both 101 and 102, which may suggest geological features, possibly former stream-lines draining into the small valley on the western side of the field.
- 4.3.7 Running in an NW – SE direction towards the SE corner of the field are the faint traces of a linear feature (**104**). Although faint, the straight nature of the feature is a good indication that it is not of natural origin. There is some suggestion within the survey results that it continues NW beyond the dimensions suggested on the

interpretation (figure 6). Such long straight features in agricultural contexts are often found to represent modern services or drainage.

4.4 Field 2

(Figure 7 & 8)

- 4.4.1 Field 2 lies at the south-western corner of the proposed development area, covering approximately 6.4 hectares. At the time of survey the field had recently been ploughed, removing a potato crop. The field has a slight southwards slope that increases as it gets closer to Fenton Brook, which runs immediately to the south and southwest of the field. The field is bounded to the north and east by straight hedgerows, the remainder is bounded by woodland and scrub surrounding Fenton Brook.
- 4.4.2 There are no previously recorded archaeological sites within this field. A possibly Bronze Age burnt mound (PRN 3332) has been recorded to the north-west of the field. Comparisons with the 1889 Ordnance Survey map indicate little alteration to the layout of the field in the intervening years. Surface finds were collected from the field during the course of the survey. These comprised 10 sherds of general post-medieval pottery, largely Dyfed gravel-tempered wares, a possible whetstone and a small late 19th/early 20th century glass bottle.
- 4.4.3 Several possible archaeological features were identified within this field on the geophysical survey results, although the origin and functions of these feature are not immediately apparent. There are mixed readings across the surveyed area, which is likely to represent the underlying geology. A relatively blank area to the northwest would suggest an area of thicker soil or subsoil deposits.
- 4.4.4 Towards the SE end of the field two linear features are identified (**201 & 202**), their appearance and relative alignments suggesting they may be part of the same feature. Feature 201, c.55m in length, is defined by magnetically positive (darker) readings, often indicative of cut features such as a ditch. It runs in a SSW – NNE direction. There is then a gap before the line is continued, albeit in a slightly more SW – NE direction by similar feature 202. The line of 202 does appear to split at the eastern edge of the surveyed area. The feature does not appear to continue into adjacent fields.
- 4.4.5 To the southeast lies a shorter linear feature (**203**), but on a similar alignment. This feature is also defined by magnetically positive (darker) readings suggesting a cut feature. These readings however are relatively strong, and produce a 'shadow' of magnetically negative (lighter) readings. Such strong bipolar readings can sometimes be indicative of a high ferrous content, or evidence of burning.
- 4.4.6 Located relatively centrally within the area surveyed are two parallel straight linear features (**204**), defined by magnetically positive (darker) readings. The siting of these features may be fortuitous but they have the appearance of a small enclosure within the field of indeterminate date or function.
- 4.4.7 Towards the northern end of the field lie two somewhat sinuous linear features (**205**) running in a north – south direction. These features however appear to be

associated with an east – west band of mixed readings across the northern end of the field that are likely to represent natural changes in the underlying geology.

4.5 Field 3

(Figure 9 & 10)

- 4.5.1 Field 3 lies to the west of Fenton Home Farm, covering approximately 4.9 hectares. This field had recently been harvested and was covered in low stubble at the time of survey. The field occupies relatively high ground, with a slight slope to the south along its southern edge. It is bounded on all sides by hedgerows, with a stream running just to the north. Access to the field was via a metal gate in the southeast corner, as the metal gate is likely to obscure any readings taken in its vicinity the area around the gate was not surveyed. The field has clearly been deep-ploughed, disturbed broken bedrock is visible on the surface of the field.
- 4.5.2 There are no previously recorded archaeological sites within this field, and the 1889 Ordnance Survey map (Figure 4) indicates there has been little change to the layout of the field since that time. Surface finds were collected from the field during the course of the survey. These included 15 sherds of general post-medieval pottery, with some possible late Medieval or earlier post-medieval pottery amongst it. One fragment of decorated Medieval floor tile was also recovered from the field. Flint was also recovered, comprising two flint nodules and four unworked flint fragments.
- 4.5.3 There was little clear evidence of archaeological activity recorded on the geophysical survey results, although there are several possible features. The general mixed readings visible across the surveyed area is likely to be the background geology. Towards the southwest corner of the field was a short curvilinear feature (**301**), c.15m in diameter, defined by magnetically positive (darker) readings often indicative of cut features such as ditches. The size and curvilinear nature of the feature may be an indication of a Prehistoric feature such as an Iron Age roundhouse or Bronze Age burial mound, although the survey results do not provide a clear indication as to the character and function of the feature.
- 4.5.4 In the northeast corner of the field is an uncertain linear feature (**303**), showing the possible corner of a rectilinear enclosure. However, the magnetic responses from this possible feature are very similar to the surrounding readings and the response is very ephemeral.
- 4.5.5 Spread throughout the field are several small possible features (**302**), represented by discrete areas of magnetically positive (darker) readings, often indicative of cut features such as pits. There are many of these similar features spread throughout the field, largely they would appear to be part of the underlying geology, represented by the general mottled spread across the surveyed area. Several have been picked out individually due to the unusual strength of their respective magnetic responses, generally stronger than most other discrete features visible on the survey results. There is no form or pattern to these features to aid in their interpretation, they may represent natural or modern features, but they could potentially represent cut archaeological features such as pits.



Photo 1: Looking NW across Field 3.

4.6 Field 4

(Figures 11 & 12)

- 4.6.1 Field 4 lies in the southwest area of the proposed development site, covering approximately 7.5 hectares. This field had recently been harvested and was covered in low stubble at the time of the survey. The ground slopes gradually to south with a slight ridgeline roughly two thirds of the way down the field, with the ground beginning to drop slightly more steeply towards Fenton Brook to the south. The field is bounded by hedgerows, with woodland also defining the southern and much of the eastern boundary. To the east a small stream cutting divides this field from Field 6, which feeds into Fenton Brook that lies a short distance to the south of the field. A trackway crosses the northern edge of the field, and an area of disturbed ground covers an area of *c.*25m by 25m in the northeast corner of the field. Due to the presence of stone on the surface it is clear this field has been deep ploughed, disturbing underlying bedrock deposits. This does not appear to be the case on the slopes and lower ground at the southern end of the field suggesting any underlying deposits may be better preserved on these lower slopes.
- 4.6.2 There are no previously recorded archaeological sites within this field. The 1889 Ordnance Survey map (Figure 4) shows that although the outer boundaries of the field have changed little since the late-19th century the field was formerly sub-divided by an east – west boundary that ran across the field, roughly where the main break of slope is towards the southern end of the field. Surface finds were collected from the field during the course of the survey, comprising 25 pieces of flint. This included 20 waste flints fragments but also five pieces of flint that appeared to show some signs of working. One piece was clearly a firing flint from a post-medieval flintlock rifle (typical from the 17th to mid-19th century), the remaining flints are likely to be Prehistoric in date.
- 4.6.3 Clear evidence of archaeological activity was again scarce on the geophysical survey results. The most obvious feature was a linear feature (**401**) running roughly east – west across the field. Such distinctive features are often typical of former field

boundaries, with ditches running alongside a central bank, and this particular feature aligns closely with the former field boundary as depicted on the 1889 Ordnance Survey map.

- 4.6.4 Roughly midway along this former field boundary a 2nd linear feature (**402**) runs off on a more NE – SW orientation. This feature is depicted by magnetically positive (darker) readings, often indicative of buried ditches. At the point where it intersects with former field boundary 401 there is a slight northward kink in the boundary that brings it in line with linear feature 402. This alignment may suggest this feature (402) represents an earlier field boundary that was partly re-used and adapted by the later field boundary 401.
- 4.6.5 In the northeast corner of the field lies a linear feature (**403**) running roughly NW – SE. This feature is picked up by both relatively strong magnetically negative (lighter) and positive (darker) readings, which may be indicative of a buried pipe. The orientation of this feature suggests it links up with the head of the stream that runs down the eastern side of the field, and therefore it appears this feature represents a drainage channel or pipe that is likely to be modern in origin.
- 4.6.6 At the southern end of the area surveyed are a series of straight linear features (**404**) on the same orientation. These features have the appearance of ploughing scars into the underlying subsoil or bedrock deposits.
- 4.6.7 In the southeast corner of the field lies a wide curvilinear feature (**405**) identified by areas of both positive (darker) and negative (lighter) magnetic responses with somewhat amorphous edges. This is likely to represent natural changes in the underlying geology, possibly a former palaeochannel on the lower slopes.



Photo 2: Looking SW across Field 4

4.7 Field 5

(Figures 13 & 14)

- 4.7.1 Field 5 lies immediately to the west of the Fenton Home Farmstead complex, along the northern edge of the proposed development site. It covers an area of 2.5 hectares. This field was in improved pasture at the time of the survey. This field occupies relatively higher ground and is generally flat, a slight hollow crosses the centre of the field in a north – south direction. It is bounded on all sides by hedgerows, with farm tracks running immediately to the east and south of the field. A large metal agricultural shed lies close to the southeast corner of the field.
- 4.7.2 There are no previously recorded archaeological sites within this field. Comparisons with the 1889 Ordnance Survey map (Figure 4) indicate that the north, west and southern boundaries have remained consistent since the late-19th century, but the eastern boundary has been moved into the field to accommodate modern agricultural sheds built on the western side of the main farmstead complex. The 1889 map also shows a stream-line crossing the centre of the field, consistent with the slight hollow that can still be seen within the field.
- 4.7.3 Little of obvious archaeological interest was identified on the geophysical survey results within this field. The mottled readings visible in other fields and indicative of the underlying geology appears largely confined to the southern end of the field, suggesting a greater depth of soil within this field. The most obvious feature was a large linear feature (**501**) crossing in a roughly north – south direction across the field. The strength and bipolar nature of the readings indicate likely ferrous objects within this fill. Its position corresponds to the former stream-line as depicted on the 1889 Ordnance Survey map, therefore it is likely this feature represents modern piping or drainage associated with taking the stream underground.
- 4.7.4 To the southeast, at the edge of the surveyed area, lie three small discrete areas of magnetically positive (darker) readings (**502**) that may be indicative of cut features such as pits. As they lie on the very edge of the area surveyed it is difficult to identify the likely function of the features with any certainty. They also lie in an area where the underlying geology is picked up by the survey results, and may therefore be naturally occurring features.
- 4.7.5 At the eastern edge of the area surveyed is the suggestion of a possible feature (**503**) identified by an area of strong magnetically positive (darker) readings. Again, being on the edge of the area surveyed it is difficult to ascertain the context for this feature, although the strength of the magnetic readings are more typical of objects or features with relatively modern origins.

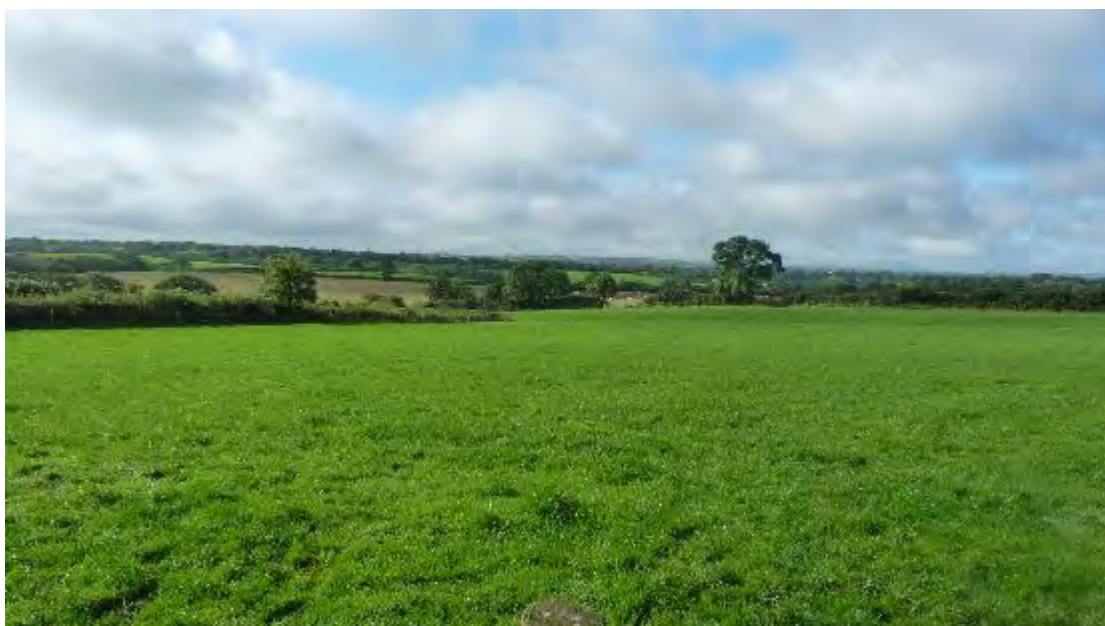


Photo 3: Looking SW across Field 5

4.8 Field 6

(Figures 15 & 16)

- 4.8.1 Field 6 lies to the south of the main farmstead complex of Fenton Home Farm. It is the largest field within the area of proposed development, covering 15.6 hectares, but at the time of the survey it was divided into two, the western half containing a potato crop, the eastern half containing improved pasture. Consequently this field was surveyed as two separate surveys. The ground gradually drops off to the south and to the east, with a slight ridgeline towards the southern end of the field beyond which the ground begins to slope at a slightly greater angle. The field is bounded to the east, west and south by hedgerows backed by trees. The north the field is bounded by hedgerows along its western half and a small stand of trees and a trackway, beyond which lies the main house and farmstead complex on its eastern half. There is no permanent division other than crop planting between the east and west parts of the field. A stream runs down a small valley immediately to the east, and also to the west and Fenton Brook lies a short distance to the south. A metal-framed poly tunnel and wire and post fencing enclose the north-eastern part of the field, although this area was not surveyed as it lies beyond the bounds of the proposed development. To the west of this, against the northern boundary of the field, lies an area containing farm machinery and equipment, preventing survey work in its immediate vicinity.
- 4.8.2 There are no previously recorded archaeological sites within the bounds of this field. Fenton Home Farm itself is recorded as a post-medieval mansion (PRN 17762), lying immediately to the north of the field. Comparisons with the 1889 Ordnance Survey map (Figure 4) indicate that although the outer boundaries of the field have remained relatively stable since the late-19th century, internally the whole field was formerly divided into four individual fields, with a possible pond in the northeast corner of the field, and land around Fenton Brook to the south being rough ground rather than the current woodland. As the western half of the field had been ploughed immediately prior to the survey some surface finds were recovered during the course

of the survey. These included eight sherds of later post-medieval pottery, including five sherds of Dyfed gravel-tempered wares and two sherds of late 19th-century lead-glazed wares. Two waste flint flakes were also recovered of probable Prehistoric date.

