PHASE 3 OF LAND AT MOUNT SANDFORD

LANDKEY

NORTH DEVON

DEVON

Results of a Geophysical Survey

South West Archaeology Ltd. report no. 190801

ARCHAEOLOGICAL SERVICES & HISTORIC BUILDING RECORDING
SOUTHWEST ARCHAEOLOGY

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Phase 3 of Land at Mount Sandford, Landkey, North Devon, Devon

Results of a Geophysical Survey

By P. Webb
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Work undertaken by SWARCH for
G. Loosemore and Son Ltd. Builders

Summary

This report presents the results of a geophysical survey carried out by South West Archaeology Ltd. (SWARCH) for Phase 3 of land at Mount Sandford, Landkey, North Devon. The site is located south of the A361 North Devon Link Road, north of Landkey Road and south-east of Barnstaple.

The site is situated in a landscape based upon medieval field patterns, previous desk-based assessment for the development suggests that the current field boundaries and usage have changed little since the early 19th century; geophysical survey and evaluation trenching identifying features predominantly relating medieval and post-medieval field-systems, but also including Iron Age settlement.

The geophysical survey identified a series of anomalies across the site, including: linear bank and ditch features and shallow possible ditch features which, given their alignment can be seen to match various elements of the existing boundaries, and indicates that they likely reflect earlier phases of the same historic field systems. A small group of curvilinear and discrete possible anomalies situated towards the eastern end of the site may indicate the presence of prehistoric settlement activity. Some discrete features of unknown archaeological or date are also present within the site.

The results of the site inspection and geophysical survey would suggest that the archaeological potential of the site is medium. It is recommended that a series of targeted evaluation trenches should be excavated to ascertain the date, form, survival and significance of the identified anomalies.

August 2019

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ACKNOWLEDGEMENTS

LOOSEMORES BUILDERS (THE CLIENT)
THE STAFF OF DEVON COUNTY HISTORIC ENVIRONMENT TEAM (DCHET)

PROJECT CREDITS

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1.0 INTRODUCTION

LOCATION:	LAND AT MOUNT SANDFORD (PHASE 3)
PARISH:	LANDKEY
DISTRICT:	NORTH DEVON
COUNTY:	DEVON
NGR:	SS 57600 31880
PLANNING REF:	54923, 59566, 60487, 60488, 63179
DCHET REF:	ARCH/DM/AND/19632A; B
MUSEUM ACCESSION NO.:	NDDMS:20.2017A
SWARCH REF:	LMS19
OASIS REF:	SOUTHWES1-295167

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was commissioned by Woodward-Smith Architects (the Agent) on behalf of Loosemore Builders (the Client) to undertake a geophysical survey in advance of the third phase of development on land at Mount Sandford, Landkey, North Devon to inform future development and/or further works. This work was undertaken in accordance with a Written Scheme of Investigation (WSI; Boyd 2017) drawn up in consultation with the Devon County Historic Environment Team (DCHET), and in line with best practice and CIfA guidelines. This phase of work builds upon previous desk-based assessment, geophysical survey and evaluation trenching of the Phase 1 and 2 development areas (Bonvoisin 2018; Scard & Bampton 2017; Webb 2018).

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

The site is located approximately 2km south-east of Barnstaple, to the south of the A361 North Devon Link Road, and north of Landkey Road. This phase of work encompasses seven fields forming the northern tip of the Site and covering an area of *c.*6ha on a north-facing slope at an altitude of *c.*45-60m AOD (Figure 1).

The soils of this area are the slowly permeable, seasonally waterlogged clayey, fine loamy and fine silty soils of the Hallsworth 2 Association surrounded by the well-drained fine loamy and fine silty soils of the Denbigh 1 Association (SSEW 1983). These overlie the mudstone of the Pilton Mudstone formation (BGS 2019).

1.3 HISTORICAL & ARCHAEOLOGICAL BACKGROUND

Landkey is a Domesday settlement, a sub-division of the holdings of the Bishops of Tawton, located towards the south-eastern corner of the parish of Landkey, and lies in the hundred of South Molton and deanery of Barnstaple. Settlement is first recorded in 1166, those the place-name element 'lan' suggests earlier origins; whilst Whiddon also has medieval origins, *Whitton* being described in lay subsidy roles of 1333. The 1846 Landkey tithe award records the land as part of Whiddon divided between the ownership of Robert Wrey and William Law; and occupied in the 19th century by Osmond Lock and William Davis. The fields were under a mix of arable, meadow and pasture cultivation, the field names being either prosaic or personal/place names.

The historic landscape in this area is characterised by the Devon Historic Landscape Characterisation (HLC) as *post-medieval enclosures with modern 20th century settlement*; and is surrounded by *medieval enclosures based on strip fields* with *modern settlement* and *recreational land*.

The development site lies in an area where little formal archaeological investigation has been undertaken, but in an area where prehistoric activity is recorded in the wider landscape – the Devon and Dartmoor Historic Environment Record (HER) identifies the sites of two putative prehistoric barrows to the west of the application area. The development also lies to the west of Whiddon Park Farm, first documented in the 14th century. The archaeological investigation of the area is limited to geophysical survey and evaluation trenching as part of Phase 1 and 2 of the current development, identifying features of prehistoric settlement alongside medieval and post-medieval field-systems; geophysical survey at Westacott; and desk-based assessment of land at Goodleigh Road, Barnstaple.

1.4 METHODOLOGY

This work was undertaken in accordance the methodology outlines in the Written Scheme of Investigation (Boyd 2017) drawn up in accordance with the CIfA (2014) guidelines and in consultation with Devon County Historic Environment Team (DCHET). The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014).

