



# Snarrows Sewage Treatment Works to River Trent Transfer Main, Leicestershire

Detailed Gradiometer Survey Report

Document Ref.: 275930.03  
March 2023



© Wessex Archaeology Ltd 2023, all rights reserved

Unit R6  
Sheaf Bank Business Park  
Prospect Road  
Sheffield  
S2 3EN

[www.wessexarch.co.uk](http://www.wessexarch.co.uk)

Wessex Archaeology Ltd is a company limited by guarantee registered in England, company number 1712772. It is also a Charity registered in England and Wales number 287786, and in Scotland, Scottish Charity number SC042630. Our registered office is at Portway House, Old Sarum Park, Salisbury, Wiltshire, SP4 6EB

#### Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage

## Document Information

Document title Snarrows Sewage Treatment Works to River Trent Transfer Main, Leicestershire

Document subtitle Detailed Gradiometer Survey Report

Document reference 275930.03

Client name Severn Trent Water

Address Endeavour House  
Raynesway  
Derby  
DE21 7BQ

Site location Belton, Leicestershire

County Leicestershire

National grid reference 441918, 323985 to 443255, 318676

Planning authority Leicestershire County Council

Planning reference

WA project code 275930

Dates of fieldwork 06 – 09 & 13 – 14 March 2023

Fieldwork directed by Filippo Carrozzo, Jo Instone-Brewer & Jack Trueman

Project management by Chris Breedon

Document compiled by Lydia Jones

Graphics by Lydia Jones

## Quality Assurance

Issue	Date	Author	Approved by
1	29/03/2023	LJ	 TR



## Contents

Summary .....	iii
Acknowledgements.....	iii
<b>1 INTRODUCTION .....</b>	<b>1</b>
1.1 Project background.....	1
1.2 Scope of document.....	1
1.3 The site.....	1
<b>2 ARCHAEOLOGICAL BACKGROUND.....</b>	<b>2</b>
2.1 Introduction.....	2
2.2 Summary of the archaeological resource .....	2
2.3 Recent investigations in the area .....	4
<b>3 METHODOLOGY .....</b>	<b>4</b>
3.1 Introduction.....	4
3.2 Aims and objectives.....	4
3.3 Fieldwork methodology .....	5
3.4 Data processing.....	5
<b>4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION .....</b>	<b>5</b>
4.1 Introduction.....	5
4.2 Gradiometer survey results and interpretation .....	6
<b>5 DISCUSSION .....</b>	<b>7</b>
<b>REFERENCES .....</b>	<b>8</b>
Bibliography.....	8
Online resources.....	8
Cartographic sources.....	8
<b>APPENDICES .....</b>	<b>9</b>
Appendix 1 Survey equipment and data processing.....	9
Appendix 2 Geophysical interpretation.....	10
Appendix 3 OASIS form.....	11

## List of Figures

<b>Figure 1</b>	Survey location and site boundary
<b>Figure 2</b>	Detailed gradiometer survey results: overall greyscale plots
<b>Figure 3</b>	Detailed gradiometer survey results: overall interpretation
<b>Figure 4</b>	Detailed gradiometer survey results: greyscale plot LP_001
<b>Figure 5</b>	Detailed gradiometer survey results: interpretation LP_001
<b>Figure 6</b>	Detailed gradiometer survey results: greyscale plot LP_002
<b>Figure 7</b>	Detailed gradiometer survey results: interpretation LP_002
<b>Figure 8</b>	Detailed gradiometer survey results: greyscale plot LP_003 - 005
<b>Figure 9</b>	Detailed gradiometer survey results: interpretation LP_003 - 005
<b>Figure 10</b>	Detailed gradiometer survey results: greyscale plot LP_005 - 006
<b>Figure 11</b>	Detailed gradiometer survey results: interpretation LP_005 - 006
<b>Figure 12</b>	Detailed gradiometer survey results: greyscale plot LP_007
<b>Figure 13</b>	Detailed gradiometer survey results: interpretation LP_007
<b>Figure 14</b>	Detailed gradiometer survey results: greyscale plot LP_008
<b>Figure 15</b>	Detailed gradiometer survey results: interpretation LP_008
<b>Figure 16</b>	Detailed gradiometer survey results: greyscale plot LP_009 - 014
<b>Figure 17</b>	Detailed gradiometer survey results: interpretation LP_009 - 014
<b>Figure 18</b>	Detailed gradiometer survey results: greyscale plot LP_015-017