- 4.8.3 Several features have been identified on the survey, the majority of which would appear to be concentrated on the sloping and lower ground at the southern end of the field. As broken bedrock is visible amongst the ploughsoil along the higher northern end of the field this would suggest that deep ploughing may have removed possible archaeological features across the shallower higher ground, but where the plough has not gone as deep on the slopes and lower ground preservation appears better. The mottled readings that appear to represent the underlying geology are visible across much of this field, in particular the eastern half, which may be an indication of a general lack of depth to soil deposits.
- 4.8.4 Running in a roughly east – west direction across the western half of the field is a linear feature (**601**) identified as a central line of magnetically negative (lighter) readings, bounded on either side by magnetically positive (darker) readings. This crosses the field just above the point where the land begins to drop away slightly more sharply towards Fenton Brook. Such responses are typical of former field boundaries. The lighter central readings seem to correspond to buried field banks, lined on both sides by ditches. This feature aligns closely with one of the field boundaries visible on the 1889 Ordnance Survey map.
- 4.8.5 A very similar feature is identified in the eastern survey. This linear feature (**602**) is slightly further to the south, with a gentle northwards curve, but also aligns very closely to a former field boundary visible on the 1889 Ordnance Survey map.
- 4.8.6 To the south are the faint traces of a further former field boundary visible on the 1889 map. This boundary (**603**) runs in a north – south direction, and according to former map sources would meet up with a segment of field boundary still in existence on the south side of the field, running as far as Fenton Brook.
- 4.8.7 At the northern end of the western surveyed area lies a linear feature (**604**) visible as a single line of magnetically positive (darker) readings. Despite the difference of appearance this too aligns with a former field boundary visible on the 1889 map.
- 4.8.8 In the northwest corner the survey has picked up the edge of an area of strong bipolar readings (**605**). Strong bipolar readings such as this are often caused by modern ferrous items. In this case it would appear to continue the line of a former stream course that can be seen in Field 5 to the north, and can also be traced on the 1889 Ordnance Survey map. Within the hollow caused by this stream the farmer admitted to burying fragments of farm machinery.
- 4.8.9 Towards the western side of the survey is a curious alignment of discrete magnetically positive (darker) readings, close to a relatively short linear feature (**606**). The somewhat sinuous nature of the linear feature appears to be repeated elsewhere in the survey and has the appearance of a naturally occurring anomaly in the underlying subsoil or geology. However, the alignment of discrete features appear unusual and may be archaeological in nature, possibly representing a line of pits or large postholes of unknown date or origin.

- 4.8.10 At the southern end of the survey area is an area of very strong bipolar magnetic readings (**607**), very typical of modern ferrous objects, and may represent another in-filled stream-line..
- 4.8.11 In the southeast corner of the western surveyed area is what would appear to be part of a linear feature of magnetically positive (darker) readings (**608**), running in a roughly SW – NE direction. However, not enough of this possible feature is revealed within the surveyed area to determine if it is of archaeological, modern or natural origin.
- 4.8.12 Within the eastern surveyed area there is a suggested of a curvilinear feature formed by discrete areas of magnetically positive (darker) readings (**609**), that may represent cut archaeological features such as pits or large postholes. This may also continue the line of a curvilinear feature (**612**) further to the east, visible on the survey results as more continuous line. The nature of this feature is uncertain, if the two are part of the same feature its curvilinear nature is more reminiscent of a natural feature such as a former stream-line or palaeochannel, but more intrusive archaeological work would be required to confirm this.
- 4.8.13 Immediately to the north of the old field boundary represented by feature 602 is a straight linear feature (**610**) running in a NNE – SSW direction. This is identified by magnetically negative (lighter) readings. Such readings can often be indicative of a buried bank or occasionally a trackway or similar feature. It is on a very similar orientation as several other features towards the southern end of the field whose linearity and regular spacing would suggest are caused by deep ploughing within the field. However, linear feature **611** may be a continuation of feature 603 due the similarity in readings. The function of these features (610 & 611) is therefore unclear and it cannot be stated with any certainty whether they represent archaeological features or more modern features such as ploughing scars or drainage channels.
- 4.8.14 Along the northeast edge of the surveyed area is the suggestion of a sinuous linear feature (**613**) running in a roughly SW – NE direction. The sinuous nature and the similarity of alignment with the current stream visible to the east would suggest this represents a former stream-line or palaeochannel.
- 4.8.15 At the northern end of the surveyed area is an area of some strong positive (darker) magnetic readings with a linear feature extending in a NE – SW direction from its western edge (**614**). Lying as it does on the edge of the surveyed area makes interpretation difficult, it may be of significance that it may lie close to a possible pond depicted on the 1889 Ordnance Survey map.



Photo 4: Looking SSW across Field 6 (East).



Photo 5: Looking SW across Field 6 (West). Note the slight hollow across the right hand side of the field, this is the former stream-line partly visible as feature 605.

4.9 Field 7 (Figures 17 & 18)

4.9.1 Field 7 lies to the east of the farmstead complex, separated by a small wooded stream valley. It covers an area of 5.8 hectares. At the time of survey the field was covered in improved pasture and grazed largely by sheep. There is a gradual southward slope in the field, which becomes more pronounced roughly midway along. The ground also begins to drop off into the stream valley to west close to the field boundary. The field is bounded by hedgerows, with trees along its western boundary. A farm track runs immediately to the north and northwest, and a stream runs to the west. To the south lies a large pond, with Fenton Brook beyond.

- 4.9.2 There are no previously recorded archaeological features within the bounds of this field. Fenton Home Farmstead lies a short distance to the west, and a possible Iron Age defended enclosure lies in the field to the east. Comparisons with the 1889 Ordnance Survey map indicate that the outer boundary of the field has remained unchanged. Internally however it was formerly divided into three separate fields. Part of the line of the northern field boundary is still picked out by a tree in the hedgeline and an isolated tree within the field.
- 4.9.3 The survey results show a linear feature (**701**) running east – west across the field, roughly a third of the way down the field. This is picked out by fragmented magnetically positive (darker) readings, and almost certainly represents remains of the former post-medieval field boundary that can be seen on the 1889 Ordnance Survey map.
- 4.9.4 A similar fragmented linear feature to the south (**702**), this time running in a NNE – SSW direction, also aligns very closely with a former post-medieval field boundary visible on the 1889 Ordnance Survey map.
- 4.9.5 To the southeast of this southern field boundary are the faint traces of a possible L-shaped linear feature (**703**). This feature is picked out by line of magnetically negative (lighter) readings. The darker magnetic readings in this area would appear to correspond to cut features, such lighter readings therefore often (although by no means exclusively) correspond to 'positive' features such as buried banks or walls. The origin and function of this possible feature is unclear as the readings in this area are rather ephemeral, and further more intrusive archaeological work would be required to confirm any archaeological potential.
- 4.9.6 Towards the NW end of the field a wide linear feature (**704**) extends c.50m into the field, running in a WSW – ENE direction. This is picked out by a central area of magnetically positive (darker) readings, with areas of mixed and magnetically negative (lighter) both to the north and south of it. The origin and function of this feature is unclear, its somewhat irregular edges may indicate this is a naturally occurring feature, such as a palaeochannel, although further more intrusive archaeological work would be required to determine if it has an archaeological value.
- 4.9.7 The northeast corner of the surveyed area picks up very strong magnetically negative (lighter) readings (**705**). This is not immediately apparent on the presented survey results as this appears as a white area, but such strong responses are likely to be caused by modern ferrous items and suggest an area of modern disturbance in the northeast corner of the field.



Photo 6: Looking SE across Field 7 from the northern hedgeline. The former northernmost field boundary visible on the 1889 map and the survey results is represented on the surface by the two trees just left of the centre of the picture.

4.10 Field 8

(Figure 19 & 20)

- 4.10.1 Field 8 lies towards the eastern end of the area of proposed development, and covers an area of 6 hectares. There is a gradual slope to the south which begins to get slightly steeper roughly halfway down the field. There is also a shallow wide channel that runs SSE down the centre of the field as the ground begins to get steeper. At the time of survey the field was partially under a beet crop, and was being grazed. The crop covered the northern third and southern quarter of the field. The crop at the southern end proved too thick to allow effective surveying in this area, but the crop to the north had been grazed sufficiently to allow surveying to take place. The field is bounded on all sides by hedgerows. A farm track runs immediately to the north of the field, and Fenton Brook lies to the south. There is a small fenced enclosure in the northwest corner, close to which lies a metal circular cattle feeder. 86m in from the northeast corner, against the northern boundary lies an electricity pole with transformer, which is earthed within the field. Electricity poles then run along the northern and eastern boundary. Potential disturbance from these electricity poles and cattle feeder prevented surveying in their immediate vicinity.
- 4.10.2 This field contained the only known archaeological site to exist within the bounds of the proposed development. A possible Iron Age defended enclosure was identified in the northern part of the field (Wessex 2013), this site has not previously been investigated archaeologically. Comparisons with the 1889 Ordnance Survey map show very little change in the layout of the field since the late 19th century.
- 4.10.3 The possible Iron Age defended enclosure is clearly visible as feature **801**, within the northeast corner of the field. This consists of a circular enclosure, c.40m – 45m in diameter, defined by a line of magnetically positive (darker) readings that is likely to represent a buried ditch. Given the depth of ploughing known to have been

undertaken in this area, and the clarity of the readings, it is likely this ditch is rock-cut. Nearby electricity posts prevented the entire circuit of the ditch being revealed, but there appears to be a break on the southern side, possibly evidence of an entranceway. Internally there are two discrete patches of magnetically positive (darker) readings, it is possible these relate to internal features such as round-houses. Similarly small discrete readings in the southeast corner of the circular enclosure may represent further internal structural remains. Clearly more intrusive archaeological work would be required to determine the condition and confirm the date and function of this feature.

- 4.10.4 Between 35m and 40m to the west of the circular enclosure are the faint traces of a curvilinear feature (**802**) that appears to mirror the line of the circular enclosure. Again magnetically positive readings suggest a buried ditch and it appears likely that the two features are related. This may represent an outer enclosure or annex of a type not uncommon in Iron Age enclosures.
- 4.10.5 In between the main inner (801) and possible outer (802) enclosure ditches and two short straight linear features (**803 & 804**), that due to their proximity to the main inner enclosure may therefore be related, although their function is unclear.
- 4.10.6 Extended southwards from the main circular enclosure are a series of sinuous and somewhat irregular linear features (**805 & 806**). These features run in a general north – south direction, with the more magnetically visible feature (805) corresponding closely to the shallow wide channel that is still visible on the surface of the field. These features have the appearance of naturally occurring phenomena within the underlying subsoil or geology, such as a palaeochannel. However, their proximity to the circular enclosure is suggestive that the features may be linked and therefore have archaeological potential, in particular the potential for important palaeo-environmental remains collecting within the palaeochannel.
- 4.10.7 Crossing the northern half of the surveyed area is a straight linear feature (**807**), running in a NNE – SSW direction. This feature is picked out by magnetically negative (lighter) readings, and corresponds to a modern water-pipe trench installed by the farmer.



Photo 7: View NW across the northern end of Field 8. The site of the possible Iron Age enclosure lies on the crest from the centre to the right of the picture.

4.11 Field 9

(Figures 21 & 22)

- 4.11.1 Field 9 lies at the eastern end of the proposed development area, covering an area of 5.4 hectares. At the time of survey this field was covered in a low leafy crop. The field exhibits a gradual slope to the south and east, with the slope becoming more prominent along the southern edge of the field. It is bounded to the west by a straight hedgeline, to the east and south by woodland, and to the north by a post and wire fenceline on top of a bank. A trackway runs immediately to the north of the field, and Fenton Brook lies immediately to the south. The main access to the field is in the northwest corner.
- 4.11.2 There are no previously recorded archaeological sites within the bounds of this field. A possible Iron Age defended enclosure lies in the field to the west. To the south, on the opposite side of Fenton Brook, lies a medieval moated site (PRN 10389). Comparisons with the 1889 Ordnance Survey map (Figure 4) show little change in the layout of the field since the late-19th century.
- 4.11.3 The survey result reveal little in terms of obvious archaeological features within this field, and no clear evidence of activity associated with the possible Iron Age defended enclosure that lies close to the northwest corner of the field. The underlying geology, represented by the general mottled readings across the surveyed area, suggest it may occur relatively close to the surface and therefore deep ploughing that is known to have occurred may have removed archaeological remains.
- 4.11.4 Towards the eastern end of the field are the possible traces of a linear, or possibly parallel linear features running roughly north – south (**901**), represented by faint negative (lighter) magnetic readings, although these are largely ephemeral. Such linear readings are sometimes indicative of buried banks, and this linear feature may

represent an old field boundary, although not one that is depicted on the 1889 Ordnance Survey map. However, the readings are so ephemeral this feature may in fact be part of the general background geological readings.

- 4.11.4 To the west lies a linear feature (**902**) running in a NNW – SSE direction, represented by positive (darker) magnetic readings, often indicative of cut features. This may therefore represent the line of a ditch, although again the sporadic nature of the readings may in fact indicate a natural feature of the underlying geology.
- 4.11.5 Immediately to the west lies another possible linear feature (**903**), depicted by very faint negative (lighter) magnetic readings. Again the faint readings may suggest this is part of the background geology, although the suggested linearity of the feature may be an indication of an artificially created feature, therefore of possible archaeological interest.
- 4.11.6 In the northwest corner of the surveyed area lies a discrete area of negative (darker) magnetic readings (**904**) that appear stronger than the general background readings. Such discrete magnetic responses are sometime indicative of cut features such as a pit.
- 4.11.7 To the south lies a discrete area of magnetically bipolar readings (**905**). Such strong bipolar responses are generally found to be modern in origin, and this particular area lies close to an electricity pole within the field and it is likely the two are related.



Photo 8: Looking SE across Field 9. The Medieval moated enclosure (PRN 10389) lies in the field beyond the first tree-line.

5. CONCLUSIONS

This report follows the geophysical surveying, using a gradiometer, of nine fields to the south, east and west of Fenton Home Farm, near Crundale, Haverfordwest. The fields cover a combined area of c.52 hectares and are the site of a proposed solar farm.

Features can be identified in all nine fields. However, with the clear exception of Field 8, most of these are of uncertain or low archaeological potential.

In general, it is clear that all the fields have been deep-ploughed. This ploughing reached bedrock deposits across much of the higher ground, a process that is likely to have disturbed, damaged or destroyed archaeological remains within the subsoil. The survey results show a better preservation of features across the sloping and lower ground around the southern fringes of the area (again with the clear exception of Field 8).

From the survey results alone, Field 8 clearly has the greatest archaeological potential, although surface finds collected during the fieldwork indicate that Field 4 may have an archaeological potential that is greater than that implied by the survey results alone.

Each field contains some features with archaeological potential that cannot be effectively interpreted. These will require further, intrusive, archaeological investigations to establish their archaeological merits. Field 8 is the exception, as it contains clear evidence of features with high archaeological potential. The proposed development has the potential to disturb, damage or destroy archaeological remains within this field.

In terms of specifically identified features, Field 1 contains one possible linear feature of archaeological origin (101) and a further linear feature (104) that is likely to be relatively modern. Two further features (102 & 103) identified within the field have the appearance of naturally occurring phenomena. However, it is difficult to be certain about any of these interpretations, an issue that partly results from apparent data errors caused by the presence of flint fragments within the field. Further intrusive archaeological investigations will be required to prove the provenance and archaeological value of these features.

Within Field 2 there are four features of archaeological potential, a possible rectilinear enclosure (204) in the centre, and linear features located towards the southeast corner (201 – 203), although the function of the latter is unclear. Other features are likely to be either modern or natural in origin.

Within Field 3 are several features of possible archaeological origin. These include a small curvilinear feature (301) that might be prehistoric, several possible pits (302) and a possible, albeit ephemeral, enclosure in the northeast corner (303). It should be noted that several flints were recovered from the surface of this field, which also attests to prehistoric activity. Other finds recovered include pottery and tile, some of which appears medieval in date. There is no indication within the survey results of the origin of this material and it is entirely possible such objects could have been introduced from elsewhere through manuring and similar agricultural practices.