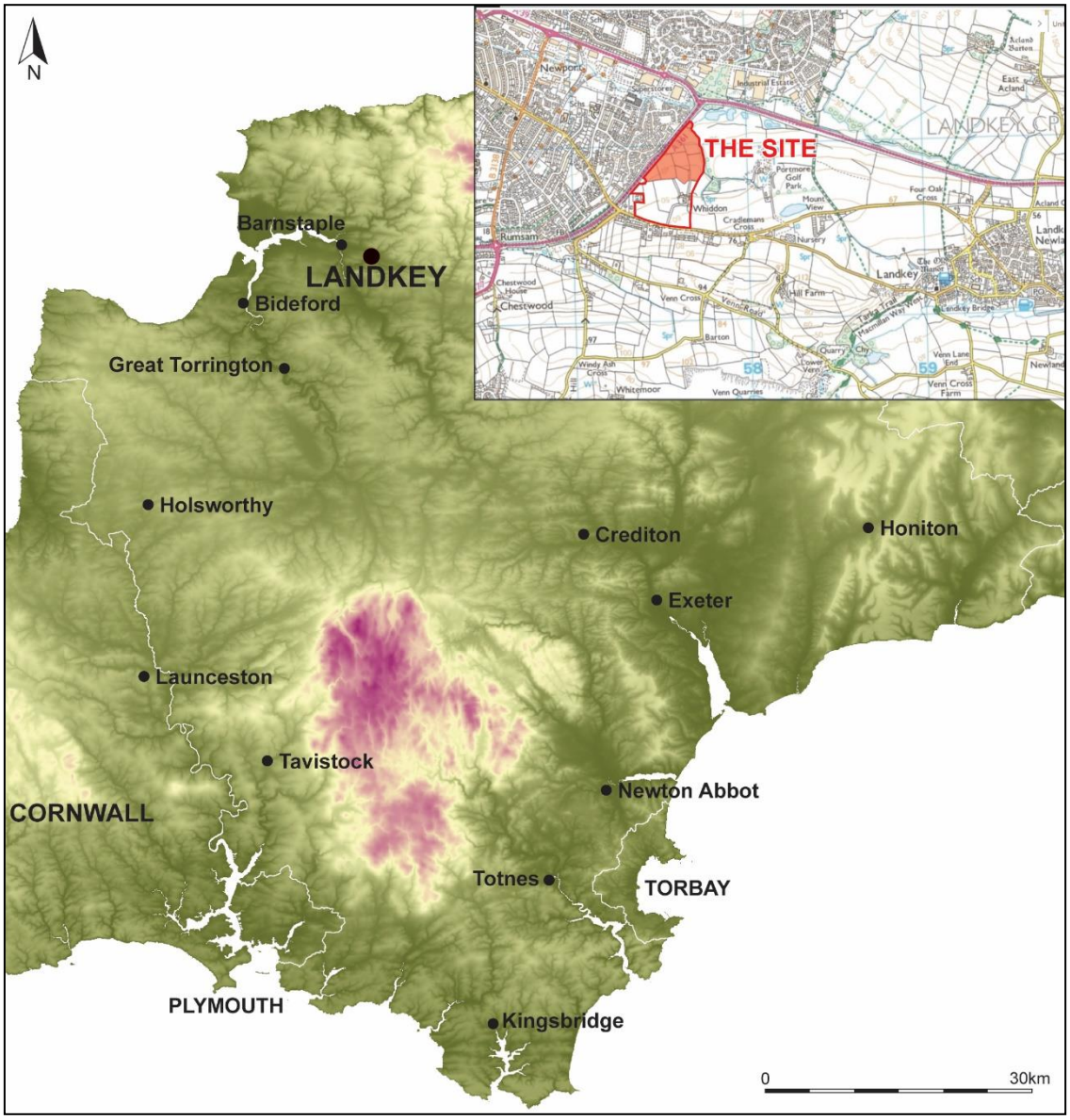

FIGURE 1: SITE LOCATION (THE SITE IS INDICATED).

2.0 GEOPHYSICAL SURVEY

2.1 INTRODUCTION

An area of *c.*6ha was the subject of a magnetometry (gradiometer) survey. The purpose of this survey was to identify and record magnetic anomalies within the proposed site. While identified anomalies may relate to archaeological deposits and structures the dimensions of recorded anomalies may not correspond directly with any associated features. The following discussion attempts to clarify and characterise the identified anomalies. The survey was undertaken between the 22nd and 24th of July 2019 by P. Webb; the survey data was processed by P. Webb.

2.2 METHODOLOGY

The gradiometer survey follows the general guidance as outlined in: *Geophysical Survey in Archaeological Field Evaluation* (English Heritage 2008) and *Standard and Guidance for Archaeological Geophysical Survey* (CIfA 2014).

The survey was carried out using a twin-sensor fluxgate gradiometer (Bartington Grad601). These machines are sensitive to depths of up to 1.50m. The survey parameters were: sample intervals of 0.25m, traverse intervals of 1m, a zigzag traverse pattern, traverse orientation was circumstantial, grid squares of 30×30m. The gradiometer was adjusted ('zeroed') every 0.5-1ha. The survey grid was tied into the Ordnance Survey National Grid. The data was downloaded onto *Grad601 Version 3.16* and processed using *TerraSurveyor Version 3.0.25.0*. The primary data plots and analytical tools used in this analysis were *Shade* and *Metadata*. The details of the data processing are as follows:

Processes: Clip +/- 3SD; DeStripe all traverses, median. DeStagger of particular grids.
Details: 4.0097ha surveyed; Max. 99.01nT, Min. -100.00nT; Standard Deviation 10.40nT, mean -1.66nT, median -0.95nT.

2.3 SITE INSPECTION

The site comprises seven triangular to sub-rectangular fields (Fields F1-F7) forming a triangle of land at the northern tip of former agricultural fields now being turned into a residential and commercial development; and adjacent to the A361 North Devon Link Road and Portmore Golf Course.

The majority of the fields contained recently flailed and cut long pasture; fields F5 and F7 being overgrown with scrub; an area of orchard was also still present along the western edge of F7. The flattened/cut nature of the crop within the majority of the fields meant that no earthworks or features were visible within the fields, with the exception of a possible linear feature running north to south within F2. A corrugated iron sheet shed and concrete surface were identified along the eastern edge of F5, along with a spoil mound in its north-west corner. A curvilinear stoned track with storm drain access points had been recently installed running from the south-west corner of F2 and across F4 to the entrance of F6. Where they were identifiable each field was bounded by earth hedgebanks with tree-lines and either surviving or trace remains of internal wire and post fencing; and were to varying degrees overgrown. The exceptions to this were the northern boundaries to F1, F2, F3 and F6, which were formed of a continuous wire and post fence fronting onto a modern concrete drain and embankment cut for the A361; and the eastern boundaries of F6 and F7 which were formed by a wire and post fence within woodland fronting onto a shallow brook. No finds were recovered, though sherds of white-refined earthenware were noted in the spoil heaps associated with the access track.