**Figure 19** Detailed gradiometer survey results: interpretation LP\_015-017



## **Summary**

A detailed gradiometer survey was conducted over land at Snarrows Sewage Treatment Works to River Trent Transfer Main, Leicestershire (between NGR 441918, 323985 and NGR 443255, 318676). The project was commissioned by Severn Trent Water with the aim of establishing the presence, or otherwise, and nature of detectable archaeological features in support of a planning application for the development of the site as a route for a effluent/settled storm transfer pipeline.

The site comprises arable and pasture fields located between Moor Lane, Tonge and Snarrows Road, Thringstone, covering an area of 15.9 ha. The geophysical survey was undertaken between 06 – 09 and 13 – 14 March 2023. The detailed gradiometer survey has been successful in detecting anomalies of possible archaeological and agricultural origin.

A possible ditched enclosure of unknown origin has been detected in the south of the site, within an area of ridge and furrow. A natural origin, such as a natural drainage feature, cannot however be ruled out.

Various anomalies representative of the past agricultural use of the land have been detected. Ridge and furrow cultivation dating mainly from the medieval period has been identified across the site. It is linked to the nearby settlements of Belton and Tonge, as well as Grace Dieu Priory. Several former field boundaries have also been identified which correspond with field boundaries seen in the OS 1st edition (1883) mapping.

In addition to this natural variation in the underlying deposits, drains, and various magnetic trends have been identified across the site. Areas of ferrous and magnetic disturbance have been detected and are associated with the edges and entrances to fields.

## **Acknowledgements**

Wessex Archaeology would like to thank Severn Trent Water for commissioning the geophysical survey. The assistance of Deborah Goodale is gratefully acknowledged in this regard.

The fieldwork was undertaken by Filippo Carrozzo, Manasi Patil, Jo Instone-Brewer, Jack Trueman, and Phoebe Baker. Callum Jervis and Andrew Marke assisted in initial interpretation of the data. The majority of the geophysical data was processed, interpreted, and reported on by Lydia Jones. Lydia Jones prepared the illustrations. The geophysical work was quality controlled by Lydia Jones. The project was managed on behalf of Wessex Archaeology by Chris Breedon.



# Snarrows Sewage Treatment Works to River Trent Transfer Main, Leicestershire

## Detailed Gradiometer Survey Report

### 1 INTRODUCTION

#### 1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Severn Trent Water to carry out a geophysical survey at Snarrows Sewage Treatment Works to River Trent Transfer Main, Leicestershire (between NGR 441918 323985 and NGR 443255 318676) (**Figure 1**). The survey forms part of an ongoing programme of archaeological works being undertaken in support of a planning application for the route of a effluent/settled storm transfer pipeline.

#### 1.2 Scope of document

1.2.1 This report presents a brief description of the methodology followed by the detailed survey results and the archaeological interpretation of the geophysical data.

#### 1.3 The site

1.3.1 The site is located between Castle Donnington, 3.6 km to the north-east of the northern extremity of the site, and Coalville, 3.7 km to the south of the southern extremity of the site, in the county of Leicestershire.

1.3.2 The entire survey area comprises 15.9 ha of agricultural land utilised for arable crop and pasture.

1.3.3 The survey area has been split into two separate evaluation areas to better discuss the geographical and geological context (**Figure 1**).

##### *Area 1 (LP\_001 – 006)*

1.3.4 The area covers LP\_001 – 006 between Moor Lane, Tonge, DE73 8BB (NGR 441918 323985) and Mill Lane, LE12 9UJ (NGR 444239 321860). It is bounded to the north by the A453 and agricultural land, Mill Lane to the south, and the A453 (Mill Lane) and further agricultural land to the east and west. The area is crossed east – west by the A42 and several smaller roads on various orientations.