Numerous flint fragments indicate some level of prehistoric activity within Field 4, although none of the features identified by the survey appear to relate to this. Indeed, the archaeological potential of the identified features appears limited. The survey results indicate a former post-medieval field boundary (401), probable modern features (403 & 404) and a possible palaeochannel (405). One linear feature (402) of potential archaeological interest may represent an old boundary pre-dating the field enclosures visible on late 19th century maps.

Within Field 5 there is little evidence of archaeological potential. Two features identified on the fringes of the surveyed area (502 & 503) may be of archaeological origin. However as they were only partially revealed, their character, function and origin could not be identified. The potential of these features appears limited. The main feature identified within this field (501) is likely to be modern in origin.

Within Field 6 numerous linear features are suggested by the survey results, some which have the potential to be of archaeological interest. Many of these appear to relate to post-medieval field boundaries (601, 602, 603 & 604) that can be identified on late 19th and early 20th century Ordnance Survey mapping, and are therefore of limited archaeological interest. Modern ploughing and drainage activity is indicated (605 & 607) and feature 610 may also relate to more recent agricultural activity. Probable naturally-occurring phenomena are suggested by features 612, 613 and 614. Despite this there are also several linear, or possibly linear, features of more uncertain origin. These may require further intrusive archaeological investigations to identify their archaeological potential and value. These include features 606, 608, 609 and 611, all of which appear on the better preserved lower ground at the southern end of the field. Waste flint fragments recovered from the western half of the field also suggest potential prehistoric activity in that area.

Post-medieval field boundaries (701 & 702) and modern activity (705) have been identified within Field 7. However, features of potential archaeological interest have also been recorded at the northern (704) and southern (703) ends of the field. Intrusive archaeological investigations will be required in order to identify their archaeological potential and clarify their origin, function and condition.

Field 8 is the only field to have clear and easily identifiable archaeological remains, and as such is the only field where it can be stated unequivocally that the proposed development has the potential to disturb, damage or destroy important features. The outline of a circular enclosure (801) is clearly visible on the survey results in the northeast corner of the field. There also appears to be an outer enclosure (802) and related internal features (803 & 804, and within 801). Such enclosures are typical of the Prehistoric period and commonly date to the Iron Age. Possible palaeochannels (805 & 806) to the south also have the potential to contain important palaeo-environmental evidence.

There is no indication within Field 9 of archaeological remains associated with the Field 8 enclosure. Indeed the survey results indicate limited potential. There are three possible linear features (901 – 903) and one possible pit (904) that may be of archaeological interest.

6. SOURCES

British Geological Survey 1994 *The Rocks of Wales* 1:250,000

Clark A J 1996 *Seeing Beneath the Soil* (2nd edition). Batsford, London

Ordnance Survey 1889 *1st edition map Pembrokeshire 1:2500*

Ordnance Survey 1902 *2nd edition map Pembrokeshire 1:2500*

Wessex Archaeology 2013 *Fenton Farm, Crundale, Pembrokeshire: Archaeological Desk-Based Assessment. Project No. 89230.02*



Figure 1: Site Location, based on the Ordnance Survey 1:50,000 map.

The Ordnance Survey has granted Archaeology Wales Ltd a Copyright Licence (No. AL 52163A0001) to reproduce map information; Copyright remains otherwise with the Ordnance Survey.

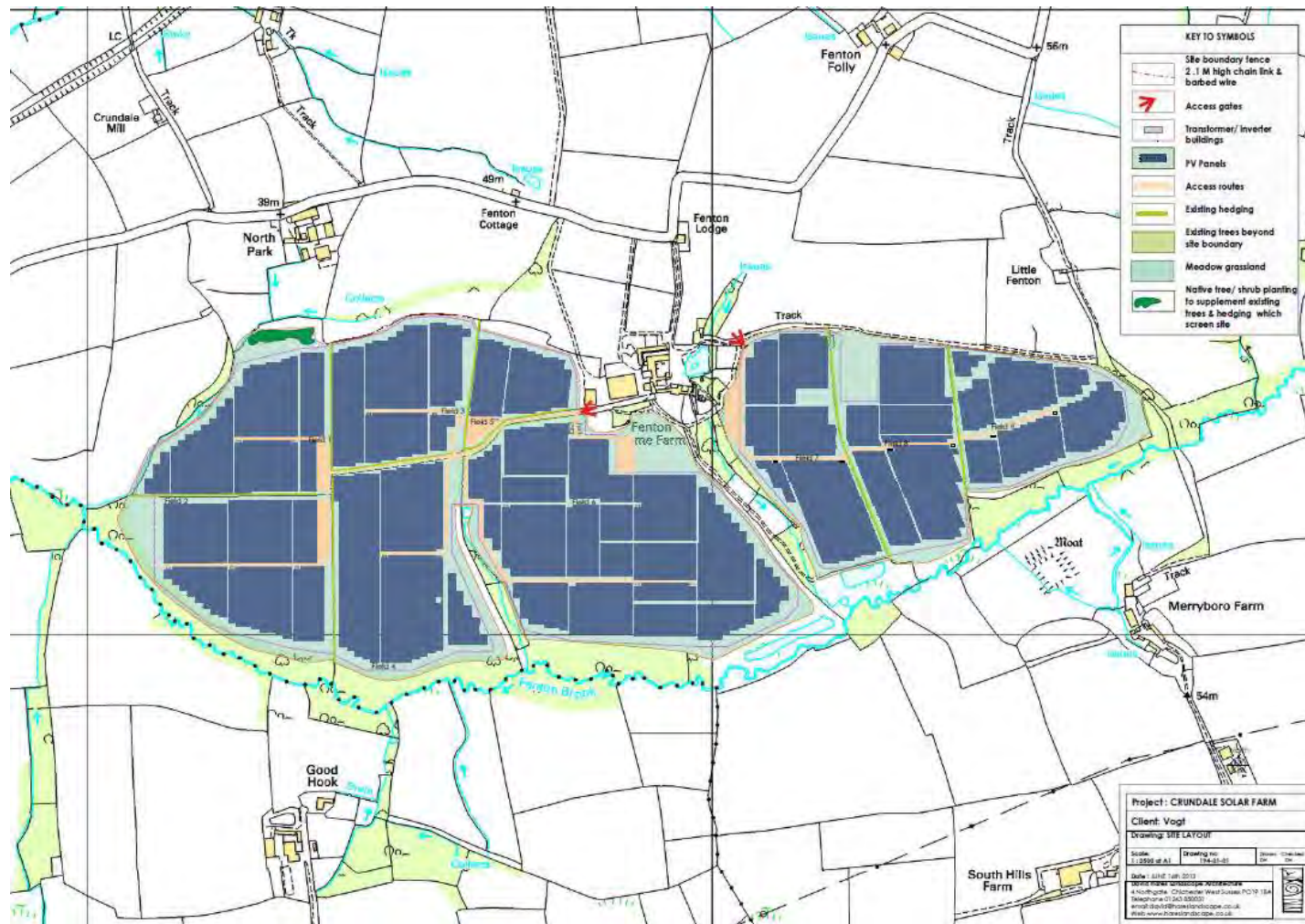


Figure 2: Layout of proposed solar farm. The proposed geophysical survey will cover all of the proposed development area

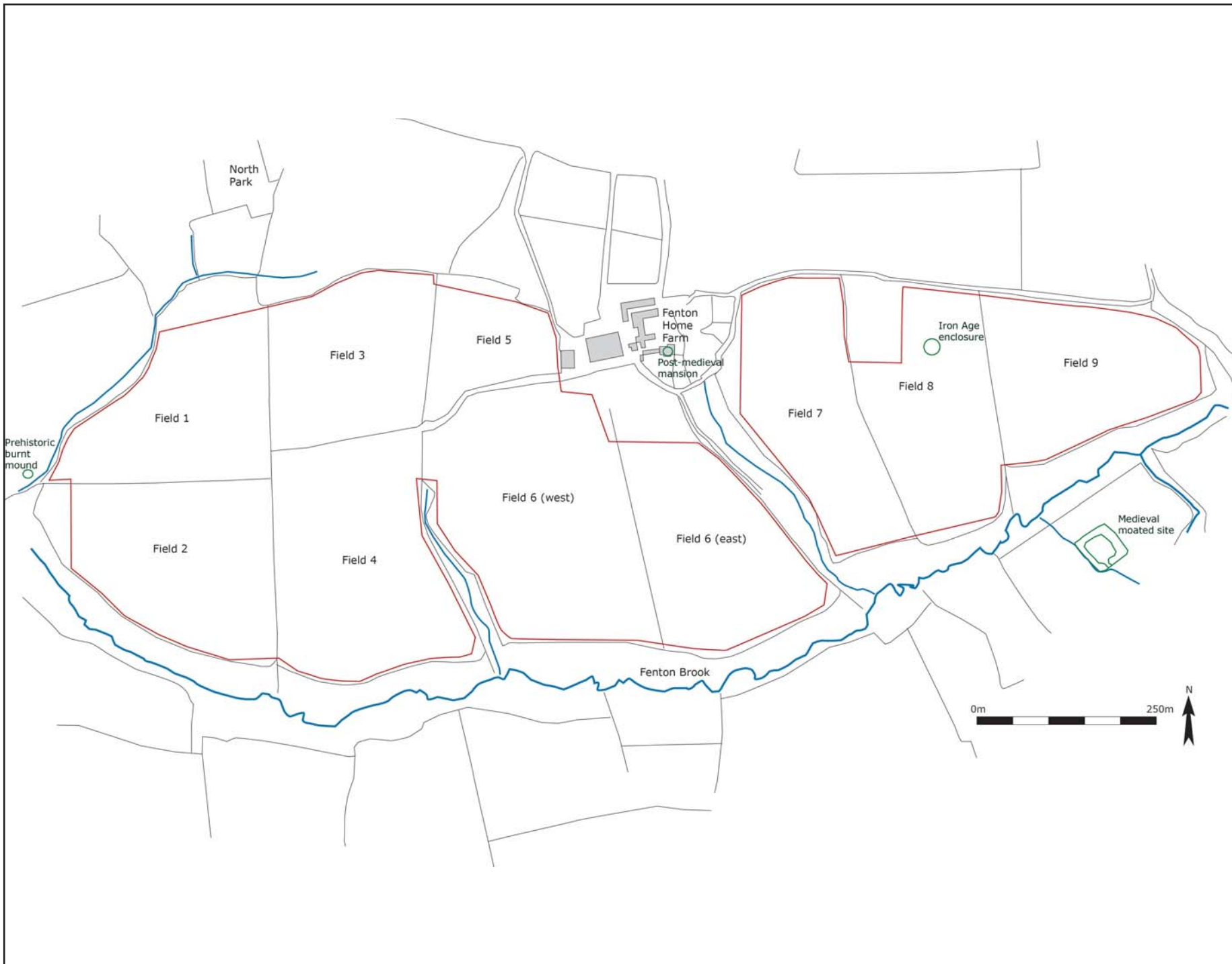


Fig. 3: Site plan, showing proposed development area (red), field labels and previously identified archaeological sites (green).

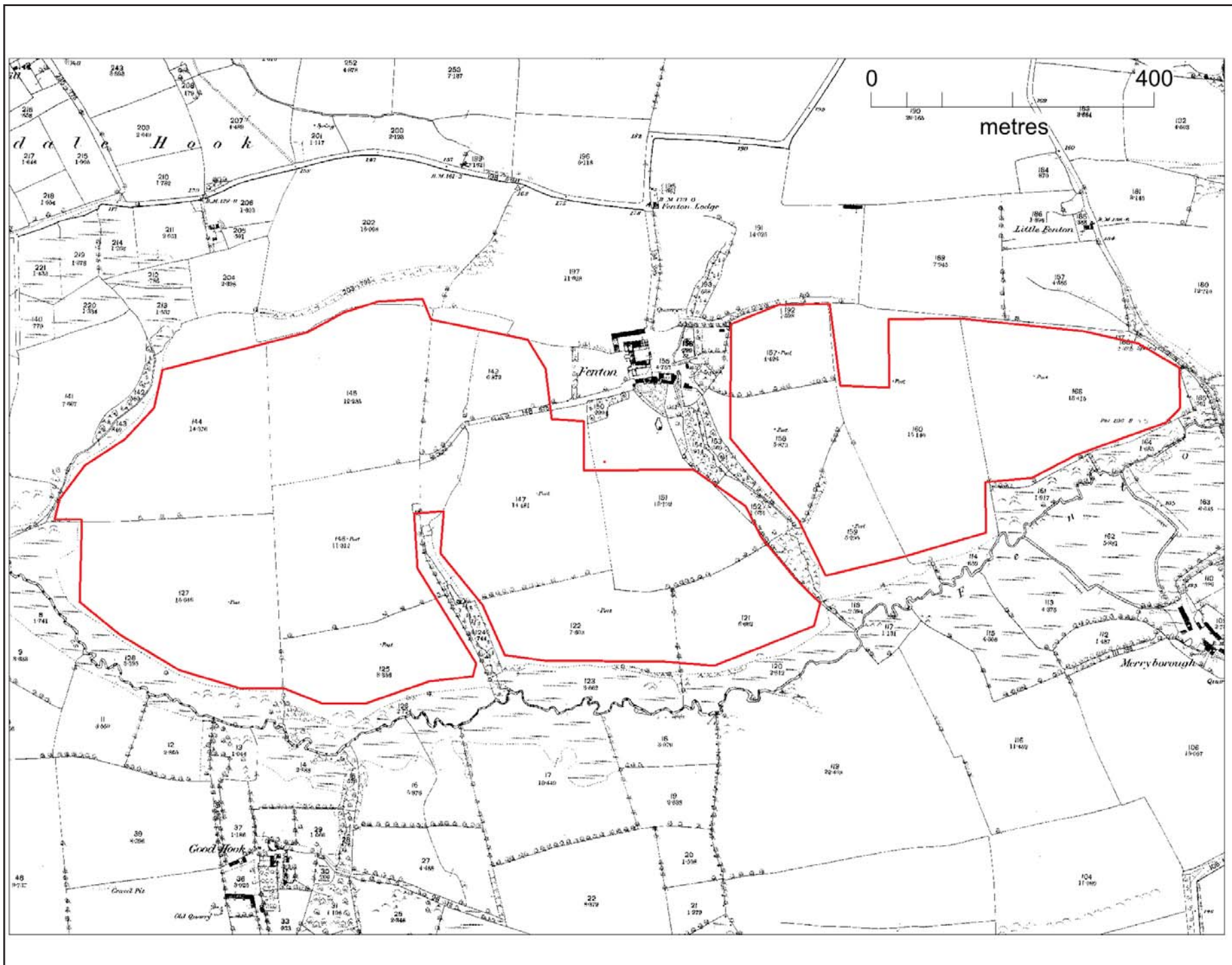


Fig. 4: Extract of the 1889 1:2500 Ordnance Survey map, showing proposed development area (red).