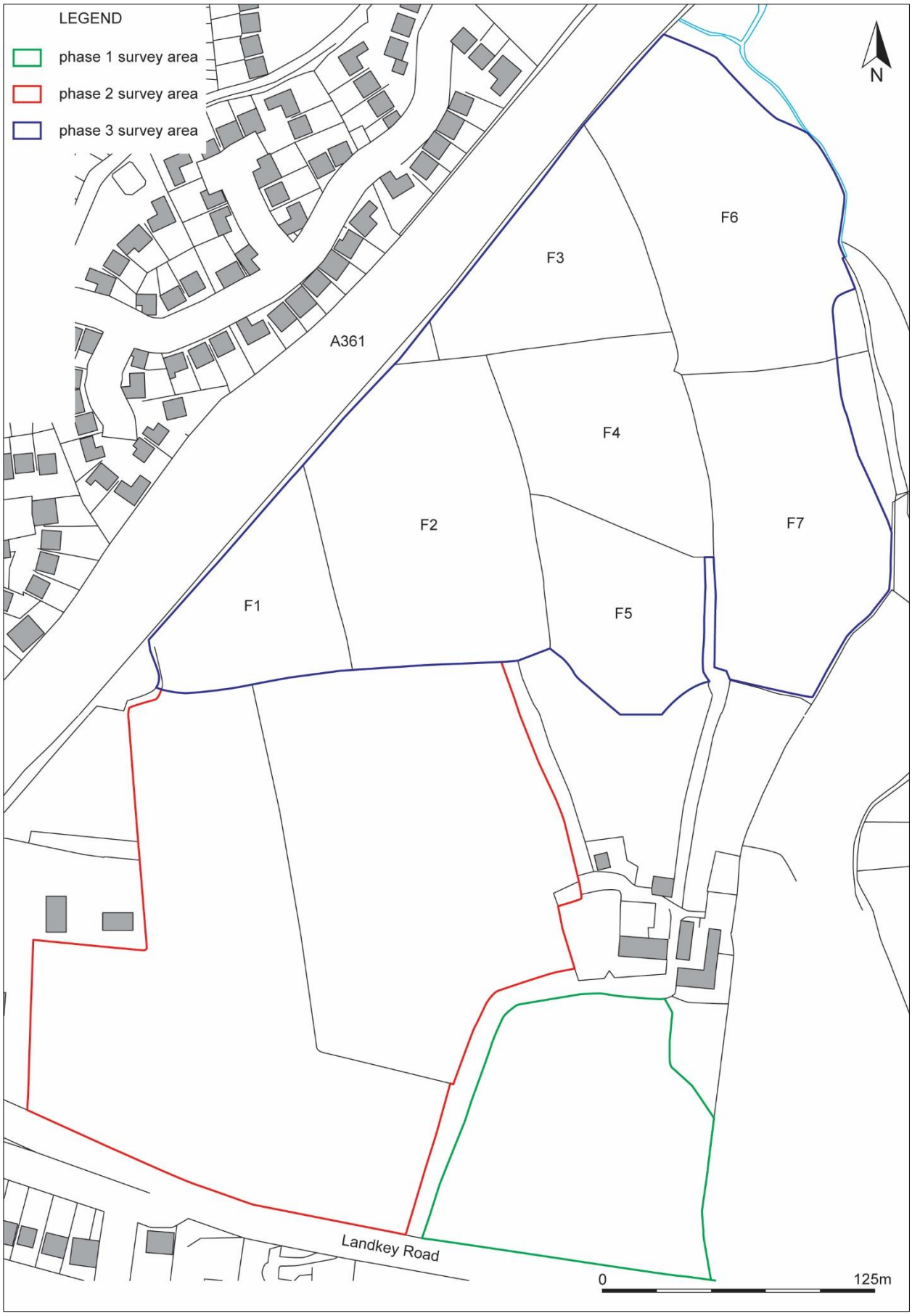

FIGURE 2: SITE PLAN SHOWING FIELD LAYOUT OUTLINED IN BLUE. PHASE 1 IS OUTLINED IN GREEN AND PHASE 2 IN RED.

2.4 RESULTS

Table 1 with the accompanying Figures 2 and 3 show the analyses and interpretation of the geophysical survey data. Additional graphic images of the survey data and numbered grid locations can be found in Appendix 1.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
1	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with cut features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of *c.*-7.28nT to +4.87nT.
2	Weak positive, possible	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping. It is, however, broadly aligned with older elements of the existing field system and anomaly Group 1 and are likely associated. Responses of between *c.*+1.68nT and +16.31nT.
3	Weak positive, probable	Ovoid	Possible pit / tree-throw	Indicative of discrete infilled cut features such as pits/tree-throws. Weak responses suggest only shallow survival or masking by local geology. Responses of between +2.16nT and +7.92nT.
4	Moderate positive, probable	Rectangular	Machine cut trench	Indicative of infilled cut features. Raised mounds were visible with pylon supporting cables. Machine cut trenches for the anchoring of overhead cable poles. Responses of between +4.49nT and +31.17nT.
5	Strong bipolar, probable	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic debris. Associated with two electricity pylons around which the anomalies occur. Responses of between -95.44nT and +103.03nT.
6	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with flanking infilled cut features indicative of ditches. Together these indicate a traditional Devon/Cornish field boundary. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of between -6.79nT and +8.55nT.
7	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with flanking infilled cut features indicative of ditches. Together these indicate a traditional Devon/Cornish field boundary. Boundaries are not depicted on historic mapping. Responses of between -13.48nT and +8.75nT.
8	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with cut and infilled features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated.

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
				Responses of between -6.88nT and +10.85nT.
9	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with cut and infilled features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of between -9.42nT and +7.16nT.
10	Weak positive, probable	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping. It is, however, broadly aligned with older elements of the existing field system and anomaly Group 8 and are likely associated. Responses of between *c.*+1.44nT and +14.05nT.
11	Weak positive, possible	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping. It is, however, broadly aligned with older elements of the existing field system and anomaly Group 8 and are likely associated. Responses of between *c.*+1.89nT and +6.11nT.
12	Weak negative, possible	Linear	Possible bank	Indicative of bank material. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping, but aligned with elements of the existing field-system and likely to be associated. Responses of between -1.26nT and -7.16nT.
13	Weak positive, probable	Ovoid	Possible pit / tree-throw	Indicative of discrete infilled cut features such as pits/tree-throws. Weak responses suggest only shallow survival or masking by local geology. Responses of between +2.55nT and +11.67nT.
14	Strong bipolar, probable	Sub-rectangular	Modern disturbance	Indicative of disturbed ground and metallic objects. Responses of between -79.51nT and +100.89nT.
15	Strong mixed, probable	Linear	Modern track	Indicative of modern disturbance. Visible as a stoned track with ferrous man-hole covers. Responses of between -101.53nT and +98.76nT.
16	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with cut and infilled features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of between -14.69nT and +10.60nT.
17	Weak positive, probable	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping. It is, however, broadly aligned with older elements of the existing field system and