1.3.5 The area varies in elevation from 54 m above Ordnance Datum (aOD) in LP\_001 at the northern extent, up to 91 m aOD in LP\_002, and 71 m aOD at LP\_005, to 83 m aOD at LP\_006.

1.3.6 The solid geology comprises mainly of Mudstone of the Gunthorpe Member with a small area of Siltstone Gunthorpe member in LP\_002. A narrow band of Diseworth Sandstone is recorded close to the eastern boundary of LP\_005. Superficial deposits consist mainly of Diamicton of the Thrussington Member, except for deposits of Head – clay, silt, sand, and gravel at LP\_001, and Diamicton of the Oadby Member at LP\_006 (BGS 2023).

1.3.7 The soils underlying the site are likely to consist of stagnogleyic argillic brown earths of the 572c (Hodnet) association in the very north of the site at LP\_001, argillic pelosols of the 431



(Worcester) association at LP\_002, and stagnogley soils of the 711m (Salop) association in the south of the area. Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

#### *Area 2 (LP\_007-017)*

- 1.3.8 The area covers LP\_007 – 017 between Mill Lane, LE12 9UJ (NGR 444191 321354) and Snarrows Road, Thringstone, LE67 8UR (NGR 443255 318676). It is bounded by Mill Lane to the north, Snarrows Road to the south, Gracedieu Lane to the south-east, and the village of Belton to the east. The area is bounded further by agricultural land to the north-east and west. Ashby Road runs east – west through the north of the area.
- 1.3.9 The area varies in elevation from 76 m aOD at its northern extent to 85 m aOD at its southern boundary. The lowest elevation is recorded in LP\_008, north-west of Belton, at 68 m aOD.
- 1.3.10 The solid geology comprises Mudstone of the Gunthorpe Member across the majority of the area with the exception of Sandstone of the Shepshed Sandstone Member at the southern extent of the site at LP\_015 – 017. Diseworth Sandstone is recorded in the very north-west of LP\_007 and a small area of Dolomitic Siltstone of the Gunthorpe Member is recorded at LP\_014. Superficial deposits consist mainly of Diamicton of the Thrussington Member with small areas of mid-Pleistocene glaciofluvial deposits of sand and gravel (BGS 2023).
- 1.3.11 The soils underlying the site are likely to consist of stagnogleyic argillic brown earths of the 572g (Dunnington Heath) association and stagnogley soils of the 711m (Salop) association in the north of the area at LP\_007 – 008, and stagnogleyic argillic brown earths of the 572g (Dunnington Heath) association further south at LP\_009 – 14. The south of the area is likely to consist of argillic pelosols of the 431 (Worcester) association. Soils derived from such geological parent material have been shown to produce magnetic contrasts acceptable for the detection of archaeological remains through magnetometer survey.

## **2 ARCHAEOLOGICAL BACKGROUND**

### **2.1 Introduction**

- 2.1.1 The archaeological and historical background was assessed in a prior desk-based assessment (DBA) (Mott Macdonald 2022), which considered the recorded historic environment resource within a 500 m study area of the proposed development. The DBA used information from the Leicestershire Historic Environment Record (HER), the National Heritage List for England (NHLE) as well as information collected on a site visit. Additional sources of information are referenced, as appropriate. The findings of the DBA are summarised below.

### **2.2 Summary of the archaeological resource**

- 2.2.1 Within the 500 m search area there are 12 designated heritage assets comprising 1 scheduled monument and 11 listed buildings.
- 2.2.2 Within the village of Belton, 260 m to the east of the site (LP\_008) are the medieval Grade II\* listed Church of St John the Baptist (NHLE 1074123), and various other post-medieval buildings including dwellings (NHLE 1074122, 1361361, 1361362, 1074121), a former vicarage (NHLE 1074124), a bakery (NHLE 1074120), a public house (NHLE 1361363), and a telephone kiosk (NHLE 1064283).





2.2.3 The scheduled monument of Grace Dieu Priory (NHLE 1012001) is located 240 m to the south of Area 2. The Augustinian Nunnery was founded between 1236 and 1242 and later converted into a Tudor mansion. It survives as extensive ruins of priory buildings (Grade II listed buildings NHLE 1074118) surrounded by a complex of earthworks including two ponds, a fishpond, boundary ditch, and wall.