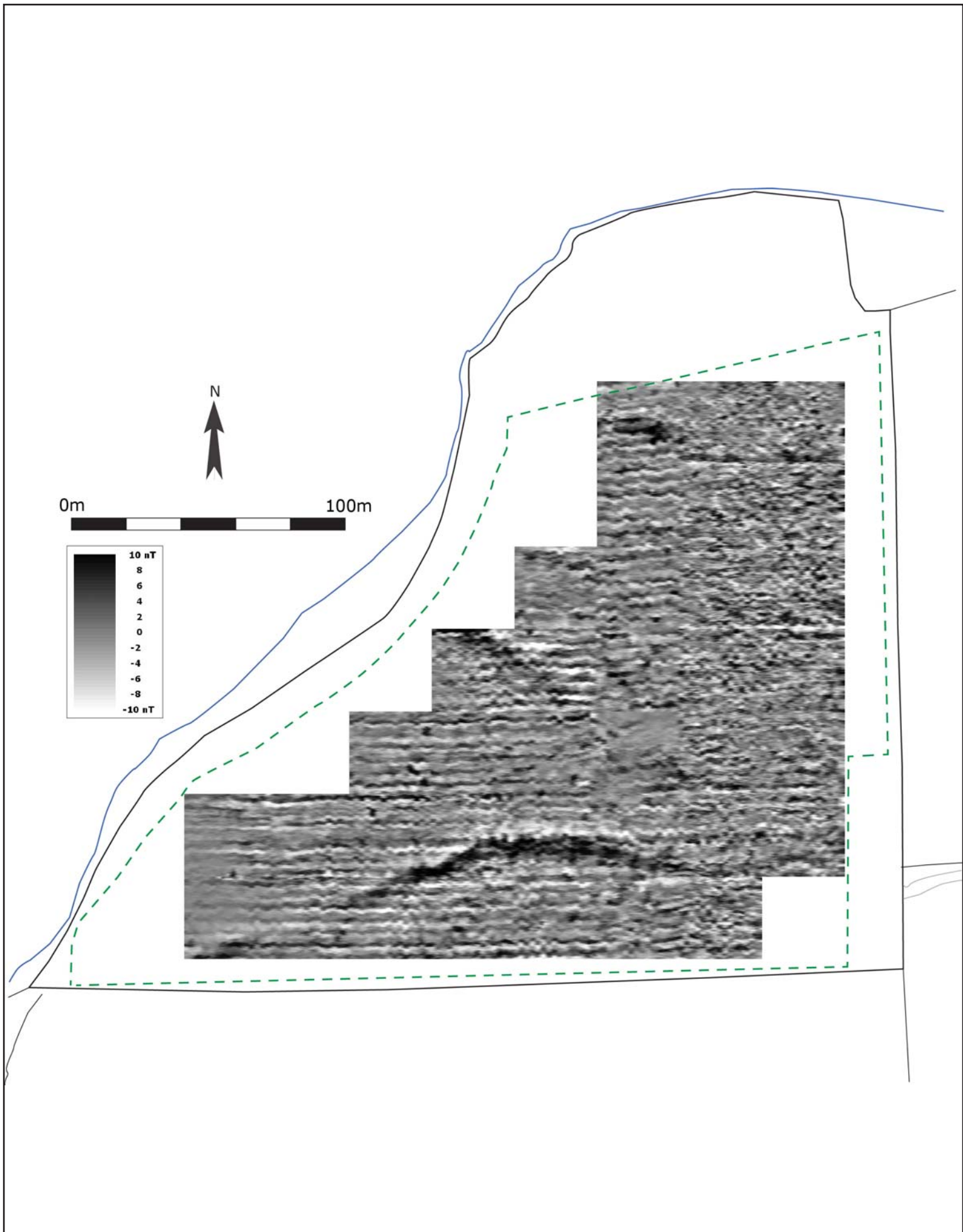


Fig. 5: Field 1, processed geophysical survey results. The approximate area of development is shown in green

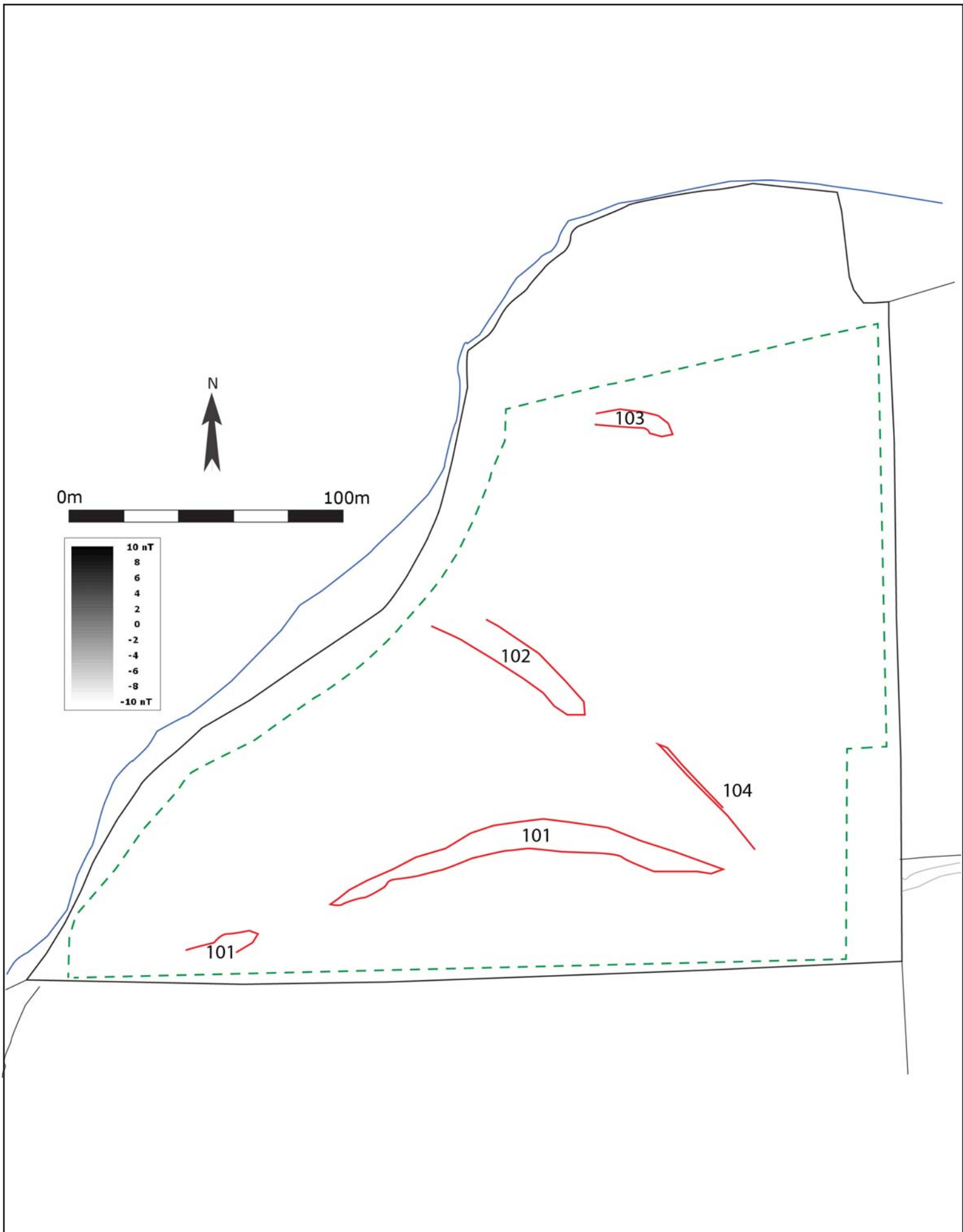


Fig. 6: Field 1, interpretation of the geophysical survey. The main features are outlined in red, the number are referred to in the main text.

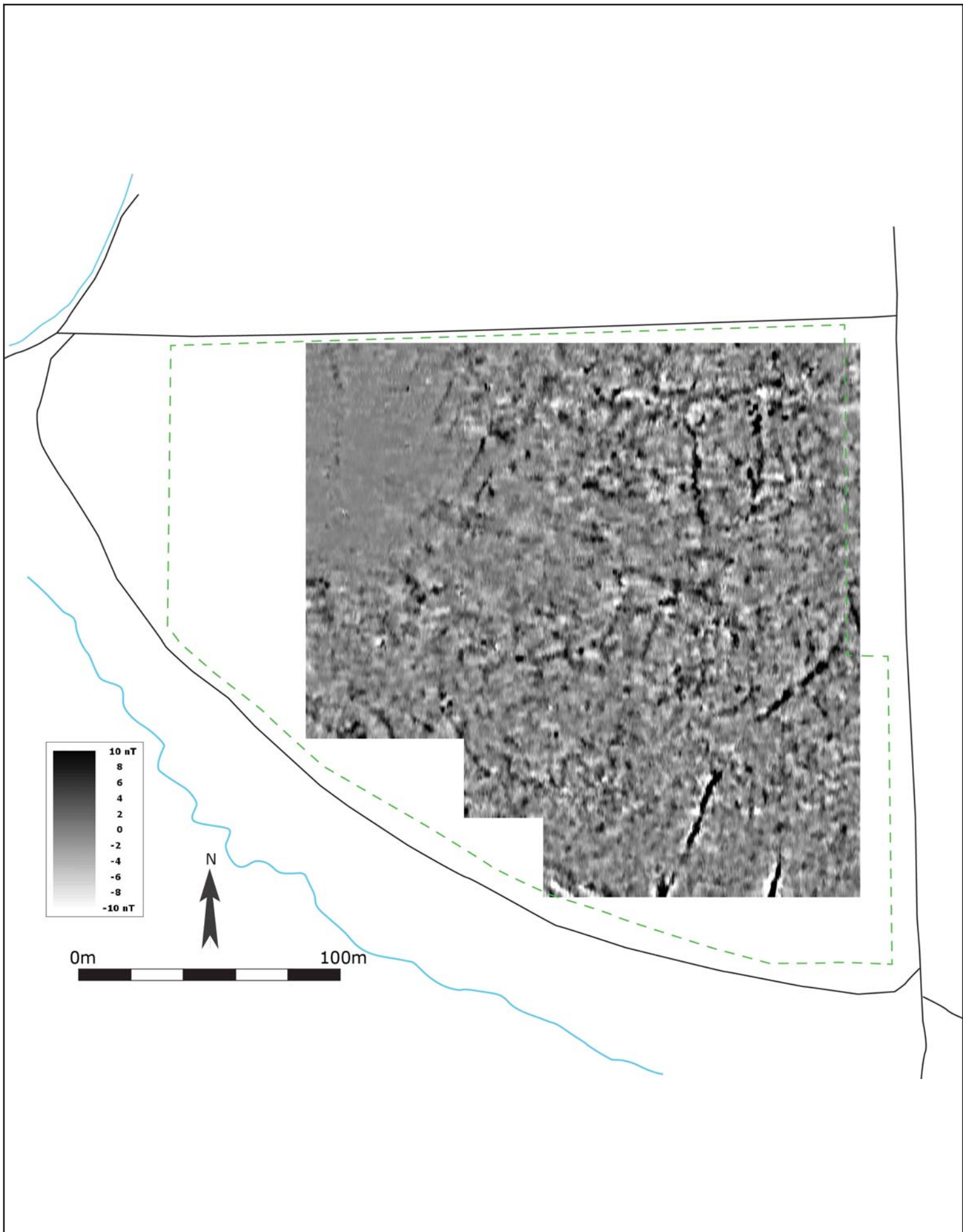


Fig. 7: Field 2, processed geophysical survey results. The approximate area of development is shown in green

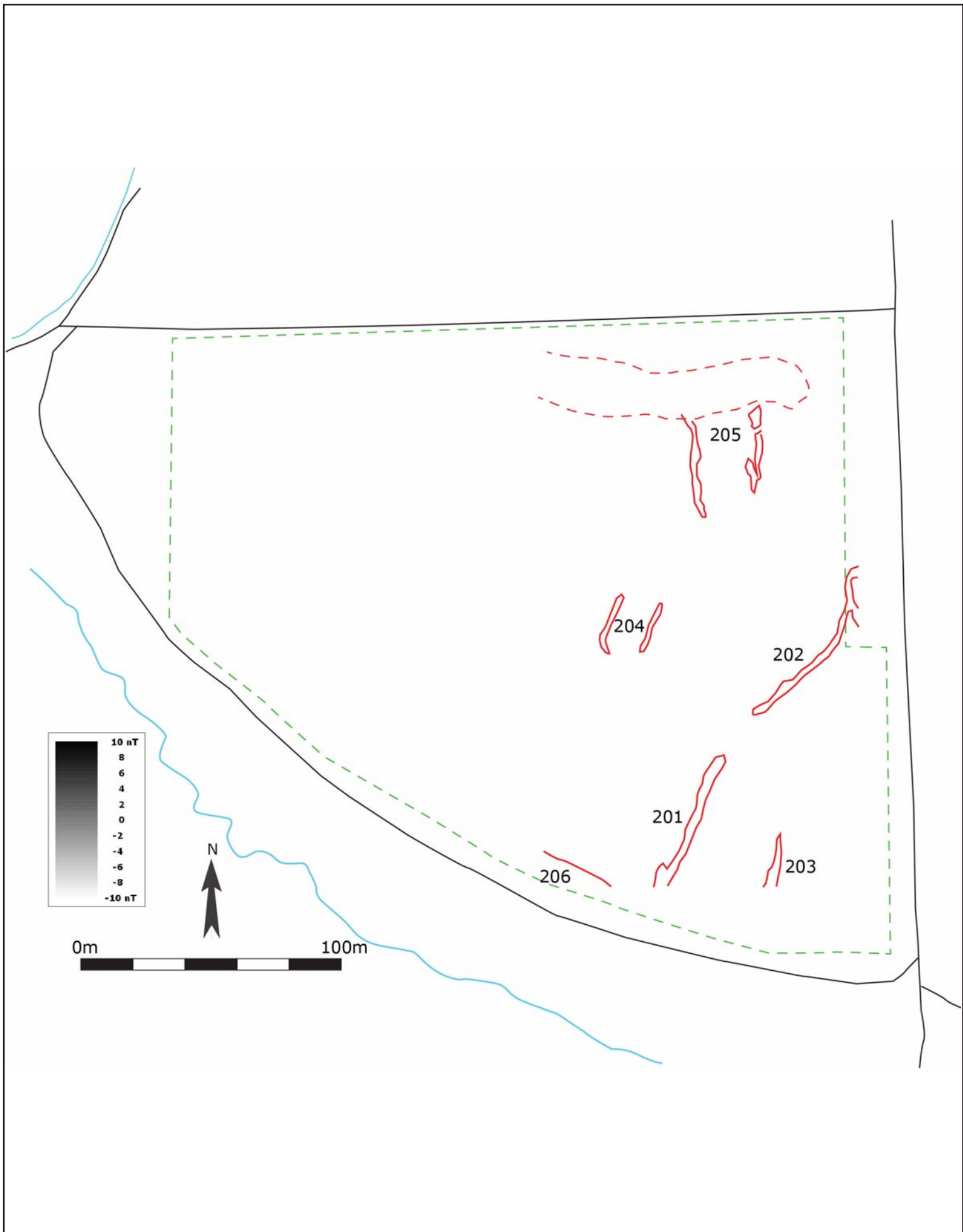


Fig. 8: Field 2, interpretation of the geophysical survey. The main features are outlined in red, the number are referred to in the main text.