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
				are likely associated. Responses of between *c.*+1.22nT and +10.18nT.
18	Weak positive with associated negative, probable	Ovoid	Possible pit	Indicative of discrete infilled cut features with associated mounds of spoil material. Weak responses suggest only shallow survival or masking by local geology. Responses of between -9.18nT and +9.86nT.
19	Weak positive and negative	Linear	Agricultural activity	Linear striations covering the entire site with regularity. Weak mixed positive and negative responses suggest shallow ploughing. Responses of between -2nT and +2nT.
20	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with cut and infilled features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of between -10.25nT and +9.34nT.
21	Weak positive and negative, probable	Linear	Field boundaries	Indicative of bank material with cut and infilled features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of between -10.25nT and +15.28nT.
22	Weak negative, possible	Linear	Possible bank	Indicative of bank material. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping but aligned with elements of the existing field-system and likely to be associated. Responses of between -1.11nT and -10.25nT.
23	Weak positive, probable	Ovoid	Possible pit / tree-throw	Indicative of discrete infilled cut features such as pits/tree-throws. Weak responses suggest only shallow survival or masking by local geology. Responses of between +2.86nT and +10.64nT.
24	Weak positive and negative	Linear	Agricultural activity	Linear striations covering the entire site with regularity. Weak mixed positive and negative responses suggest shallow ploughing. Responses of between -2nT and +2nT.
25	Strong mixed, probable	Linear	Modern track	Indicative of modern disturbance. Visible as a stoned track with ferrous manhole covers. Responses of between -101.53nT and +98.76nT.
26	Weak positive and negative, possible	Linear	Field boundaries	Indicative of bank material with cut and infilled features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of between -1.78nT and +6.48nT.
27	Weak positive, possible	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping. It is,

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
				however, broadly aligned with older elements of the existing field system and are likely associated. Responses of between *c.*+2.09nT and +5.01nT.
28	Weak positive, probable	Ovoid	Possible pit / tree-throw	Indicative of discrete infilled cut features such as pits/tree-throws. Weak responses suggest only shallow survival or masking by local geology. Responses of between +1.13nT and +18.02nT.
29	Weak positive, possible	Curvilinear, ovoid	Possible roundhouse	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Curvilinear form suggests may represent a possible round-house structure with internal features. Responses of between +1.37nT to +10.52nT.
30	Weak-strong positive and negative, probable	Linear	Field boundaries	Indicative of bank material with cut and infilled features to one side indicative of a ditch. Boundaries are not depicted on historic mapping, though broadly aligned with older elements of the existing field-system and are likely to be associated. Responses of between -14.76nT and +40.79nT.
31	Weak positive and negative, possible	Linear	Agricultural activity	Linear striations covering the entire site with regularity. Weak mixed positive and negative responses suggest shallow ploughing. Responses of between -8.94nT and +9.86nT.
32	Weak positive and negative, possible	Linear	Agricultural activity	Linear striations covering the entire site with regularity. Weak mixed positive and negative responses suggest shallow ploughing. Responses of between -8.94nT and +9.86nT.
33	Weak positive and negative	Linear	Agricultural activity	Linear striations covering the entire site with regularity. Weak mixed positive and negative responses suggest shallow ploughing. Responses of between -2nT and +2nT.
34	Strong mixed positive and negative, probable	Linear	Modern service	Indicative of modern disturbance and likely associated with modern drainage. Responses of between -97.57nT and +103.20nT.
35	Weak-moderate positive, probable	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Boundaries are not present on historic mapping. It is, however, broadly aligned with elements of the existing field system and are likely associated. Responses of between *c.*+1.88nT and +27.30nT.
36	Weak positive, probable	Linear	Possible ditch / field boundary	Indicative of infilled cut features. Weak responses suggest only shallow survival or masking by local geology. Responses of between *c.*+1.50nT and +5.75nT.
37	Weak positive, probable	Ovoid	Possible pit / tree-throw	Indicative of discrete infilled cut features such as pits/tree-throws. Weak responses suggest only shallow survival or masking by local geology. Responses of between +1.57nT and +7.92nT.
38	Weak positive and negative	Linear	Agricultural activity	Linear striations covering the entire site with regularity. Weak mixed positive and

Anomaly Group	Class and Certainty	Form	Archaeological Characterisation	Comments
				negative responses suggest shallow ploughing. Responses of between -2nT and +2nT.
	Strong bipolar (mixed response)	Discrete	Ferrous anomaly	Indicative of a metallic object. Responses of between -102.09nT and +94.42nT.
	Strong bipolar (mixed response)	Irregular	Modern disturbance	Indicative of disturbed ground and disturbance caused by proximity to metallic fences and debris. Responses of between -99.87nT and +100.58nT.

TABLE 1: INTERPRETATION OF GRADIOMETER SURVEY DATA.

2.5 DISCUSSION

The survey identified 38 groups of anomalies. These were predominantly linear anomalies likely associated with historic boundaries and agricultural activity, including features which may indicate prehistoric settlement. The general geological variation across the site was between +/-1nT. The identified anomaly groups include: possible historic field boundaries; ditch features; ring-gully features; pits/tree-throws; agricultural activity; modern tracks; and modern drainage. Cartographic and visual sources supporting the discussion and comments can be seen in Appendix 2.

2.5.1 FIELD 1

Anomaly Group 1 consists of weak (-0.71nT to -7.28nT) negative linear responses indicative of bank material with associated weak (+0.60nT to +4.87nT) positive linear response indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-north-west to south-south-east and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase.

Anomaly Group 2 consists of weak (+1.68nT to +16.31nT) positive linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly east-north-east to west-south-west and have a perpendicular alignment to anomaly Group 1, suggesting that they may be associated in forming part of an earlier phase of the existing field-system.

Anomaly Group 3 consists of weak (+2.16nT to +7.92nT) positive discrete ovoid responses indicative of cut and filled discrete features such as pits or tree-throws. The overall weak nature of the responses suggests only shallow survival or masking by local geology or may indicate that they are more likely tree-throws than pits.