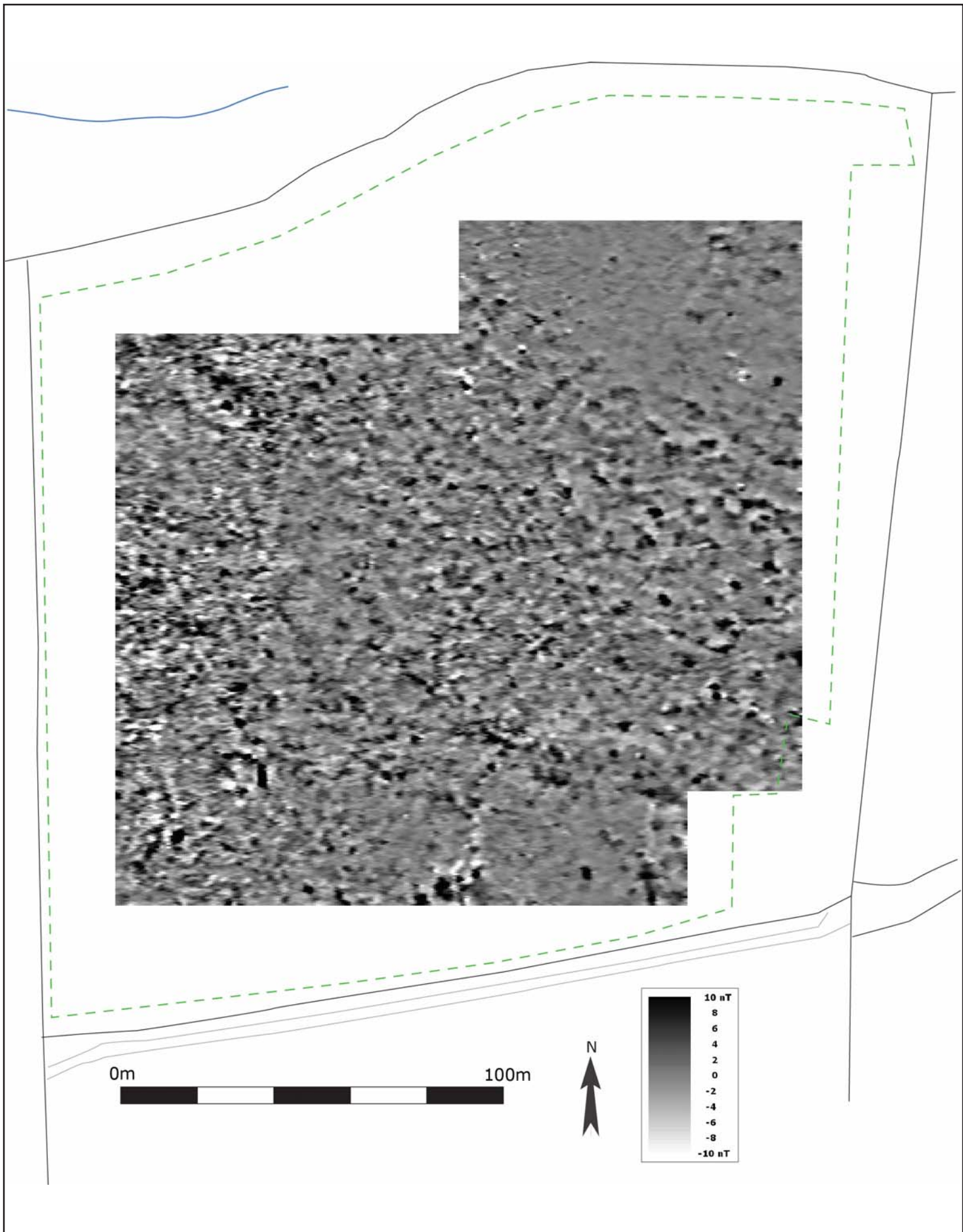


Fig. 9: Field 3, processed geophysical survey results. The approximate area of development is shown in green

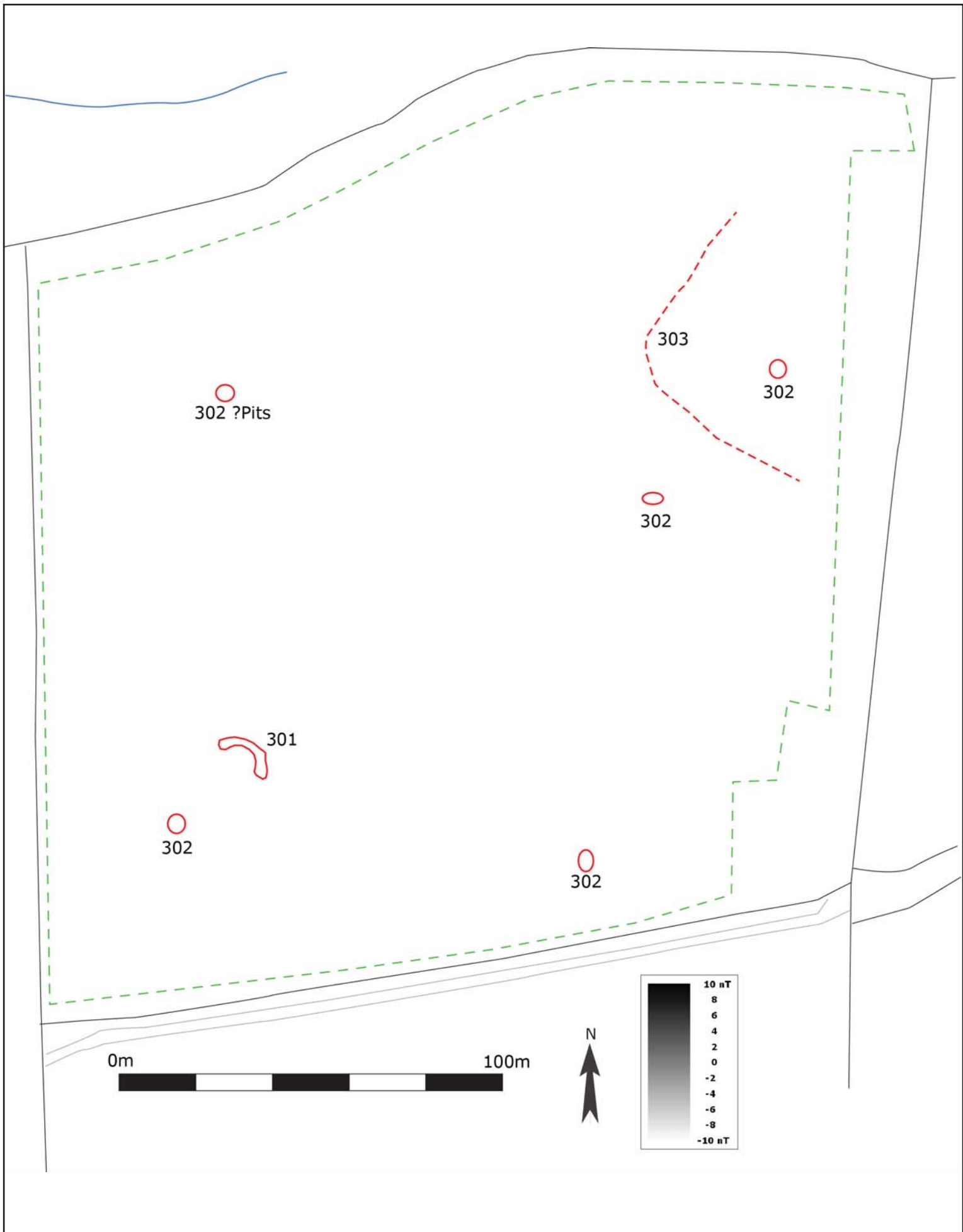


Fig. 10: Field 3, interpretation of the geophysical survey. The main features are outlined in red, the number are referred to in the main text.

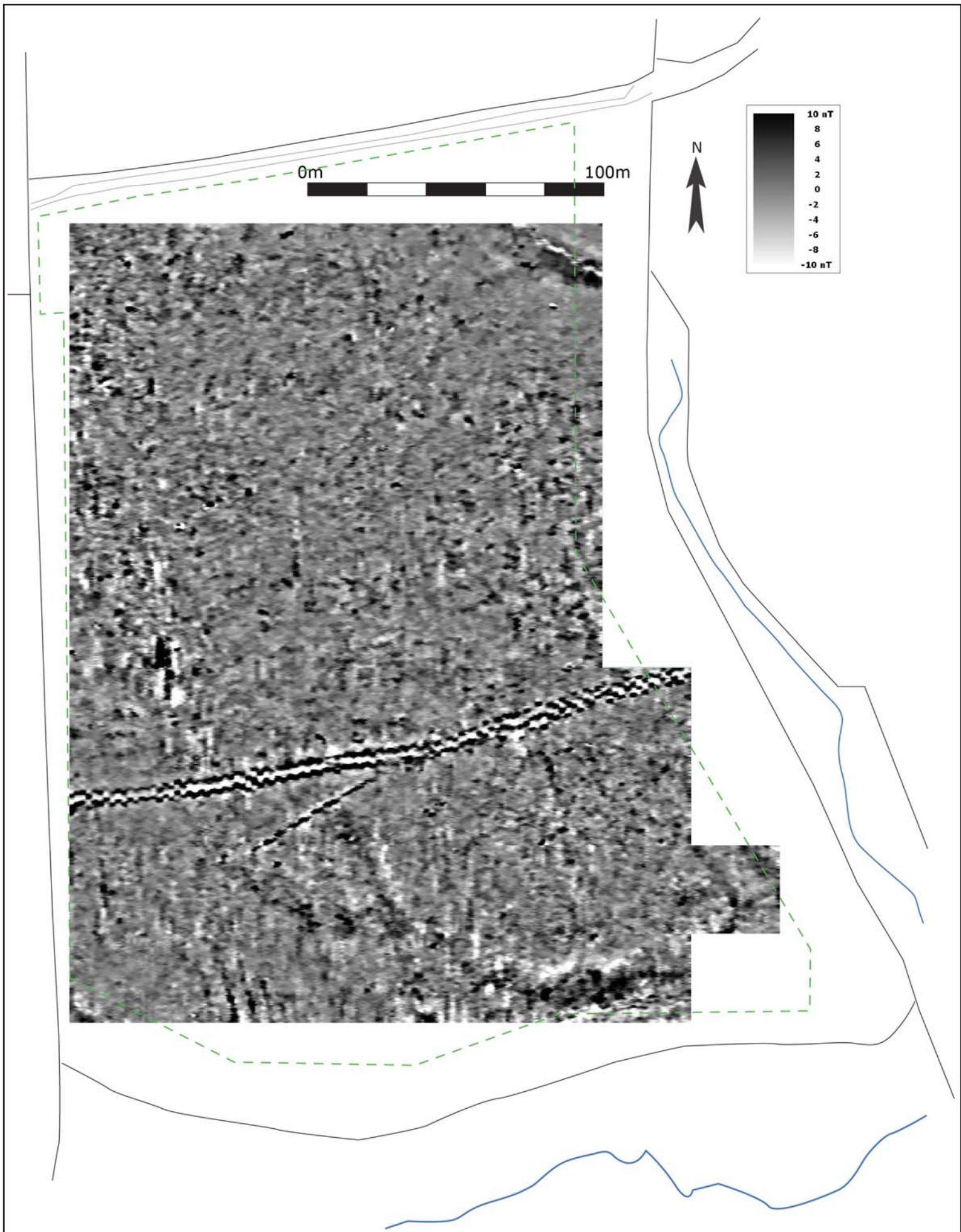


Fig. 11: Field 4, processed geophysical survey results. The approximate area of development is shown in green

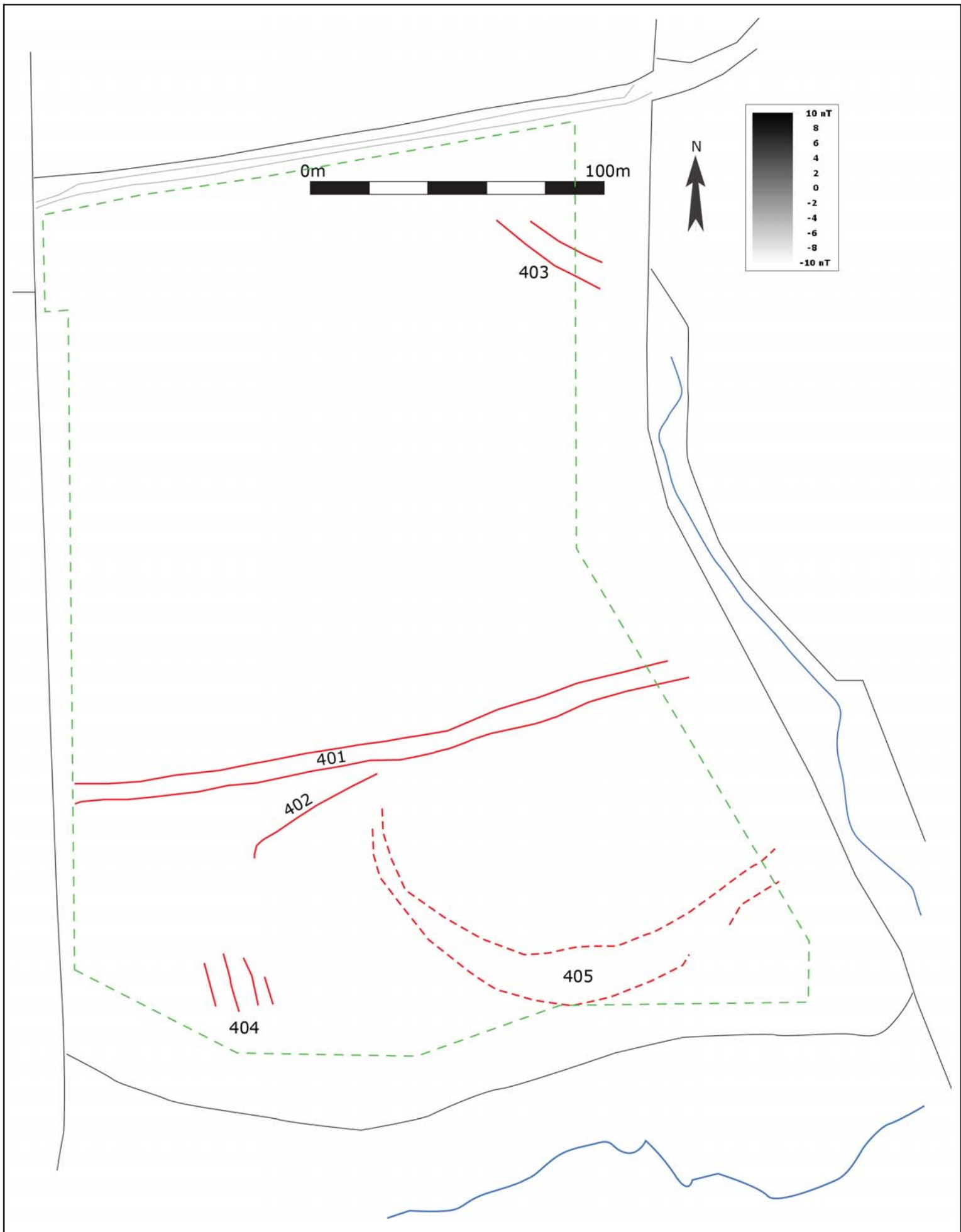


Fig. 12: Field 4, interpretation of the geophysical survey. The main features are outlined in red, the number are referred to in the main text.