Anomaly Group 4 consists of a pair of moderate (+4.49nT to +31.17nT) positive discrete rectangular responses indicative of cut and filled features. They were visible as raised spoil mounds from which the supporting cables of overhead cable pylons extended. These are modern features.

Anomaly Group 5 consists of an irregular area of strong (-95.44nT to +103.03nT) bipolar responses indicative of disturbed ground and disturbance caused by proximity to metallic debris. It is associated with the position of two electricity pylons around which the anomaly occurs and with anomaly Group 4.

2.5.2 FIELD 2

Anomaly Group 6 consists of weak (-0.56nT to -6.79nT) negative linear responses indicative of bank

material with associated weak (+2.13nT to +8.55nT) positive linear response indicative of infilled cut ditches. Together these indicate the presence of a traditional Devon/Cornish field boundary of a central bank with a pair of flanking ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-north-west to south-south-east and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase.

Anomaly Group 7 consists of weak (-1.13nT to -13.48nT) negative linear responses indicative of bank material with associated weak (+1.17nT to +8.75nT) positive linear response indicative of infilled cut ditches. Together these indicate the presence of a traditional Devon/Cornish field boundary of a central bank with flanking ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-east to south-west and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. These anomalies lie on a slightly different alignment to the similar features of anomaly Group 6 and it is likely that they represent a different phase of field-boundary.

Anomaly Group 8 consists of weak (-0.43nT to -6.88nT) negative linear responses indicative of bank material with associated weak (+1.88nT to +10.85nT) positive linear response indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-north-west to south-south-east and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly Group 9.

Anomaly Group 9 consists of weak (-1.48nT to -9.42nT) negative linear responses indicative of bank material with associated weak (+1.19nT to +7.16nT) positive linear response indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately east-north-east to west-south-west and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly Group 8.

Anomaly Group 10 consists of weak (+1.44nT to +14.05nT) positive linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly north-north-east to south-south-west and have a parallel alignment to anomaly Group 8, suggesting that they may be associated and form an internal division of a strip field.

Anomaly Group 11 consists of weak (+1.89nT to +6.11nT) positive linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly east-north-east to west-south-west and have a perpendicular alignment to anomaly Group 8, suggesting that they may be associated in forming part of an earlier phase of the existing field-system.

Anomaly Group 12 consists of weak (-1.26nT to -7.16nT) negative linear responses indicative of bank material. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly east-north-east to west-south-west and align with elements of the existing field-system, suggesting that they are likely associated. Given the nature of the majority of the likely field boundary anomalies, ditches would be expected to at least one side of the bank and are probably not visible due to shallow survival or masking by local geology.

Anomaly Group 13 consists of weak (+2.55nT to +11.67nT) positive discrete ovoid responses indicative of cut and filled discrete features such as pits or tree-throws. The overall weak nature of the responses suggests only shallow survival or masking by local geology, or may indicate that they

are more likely to be tree-throws than pits, though their position and alignment suggests that they may represent the intermittent survival of ditch features associated with anomaly Group 8.

Anomaly Group 14 comprises a sub-rectangular bipolar (-79.51nT to +100.89nT) anomaly indicative of modern disturbance or metallic objects. Its sub-rectangular form suggests that it may indicate the presence of a machine cut pit.

Anomaly Group 15 consists of strong (-101.53nT to +98.76) mixed linear responses indicative of modern disturbance. This feature was visible as a stoned track running across the survey area with a bank of soil on its southern edge. A series of deep storm drain inspection chambers were present at intervals along the track.

2.5.3 FIELD 3

Anomaly Group 16 consists of weak (-1.40nT to -14.69nT) negative linear responses indicative of bank material with associated weak (+0.92nT to +10.60nT) positive linear response indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-north-west to south-south-east and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly Group 17.

Anomaly Group 17 consists of weak (+1.22nT to +10.18nT) positive linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly east-north-east to west-south-west and have a perpendicular alignment to anomaly Group 16, suggesting that they may be associated and form an internal division of a strip field.

Anomaly Group 18 consists of weak (+2.32nT to +9.86nT) positive discrete ovoid responses with associated weak (-1.19nT to -9.18nT) negative responses. These are indicative of cut and filled discrete features such as pits or tree-throws with associated mounds of spoil which may suggest a deeper cut feature such as a quarry pit. The overall weak nature of the responses suggests only shallow survival or masking by local geology.

Anomaly Group 19 consists of weak (-2nT to +2nT) mixed positive and negative responses with a general north-north-west to south-south-east trend. They are narrowly and consistently spaced and are likely to represent the most recent episode of ploughing across the field.

2.5.4 FIELD 4

Anomaly Group 20 consists of weak (-1.11nT to -10.25nT) negative linear responses indicative of bank material with associated weak (+1.28nT to +9.34nT) positive linear response indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-north-west to south-south-east and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly Group 21.

Anomaly Group 21 consists of weak (-1.11nT to -10.25nT) negative linear responses indicative of bank material with associated weak (+0.92nT to +15.28nT) positive linear response indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately west-north-west to east-south-east and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly Group 16.

Anomaly Group 22 consists of weak (-1.11nT to -10.25nT) negative linear responses indicative of

bank material. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly east-north-east to west-south-west and align with elements of the existing field-system, suggesting that they are likely associated. Given the nature of the majority of the likely field boundary anomalies, ditches would be expected to at least one side of the bank and are probably not visible due to shallow survival or masking by local geology.

Anomaly Group 23 consists of weak (+2.86nT to +10.64nT) positive discrete ovoid responses indicative of cut and filled discrete features such as pits or tree-throws. The overall weak nature of the responses suggests only shallow survival or masking by local geology, or may indicate that they are more likely to be tree-throws than pits.

Anomaly Group 24 consists of weak (-2nT to +2nT) mixed positive and negative responses with a general north-north-west to south-south-east trend. They are narrowly and consistently spaced and are likely to represent the most recent episode of ploughing across the field.

Anomaly Group 25 consists of strong (-101.53nT to +98.76) mixed linear responses indicative of modern disturbance. This feature was visible as a stoned track running across the survey area with a bank of soil on its southern edge. A series of deep storm drain inspection chambers were present at intervals along the track.