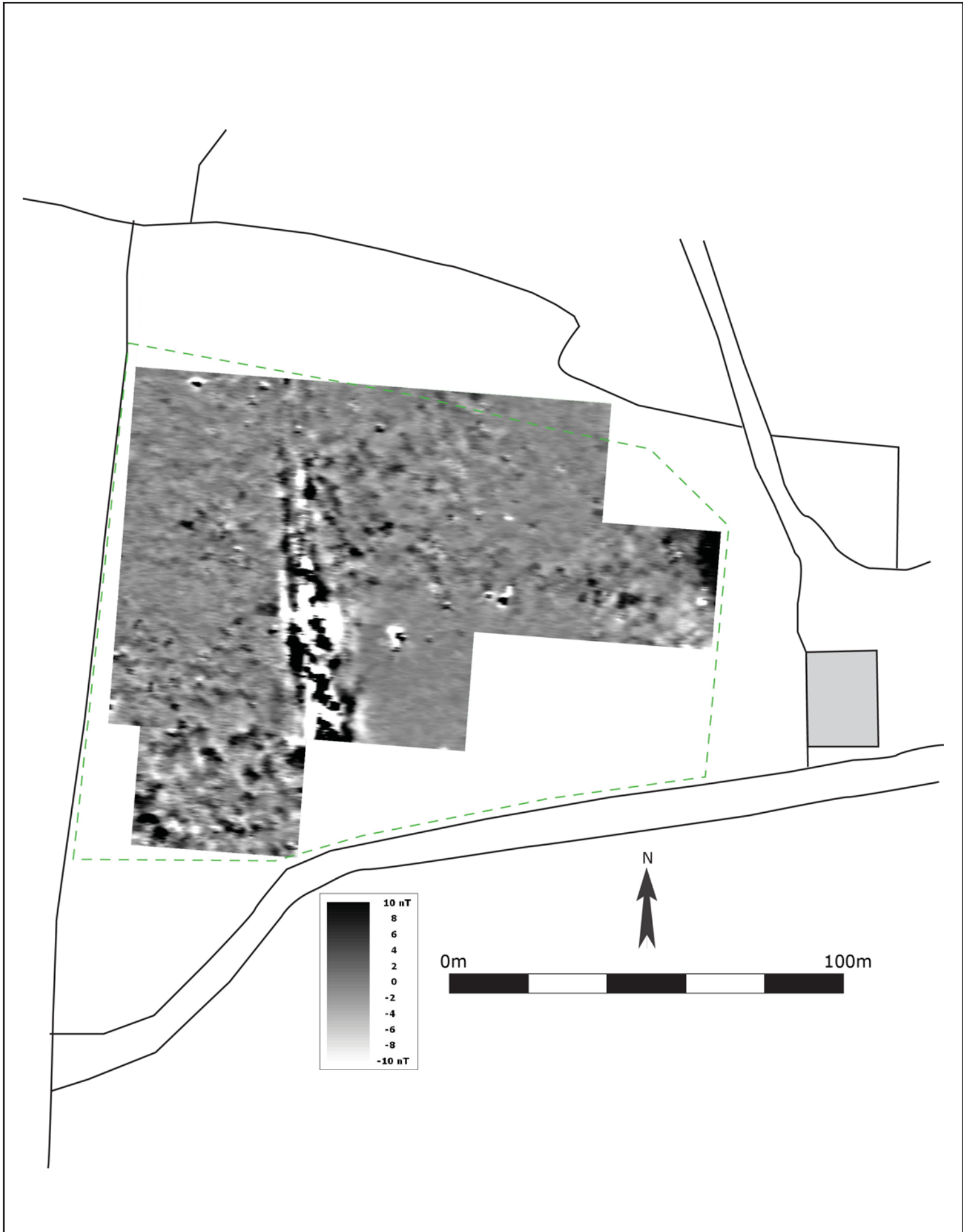


Fig. 13: Field 5, processed geophysical survey results. The approximate area of development is shown in green

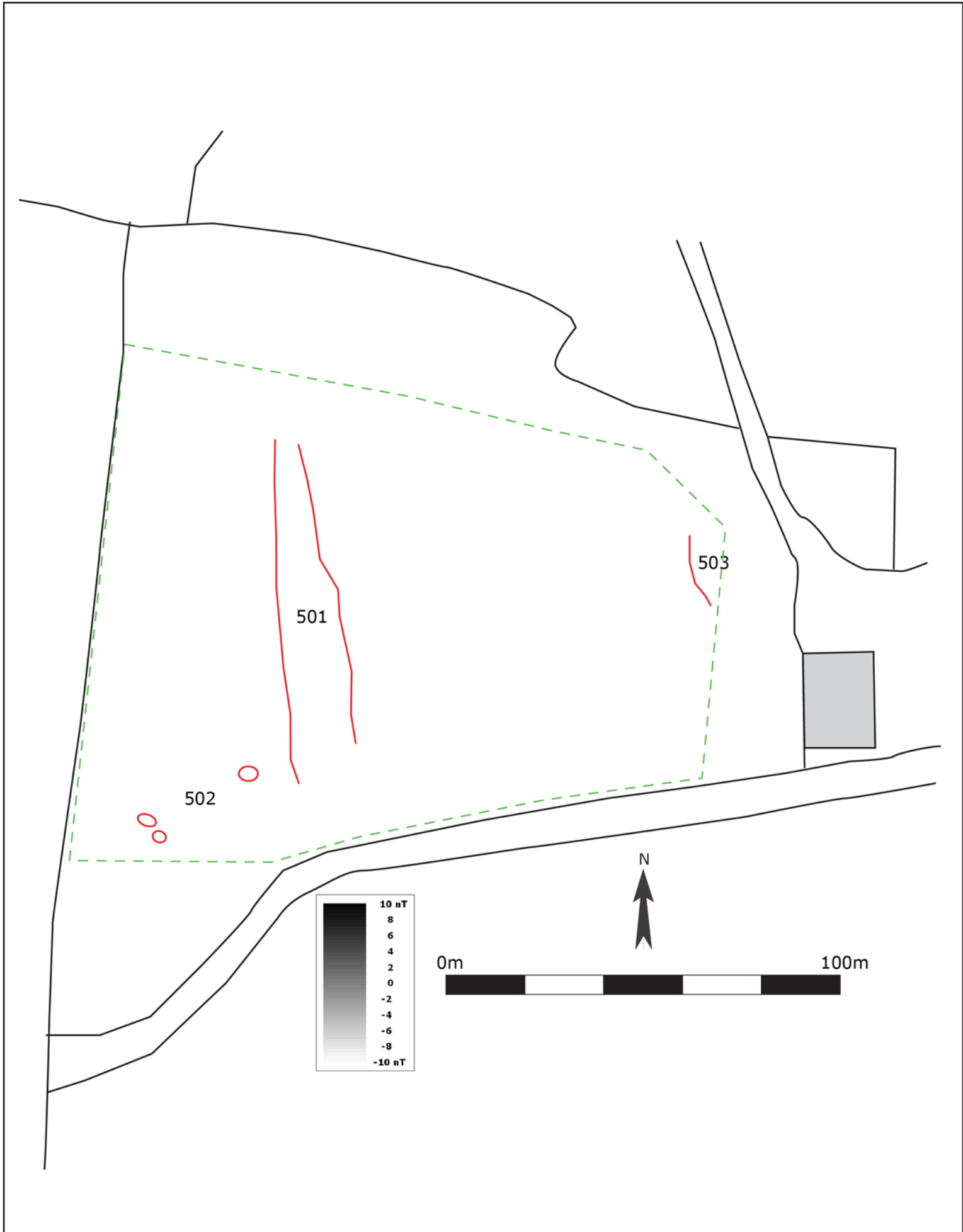


Fig. 14: Field 5, interpretation of the geophysical survey. The main features are outlined in red, the number are referred to in the main text.

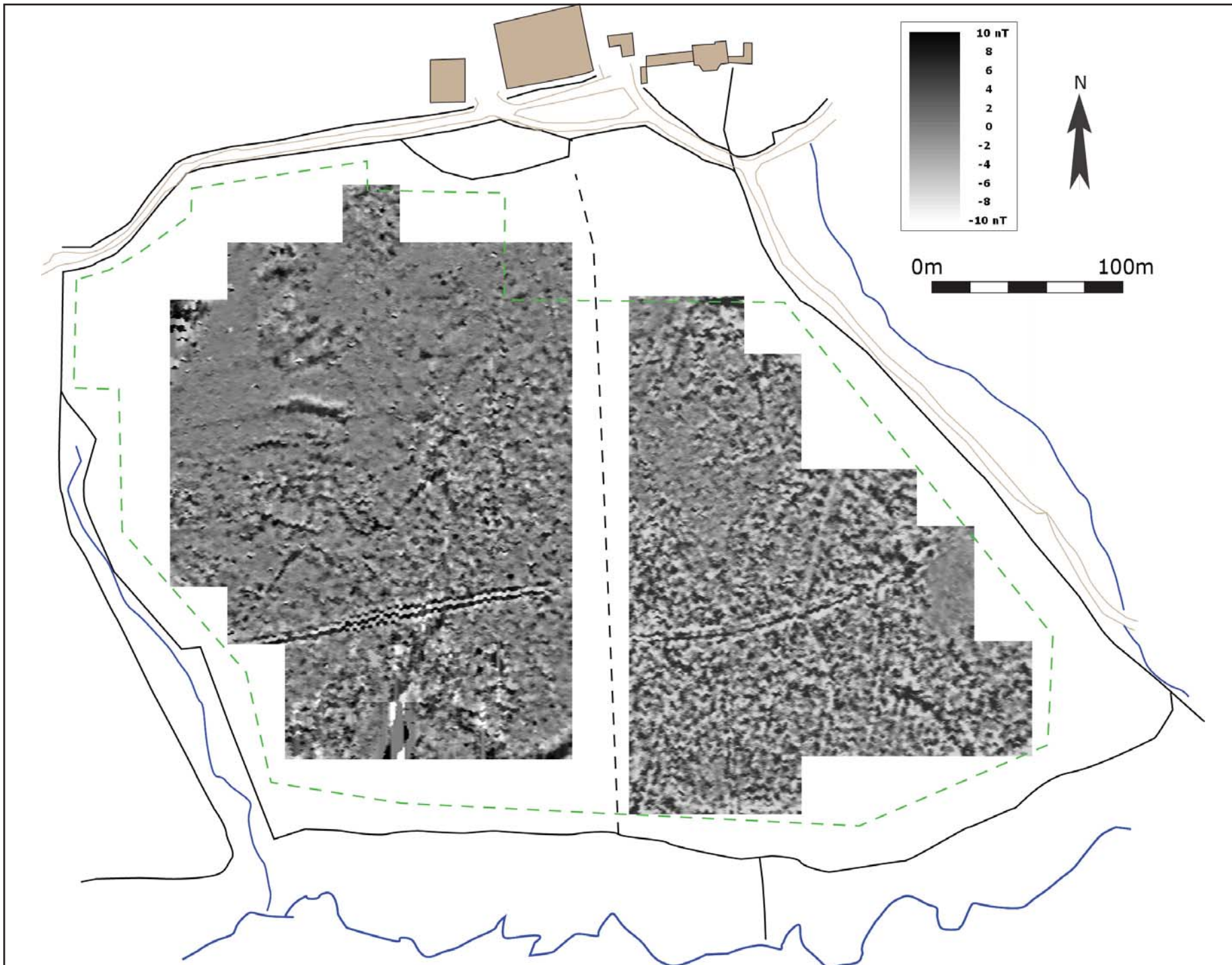


Fig. 15: Field 6, processed geophysical survey results. The approximate area of development is shown in green

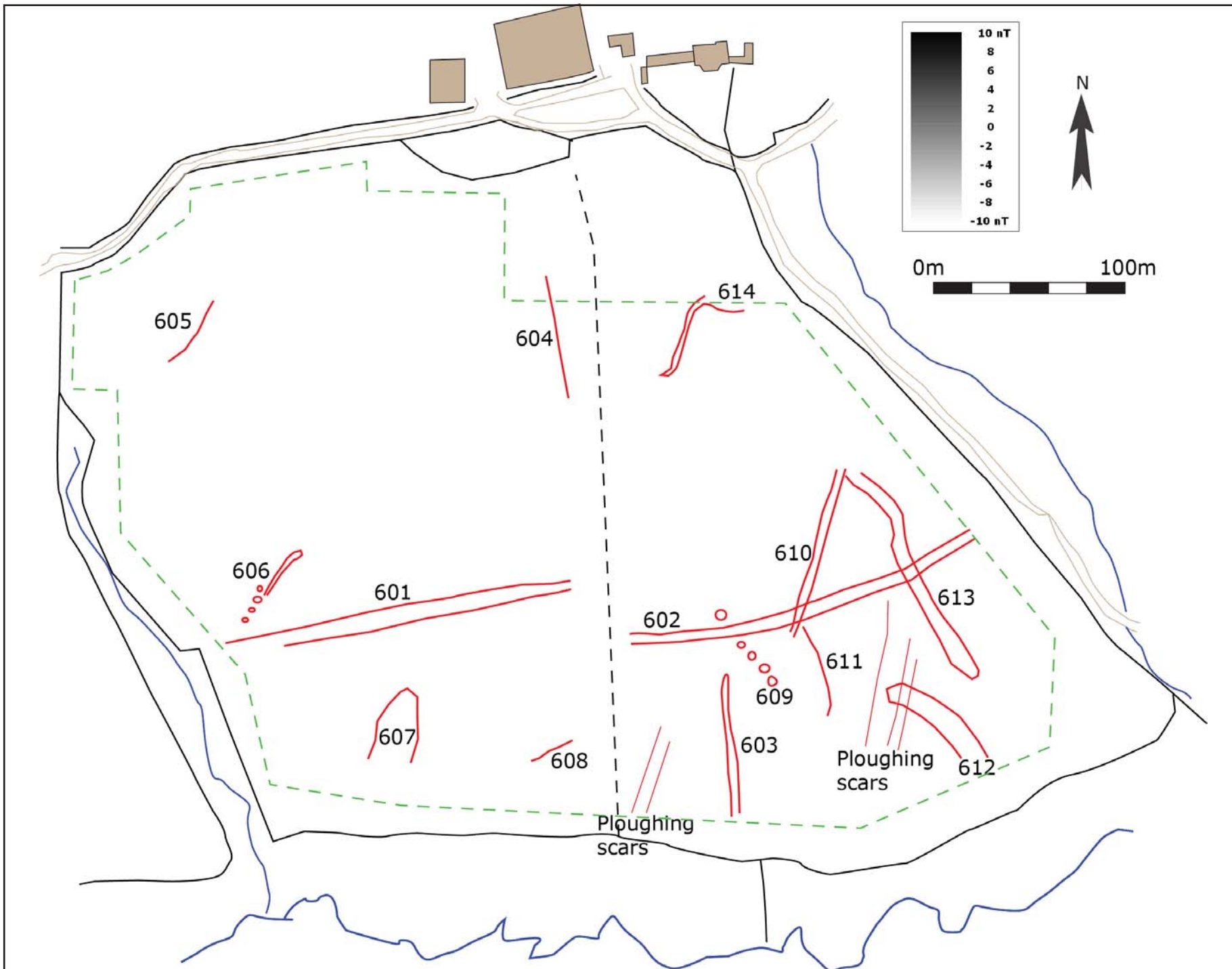


Fig. 16: Field 6, interpretation of the geophysical survey. The main features are outlined in red, the numbers are referred to in the main text.