2.5.5 FIELD 5

Anomaly Group 26 consists of weak (-1.07nT to -1.78nT) negative linear responses indicative of bank material with associated weak (+1.07nT to +6.48nT) positive linear response indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated approximately north-north-west to south-south-east and whilst they do not appear on the historic maps, their alignment matches that of the existing field-system, and it is likely that they represent an earlier phase. Likely associated with anomaly Group 21.

Anomaly Group 27 consists of weak (+2.09nT to +5.01nT) positive linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly north-west to south-east and are parallel to elements of the existing field boundary, suggesting that they may be associated.

Anomaly Group 28 consists of weak (+1.13nT to +18.02nT) positive discrete ovoid responses indicative of cut and filled discrete features such as pits or tree-throws. The overall weak nature of the responses suggests only shallow survival or masking by local geology, or may indicate that they are more likely to be tree-throws than pits; something more likely given the recording of the field as being orchard on the tithe apportionment and depiction as wooded on the 2nd edition Ordnance Survey map.

2.5.6 FIELD 6

Anomaly Group 29 consists of weak (+1.37nT to +10.52nT) positive curvilinear and discrete ovoid anomalies and are indicative of infilled cut features. The curvilinear anomalies are suggestive of possible round-house structures, the ovoid responses suggesting possible internal features. However, given the proximity of modern service features and disturbed ground, it is possible that these anomalies represent disturbed ground.

Anomaly Group 30 consists of weak (-3.28nT to -14.76nT) negative linear responses indicative of bank material with associated weak-strong (+2.48nT to +40.79nT) positive linear response indicative of infilled cut ditches. They are orientated approximately north-north-east to south-south-west and whilst they do not appear on the historic maps, their alignment matches that of isolated elements of the existing field-system, and it is likely that they represent an earlier phase.

Anomaly Group 31 consists of weak (-1.65nT to -8.94nT) negative with associated weak (+1.32nT to +9.86nT) positive intermittent responses with a general north-north-west to south-south-east trend. They are narrowly and consistently spaced and are likely to represent deeper cut elements of the most recent episode of ploughing across the field associated with anomaly Group 33.

Anomaly Group 32 consists of weak (-1.65nT to -8.94nT) negative with associated weak (+1.32nT to +9.86nT) positive intermittent responses with a broad north-north-east to south-south-west trend. They appear very similar to the Group 31 anomalies which appear as deeper cut agricultural features, though on a different alignment, perhaps indicating ploughing machinery tracking across the site in wet conditions.

Anomaly Group 33 consists of weak (-2nT to +2nT) mixed positive and negative responses with a general north-north-west to south-south-east trend. They are narrowly and consistently spaced and are likely to represent the most recent episode of ploughing across the field.

Anomaly Group 34 consists of strong (-3.71nT to -97.57) negative and (+1.99nT to 103.20nT) positive linear responses indicative of disturbed ground within a modern service trench. They are orientated approximately north-north-west to south-south-east and extend between manhole covers.

Field 7

Anomaly Group 35 consists of weak-moderate (+1.88nT to +27.30nT) positive linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly east-north-east to west-south-west and are parallel to elements of the existing field-system suggesting that they form an earlier phase.

Anomaly Group 36 consists of weak (+1.50nT to +5.75nT) positive linear responses indicative of infilled cut ditches. The weak nature of the responses suggests only shallow survival or masking by local geology. They are orientated broadly north-north-west to south-south-east.

Anomaly Group 37 consists of weak (+1.57nT to +7.92nT) positive discrete ovoid responses indicative of cut and filled discrete features such as pits or tree-throws. The overall weak nature of the responses suggests only shallow survival or masking by local geology or may indicate that they are more likely to be tree-throws than pits.

Anomaly Group 38 consists of weak (-2nT to +2nT) mixed positive and negative responses with a general north-north-west to south-south-east trend. They are narrowly and consistently spaced and are likely to represent the most recent episode of ploughing across the field.

Modern disturbance, Di-Polar anomalies and magnetic disturbance are also located across the site, particularly around the site boundaries. This is likely due to modern or metallic debris and metallic components along the boundaries of the field.

FIGURE 3: SHADE PLOT OF GRADIOMETER SURVEY DATA; BANDWEIGHT EQUALISED, GRADIATED SHADING.

FIGURE 4: INTERPRETATION OF GRADIOMETER SURVEY DATA.

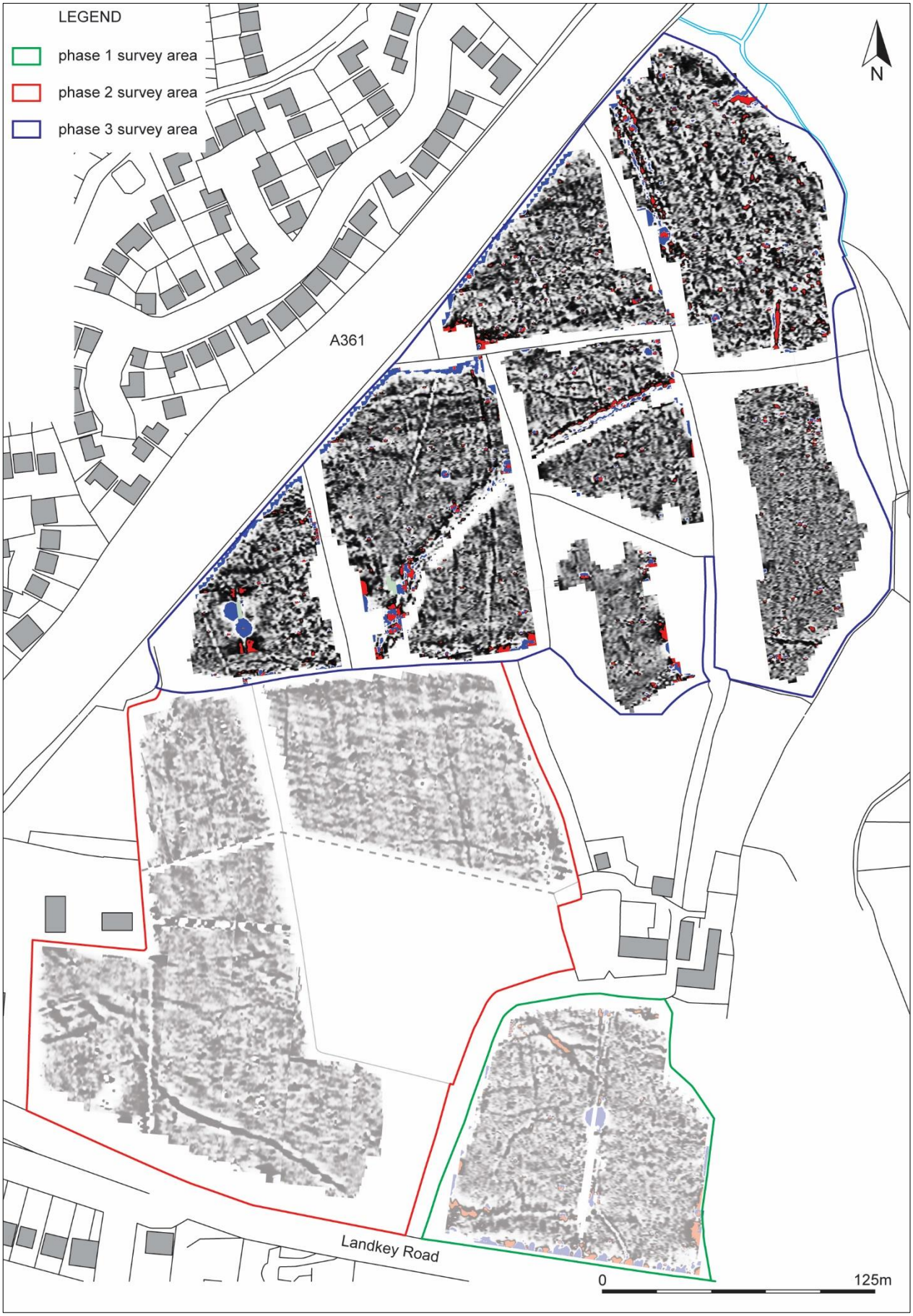

FIGURE 5: RED-GREY-BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA SHOWING PHASE 3 SURVEY IN RELATION TO EARLIER PHASES OF GEOPHYSICAL SURVEY.

3.0 CONCLUSION

The site is located south of the A361 North Devon Link Road, north of Landkey Road; and comprises seven fields which form Phase 3 of development at Mount Sandford, Landkey. Previous desk-based assessment for the development (Scard & Bampton 2017) suggests that the current field boundaries and usage have changed little since the early 19th century; geophysical survey and evaluation trenching (Bonvoisin 2018; Scard & Bampton 2017; Webb 2018) identifying features predominantly relating medieval and post-medieval field-systems, but also including traces of an Iron Age settlement, and its associated fields.

The geophysical survey identified a series of anomalies across the site including: linear bank and ditch features and shallow possible ditch features which, given their alignment can be seen to match various elements of the existing boundaries, and indicates that they likely reflect earlier phases of the same field systems. A small group of curvilinear and discrete possible anomalies situated towards the eastern end of the site may indicate the presence of prehistoric settlement activity. Some discrete features of unknown archaeological or date are also present within the site.

The results of the site inspection and geophysical survey would suggest that the archaeological potential of the site is *medium.* It is recommended that a series of targeted evaluation trenches should be excavated to ascertain the date, form, survival and significance of the identified anomalies.

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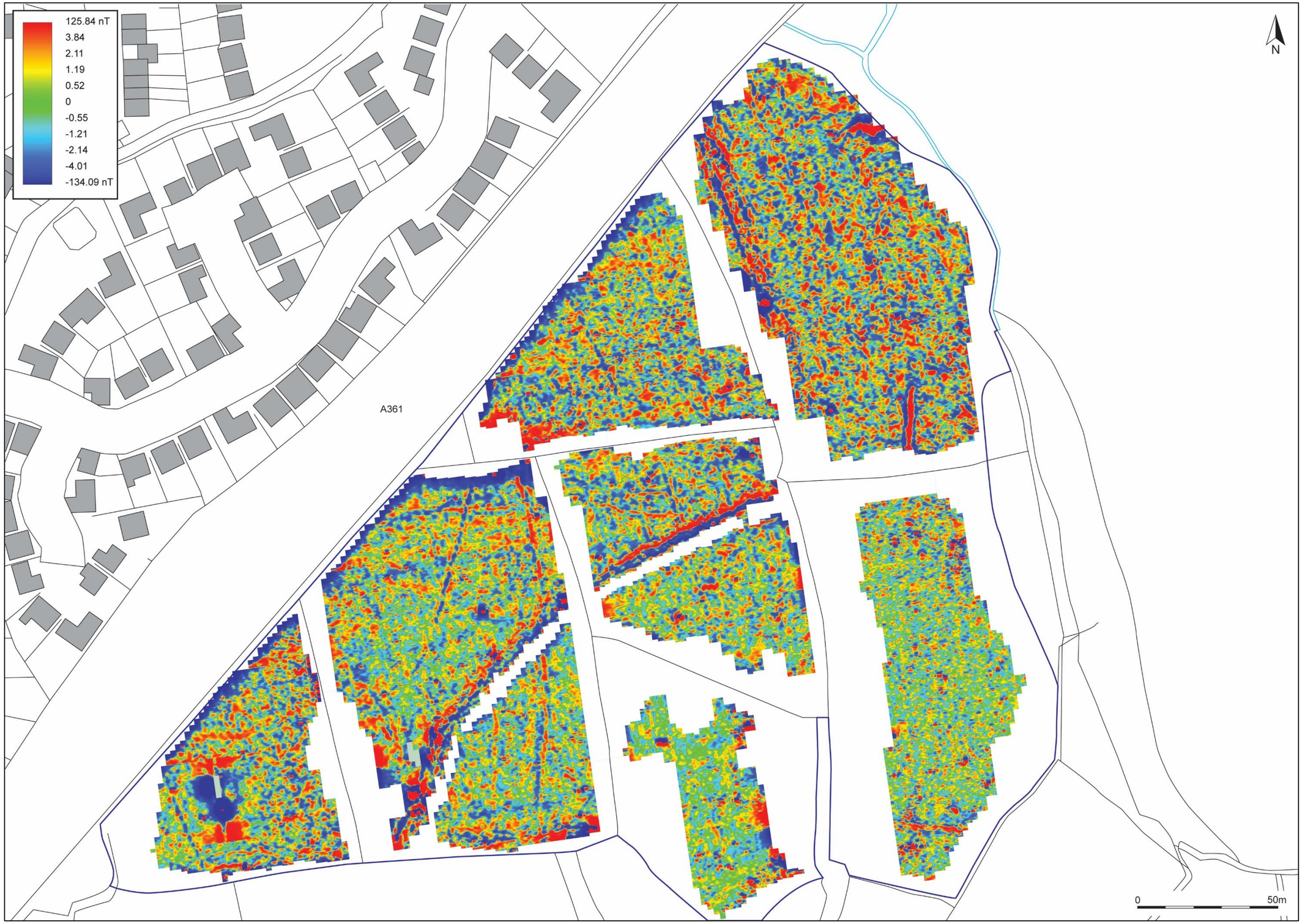
APPENDIX 1: ADDITIONAL GRAPHICAL IMAGES OF THE GRADIOMETER SURVEY

GEOPHYSICAL SURVEY GRID LOCATION AND NUMBERING.