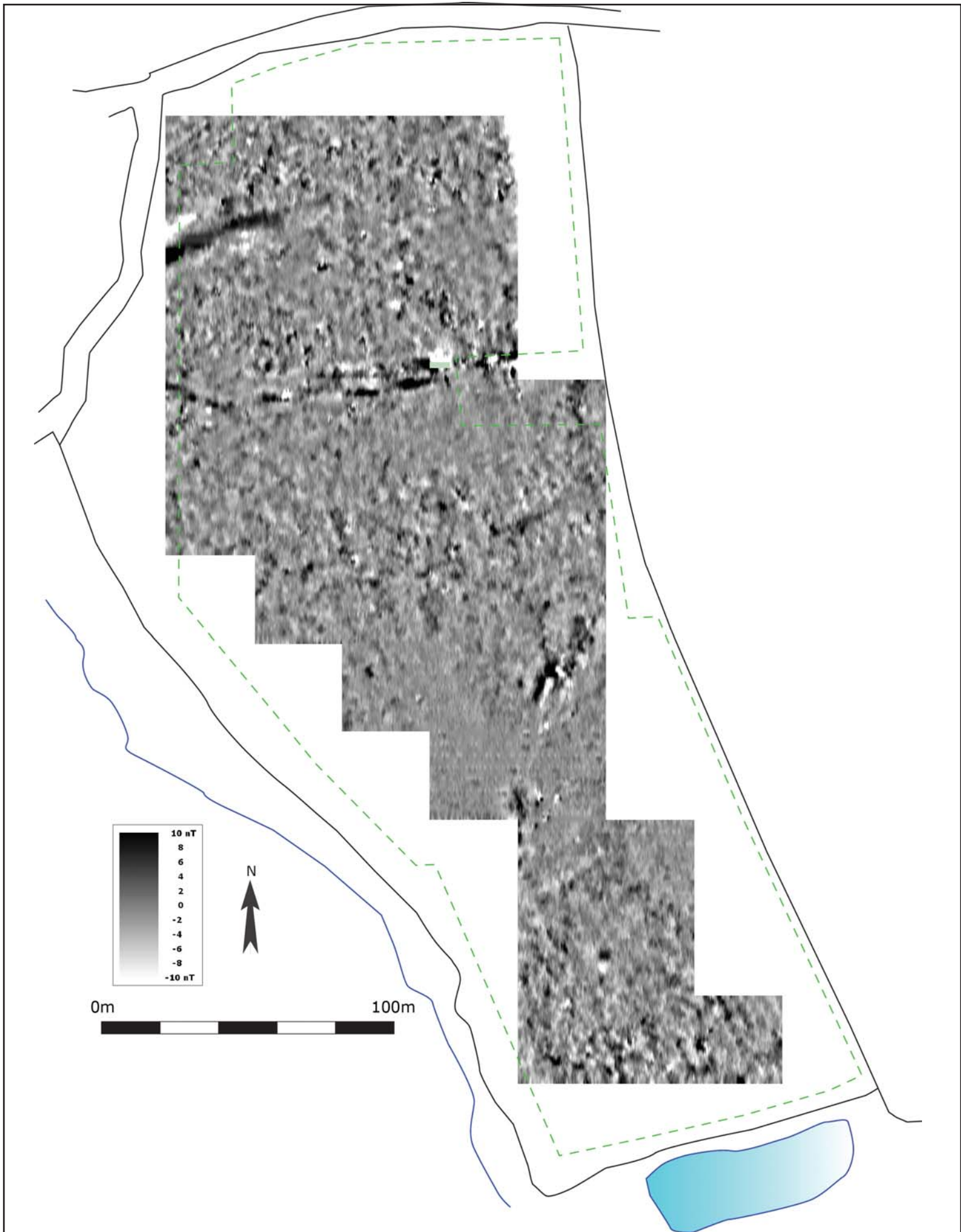


Fig. 17: Field 7, processed geophysical survey results. The approximate area of development is shown in green

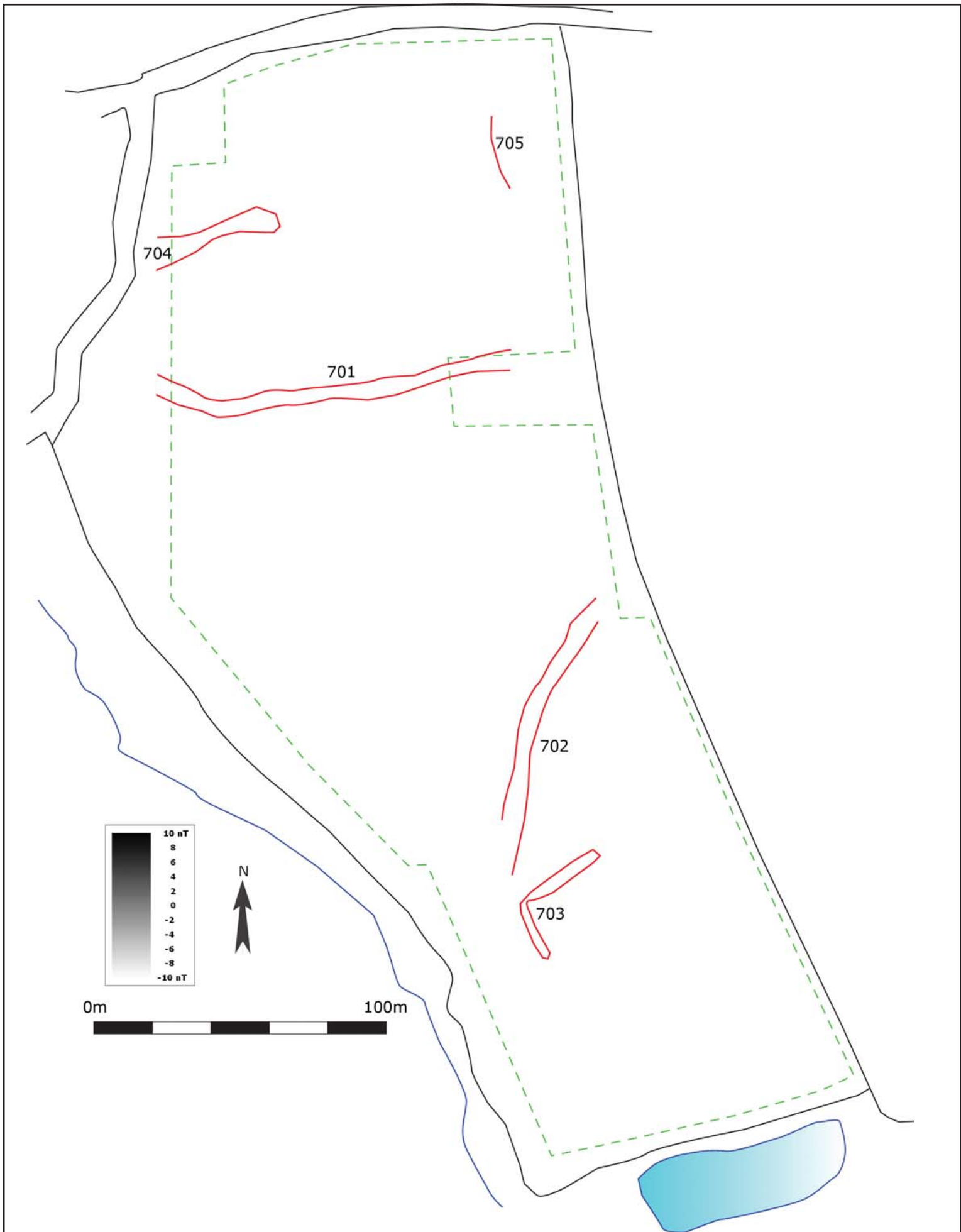


Fig. 18: Field 7, interpretation of the geophysical survey. The main features are outlined in red, the number are referred to in the main text.

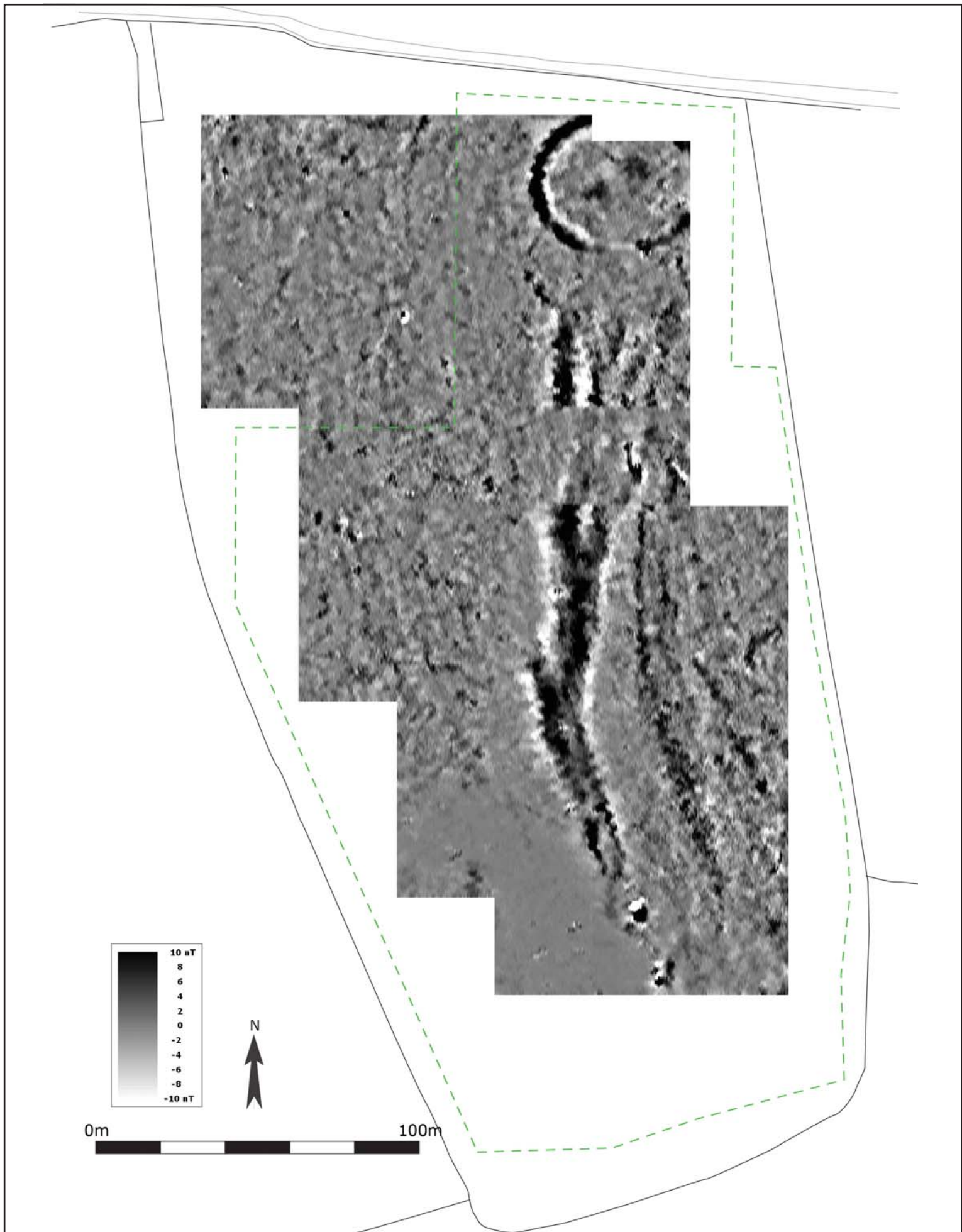


Fig. 19: Field 8, processed geophysical survey results. The approximate area of development is shown in green

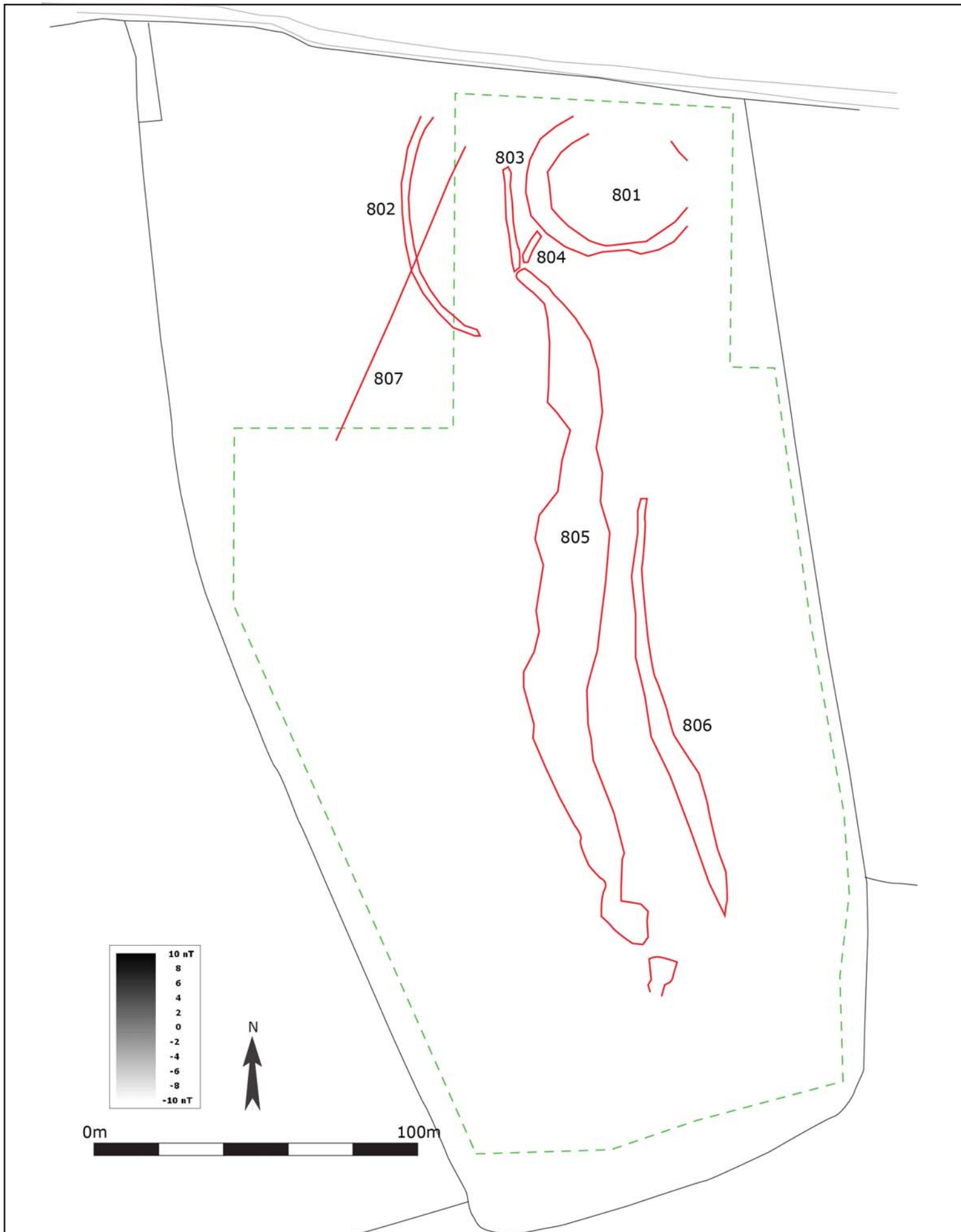


Fig. 20: Field 8, interpretation of the geophysical survey. The main features are outlined in red, the numbers are referred to in the main text.