SHADE PLOT OF GRADIOMETER SURVEY DATA; MINIMAL PROCESSING.

RED GREYSCALE BLUE SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.



RED-BLUE-GREEN SHADE PLOT OF GRADIOMETER SURVEY DATA; BAND WEIGHT EQUALISED, GRADIATED SHADING.

APPENDIX 2: SUPPORTING CARTOGRAPHIC EVIDENCE

EXTRACT FROM THE 1845 LANDKEY TITHE MAP; THE APPROXIMATE OUTLINE OF THE SITE IS INDICATED.

APPENDIX 3: SUPPORTING PHOTOGRAPHIC EVIDENCE

1. VIEW ACROSS F1; VIEWED FROM THE SOUTH-WEST.

2. VIEW ACROSS F1; VIEWED FROM THE SOUTH-EAST.

3. VIEW ALONG SOUTH BOUNDARY OF F1; VIEWED FROM THE NORTH-WEST (1M SCALE).

4. VIEW ALONG HEDGEBANK BOUNDARY BETWEEN F1 AND F2; VIEWED FROM THE NORTH (1M SCALE).

5. VIEW ACROSS NORTHERN END OF F2; VIEWED FROM THE NORTH-EAST.

6. DETAIL OF NORTH BANK BOUNDARY TO F2; VIEWED FROM THE EAST (1M SCALE).

7. VIEW ALONG POSSIBLE DITCH FEATURE WITHIN F2; VIEWED FROM THE NORTH (1M SCALE).

8. DETAIL OF THE HEDGEBANK BOUNDARY BETWEEN F2 AND F4; VIEWED FROM THE EAST (1M SCALE).

9. VIEW ALONG THE MODERN TRACK CROSSING F2; VIEWED FROM THE NORTH-EAST.

10. VIEW ACROSS SOUTHERN HALF OF F2; VIEWED FROM THE SOUTH-EAST.

11. DETAIL OF SOUTHERN HEDGEBANK BOUNDARY TO F2; VIEWED FROM THE EAST (1M SCALE).

12. VIEW ACROSS F3; VIEWED FROM THE NORTH.

13. DETAIL OF HEDGEBANK BOUNDARY BETWEEN F3 AND F4; VIEWED FROM THE SOUTH-EAST (1M SCALE).

14. DETAIL OF HEDGEBANK BOUNDARY BETWEEN F3 AND F6; VIEWED FROM THE SOUTH-SOUTH-WEST (1M SCALE).

15. VIEW ALONG HEDGEBANK BOUNDARY BETWEEN F3 AND F4; VIEWED FROM THE EAST-NORTH-EAST (1M SCALE).

16. VIEW ACROSS THE SOUTHERN HALF OF F4; VIEWED FROM THE SOUTH-EAST.

17. VIEW ACROSS THE NORTHERN HALF OF F4; VIEWED FROM THE NORTH-WEST.

18. DETAIL OF THE HEDGEBANK BOUNDARY BETWEEN F4 AND F5; VIEWED FROM THE EAST-NORTH-EAST (1M SCALE).

19. DETAIL OF THE HEDGEBANK BOUNDARY BETWEEN F4 AND F3; VIEWED FROM THE SOUTH-EAST (1M SCALE).

20. VIEW ALONG THE MODERN TRACK CROSSING F4; VIEWED FROM THE EAST-NORTH-EAST.

21. VIEW ACROSS F5; VIEWED FROM THE NORTH-EAST.

22. VIEW ACROSS F5; VIEWED FROM THE SOUTH-EAST.

23. DETAIL OF THE CONCRETE SURFACE AND DEMOLISHED STRUCTURE AT THE EASTERN EDGE OF F5; VIEWED FROM THE SOUTH.

24. DETAIL OF THE SURVIVING SHED STRUCTURE AT THE EASTERN EDGE OF F5; VIEWED FROM THE NORTH-WEST.

25. DETAIL OF THE CHURNED GROUND WITHIN F5; VIEWED FROM THE SOUTH-EAST.

26. DETAIL OF THE SPOIL MOUND IN THE NORTH-EAST CORNER OF F5; VIEWED FROM THE SOUTH (1M SCALE).

27. VIEW ACROSS F6; VIEWED FROM THE NORTH-WEST.

28. VIEW ACROSS F6; VIEWED FROM THE NORTH-NORTH-EAST.

29. VIEW ACROSS F6; VIEWED FROM THE SOUTH-EAST.

30. VIEW ALONG EASTERN EDGE OF F6; VIEWED FROM THE NORTH (1M SCALE).

31. DETAIL OF HEDGEBANK BOUNDARY BETWEEN F6 AND F3; VIEWED FROM THE SOUTH-EAST (1M SCALE).

32. DETAIL OF THE MODERN DRAIN MAN-HOLE AND AREA OF SCRUB IN THE SOUTH-WEST CORNER OF F6; VIEWED FROM THE SOUTH.

33. VIEW ACROSS F7; VIEWED FROM THE NORTH-WEST.

34. VIEW ACROSS F7; VIEWED FROM THE SOUTH.

35. DETAIL OF THE SURVIVING ORCHARD ALONG THE WESTERN EDGE OF F7; VIEWED FROM THE SOUTH-EAST.

36. VIEW ALONG THE WESTERN EDGE OF F7 SHOWING THE SURVIVING ORCHARD AND AREA OF SCRUB; VIEWED FROM THE NORTH.

37. DETAIL OF THE MODERN MANHOLE COVER AT THE WESTERN EDGE OF F7, INDICATING DRAINAGE LINKED TO THAT IDENTIFIED WITHIN F6; VIEWED FROM THE WEST (1M SCALE).

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