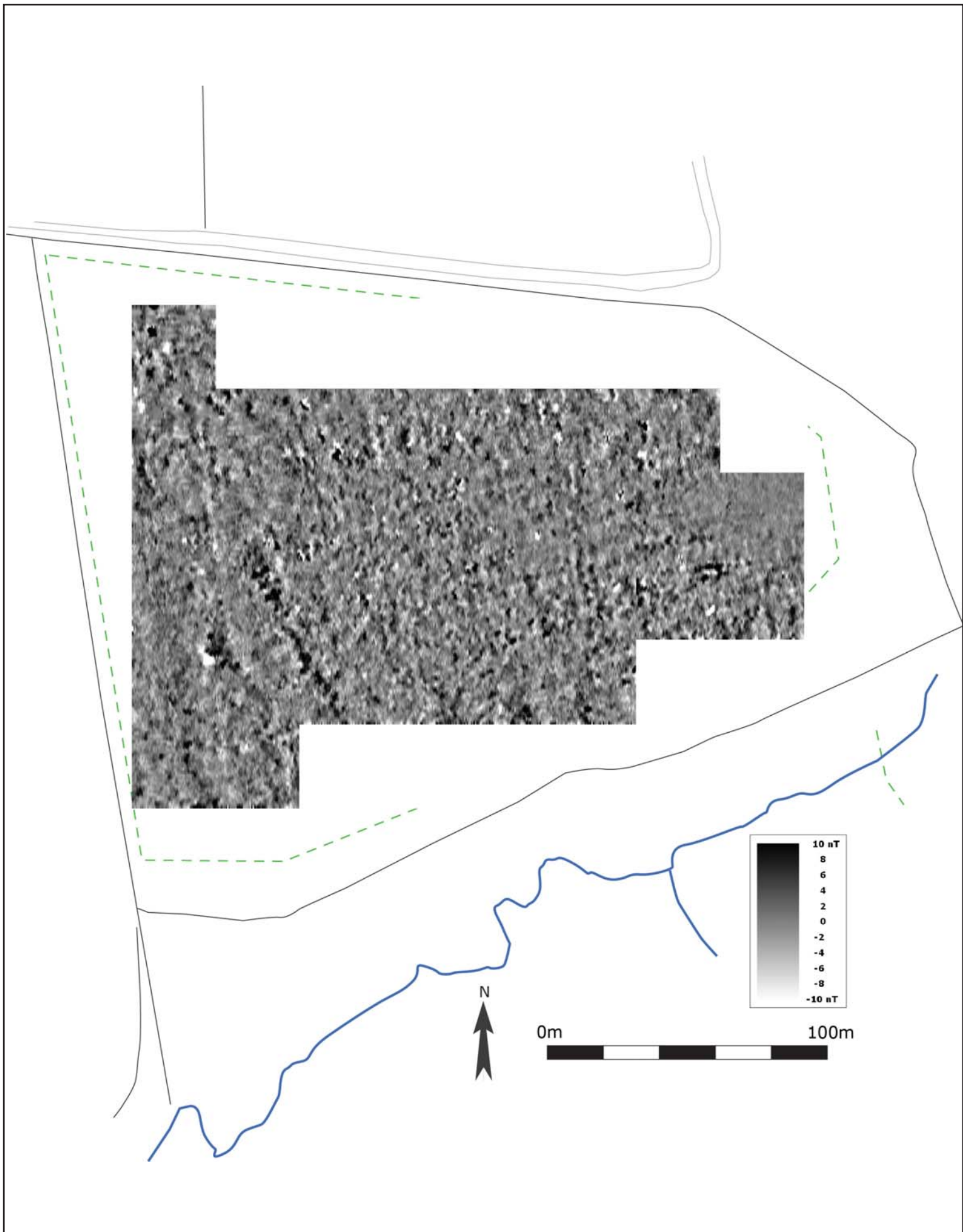


Fig. 21: Field 9, processed geophysical survey results. The approximate area of development is shown in green

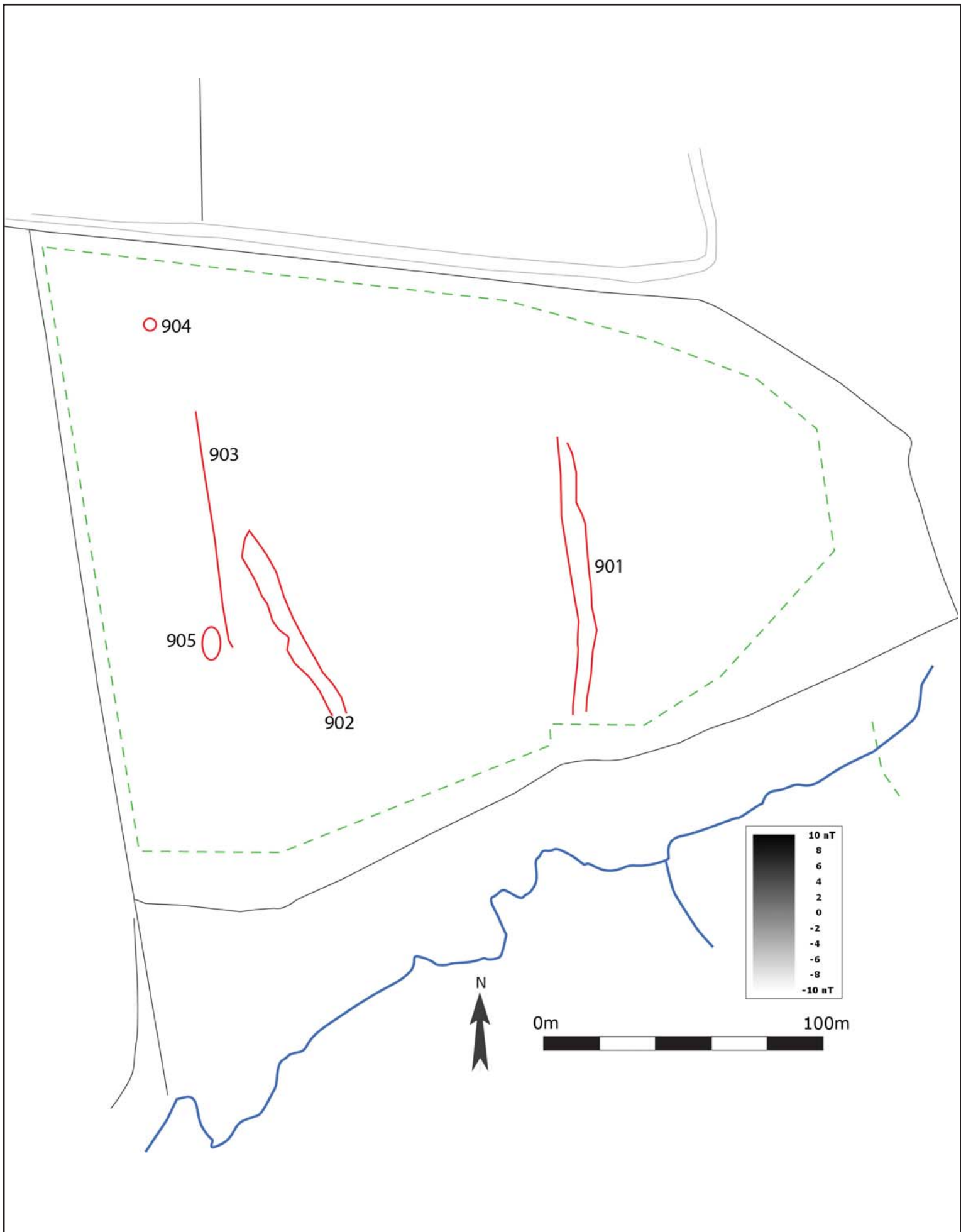


Fig. 22: Field 9, interpretation of the geophysical survey. The main features are outlined in red, the numbers are referred to in the main text.

Archaeology
Wales

APPENDIX I:
Written Scheme of Investigation

Written Scheme of Investigation
For a Geophysical Survey at Fenton Home Farm, Crundale,
Haverfordwest

Prepared for:
Parker Dann Chartered Town Planning Consultants

Project No: 2169

Date: 3rd September 2013

Archaeology Wales Limited
Rhos Helyg, Cwm Belan, Llanidloes, Powys, SY18 6QF
Tel: +44 (0) 1686 440319
Email: admin@arch-wales.co.uk



NON TECHNICAL SUMMARY

This Written Scheme of Investigations details a proposal for a geophysical survey of land around Fenton Home Farm, Crundale, Haverfordwest (planning ref: 13/0278/PA), designed as an initial investigation of potential buried archaeology within the proposed area of development. It has been prepared by Archaeology Wales Ltd for Parker Dann Chartered Town Planning Consultants.

1. Introduction

The proposed development is for a solar power farm (Photovoltaic panels) on land at Fenton Home Farm, Crundale, Haverfordwest (Henceforth – the site) and comprises the construction of PV panels across several fields comprising 52.5ha. The development proposal has been submitted by Parker Dann Chartered Town Planning Consultants on behalf of their clients. The local planning authority is Pembrokeshire County Council and the planning application number is 13/0278/PA. The site is located at SM 9861 1723 (Figure 1).

Charles Hill, Senior Planning Archaeologist at the Dyfed Archaeological Trust (Henceforth – DAT), in his capacity as archaeological planning advisor to Pembrokeshire County Council (Henceforth – PCC) has determined that the proposed development may potentially affect buried archaeological remains, but as yet they have insufficient information to identify the form, character, type, date or relative significance of the buried archaeology. Consequently, Pembrokeshire County Council have been informed that further information on the historic asset will be required before the determination of the planning application.

The archaeological planning advisor has therefore recommended that an archaeological evaluation is undertaken (in accordance with Planning Policy Wales, March 2002, Section 6.5 and Welsh Office Circular 60/96, and in line with Policy GN.38 of the Pembrokeshire Local Development Plan, adopted 2013), consisting in the first instance of a Geophysical Survey.

This Written Scheme of Investigations (Specification) has been prepared by Philip Poucher (MIFA), Project Manager, Archaeology Wales Ltd (Henceforth - AW) at the request of Parker Dann Chartered Town Planning Consultants. It provides information on the methodology which will be employed by AW during the proposed geophysical survey.

AW is a Registered Organisation with the Institute for Archaeologists (IfA). The proposed work will be managed by Philip Poucher, all field-work will be undertaken by suitably qualified staff and in accordance with the standards and guidelines of the IfA.

2 Site description

The proposed development occupies several fields to the south, east and west of Fenton Home Farm, Crundale, to the northeast of Haverfordwest (SM 9861 1723). The fields are currently in agricultural use, surrounded by hedegrows, with a general south to south-westward slope towards Fenton Brook.

Although there are no archaeological sites within the bounds of the proposed

development area recorded on the regional Historic Environment Record a possible Bronze Age burnt mound lies close to the western edge of the site and several Iron Age defended enclosures are also recorded in this general area both to the north and south of the site. A short distance to the southeast lies a moated platform, possibly of medieval origins, which is now a designated Scheduled Ancient Monument (Pe465). Fenton Home Farm itself is recorded as a post medieval mansion site. The potential for further buried archaeological remains within the proposed development area has been highlighted by the archaeological advisors to the planning authority.

3 Site specific objectives

The primary objectives of the work will be to locate and describe, by means of geophysical survey, archaeological features that may be present within the development area. The proposed archaeological work will attempt to elucidate the presence or absence of archaeological material that might be affected by the scheme, in particular its character, distribution, extent and relative significance.

A report will be produced that will provide information which is sufficiently detailed to allow informed planning decisions to be made that can safeguard the archaeological resource. The information could then be used to determine further archaeological investigation or appropriate mitigation strategies for any archaeological remains within the area to be implemented prior to or during the proposed development. The report will be used to allow a decision to be made on the planning application.

4 Methodology

The area to be surveyed will include all of the development area (see the attached plan, Figure 2).

The site will be located by GPS. All survey points will be located with a total station and plotted onto an O.S. base map.

The on-site survey will be undertaken in a single phase lasting approximately six weeks. This will be followed by report production.

The survey will be carried out using a Bartington Grad601 Magnetometer. Each survey area will be divided into 20m square grids along a common alignment.

Within each grid, parallel traverses 1m apart will be walked at rapid pace along the same orientation. Instrument readings will be logged at 0.25m intervals, with an average cycle of 4 using an ST1 internal sample trigger. Incomplete survey lines resulting from irregular area boundaries or obstacles will be completed using the "dummy log" key.

Further survey information will be completed on the relevant pro-forma sheet. All data will be downloaded in the field into a laptop computer. The location of the grid corners will be recorded using a total station so that results can be accurately placed onto an OS map.

A composite of each detailed survey area will be created and processed using the software package *Geoplot V.3*. A variety of processing tools will be used to enhance

any potential archaeology. The final results will be presented at an appropriate scale tied to the Ordnance Survey National Grid.

5 Monitoring

DAT will be contacted at least one week prior to the commencement of site works and subsequently once the work is underway.

Any changes to this Written Scheme of Investigations that AW may wish to make after approval will be communicated to DAT for approval on behalf of Planning Authority.

DAT will be given access to the site so that they can monitor the progress of the work, they will be kept regularly informed about developments, both during the site works and subsequently during the post-fieldwork programme.

6 Stage 4 - Archiving and Reporting

Site archive

An ordered and integrated project archive will be prepared in accordance with the National Monuments Record (Wales) agreed structure and be deposited within an appropriate body upon completion of the work.

Final reporting

The client report will contain, as a minimum, the following elements:

- Concise non-technical summary of the results
- Detailed plans of the site
- Site illustrations, related to Ordnance Datum
- Written description
- Statement of local and regional context
- Impact assessment with mitigation proposals
- Conclusions as appropriate
- Bibliography
- A copy of the AW Written Scheme of Investigations

Copies of the report will be sent to Parker Dann Chartered Town Planning Consultants, the archaeological advisors (DAT) to the local planning authority, and DAT heritage management division for inclusion in the HER. Digital copies will be provided in pdf format if required.

A summary report of the work will be submitted for publication to a national journal (eg Archaeology in Wales) no later than one year after the completion of the work.

7 Resources and timetable

Standards

The field evaluation will be undertaken by AW staff using current best practice.

AW is an IFA Registered Archaeological Organisation and all work will be undertaken to the standards and guidelines of the IFA.

Staff

The project will be undertaken by suitably qualified AW staff. Overall management of the project will be undertaken by Philip Poucher (a CV is available upon request).

Equipment

The project will use a Bartington Grad601 set to standard specifications.

Timetable of archaeological works

The work will be undertaken at the convenience of the client. No start date has yet been agreed. It is anticipated that the fieldwork element could take in the region of six weeks.

Insurance

AW is an affiliated member of the CBA, and holds Insurance through the CBA insurance service.

Health and safety

All members of staff will adhere to the requirements of the *Health & Safety at Work Act, 1974*, and the Health and Safety Policy Statement of AW.

If AW has sole possession of the site, then AW will produce a detailed Risk Assessment for approval by the client before any work is undertaken. If another organisation has responsibility for site safety, then AW employees will be briefed on the contents of all existing Risk Assessments, and all other health and safety requirements that may be in place.

Archaeology Wales



Archaeology Wales Limited

Rhos Helyg, Cwm Belan, Llanidloes, Powys SY18 6QF

Tel: +44 (0) 1686 440371

Email: admin@arch-wales.co.uk

Company Directors: Mark Houlston MIFA & Jill Houlston
Company Registered No. 7440770 (England & Wales).
Registered office: Morgan Griffiths LLP, Cross Chambers,
9 High Street, Newtown, Powys, SY16 2NY