2.2.4 A Grade II listed mile post (NHLE 1074119) is located 420 m south of the southern extent of the site on Ashby Road.

*Prehistoric*

2.2.5 A Mesolithic flint scatter was recorded during fieldwalking between 1994 – 1997 500 m north-east of LP\_016. A Neolithic and Bronze Age lithic scatter was also recorded in the same area. An Iron Age enclosure has been identified via aerial photography 380 m east of LP\_016. Undated cropmarks, located 400 m east of LP\_006 and 420 m east of LP\_005, suggest possible further prehistoric potential.

*Romano-British*

2.2.6 Immediately to the east of LP\_003, the postulated route of a Roman Road is recorded. This is believed to link Watling Street, at Tamworth, to a crossing of the Trent, at Sawley. The alignment is suggested based on existing routes, a series of straight parish boundaries, and place names. Roman findspots are recorded in the vicinity of the site including pottery sherds 340 m to the east of LP\_008. A find spot of brooches, coins, a spoon, and pottery is located 500 m to the east of LP\_017.

*Early medieval*

2.2.7 Sherds of Anglo-Saxon pottery were discovered during a watching brief in 2008, 340 m to the east of LP\_008. Just over 500 m from the northern extent of the site is the village of Tonge, which was recorded in the Domesday survey of 1086 as having 37 households.

*Medieval*

2.2.8 Analysis of LiDAR and observations during a site visit have detected extant, possibly medieval, ridge and furrow cultivation within LP\_009 – LP\_014 and LP\_001.

2.2.9 The village of Belton, 260 m to the east of the site, has a medieval settlement core, including the Grade II\* church of St John the Baptist. A medieval market is also recorded in the village.

2.2.10 The village of Tonge, just over 500 m to the south-east of the northern extent of the site, developed during the medieval period. Historical mapping of the village in 1758 shows earthwork remains of the old village, such as farmsteads and a number of closes later cut by the Midlands Railway. A deer park is recorded as having been located 480 m to south-west of LP\_002.

*Post-medieval*

2.2.11 Historical OS mapping shows the area to have been agricultural in nature and shows the landscape to have been an enclosed field system. Various farm buildings were built and are still in use in the landscape surrounding the site. The village of Belton expands slightly during this period. By 1696 most of the buildings at Grace Dieu Priory, 240 m to the south of the southern extent of the site, had been pulled down. Just to the south of the priory, quarrying was recorded on historical OS mapping during the 18th century. The Charnwood Forest Railway, opened in 1883, passes 440 m to the south-east of the southern extent of the site. The Midland Railway Ashby to Derby line opened during this period, 180 m to the west of the northern extent of the site.



### *Modern*

- 2.2.12 The landscape has remained in agricultural use into the modern period, although removal of field boundaries has resulted in some larger fields. The A42 which runs east – west through the north of the area was built in 1989.

## **2.3 Recent investigations in the area**

- 2.3.1 There have been various archaeological investigations within 500 m of the site. The most relevant and closest are discussed in this section.
- 2.3.2 Various investigations have been undertaken at Grace Dieu Priory, located 240 m to the south of the southern extent of the site. These include building survey, fieldwalking, research prior to consolidating the ruins, a watching brief, and trial trenching.
- 2.3.3 A watching brief was undertaken in 2000, 400 m to the south of LP\_001 near the village of Tonge. Evidence for early road surfaces and post-medieval activity was recorded.
- 2.3.4 A watching brief in 2007, conducted 380 m to the east of LP\_008 in Belton, discovered a pit containing Saxon pottery. Roman, Saxon, and medieval pottery, as well as a Bronze Age scraper, were all recovered from the topsoil.
- 2.3.5 A DBA was conducted in 2008 which identified medieval village earthworks 50 m to the south-west of LP\_001, on the opposite side of Moor Lane.
- 2.3.6 A magnetometer survey was undertaken 270 m to the north-west of the southern extent of the site. Most of the anomalies detected were agricultural in origin, such as ridge and furrow.
- 2.3.7 A watching brief in 2014, conducted 385 m to the east of LP\_008 in Belton, discovered an articulated skeleton and charnel in the subsoil.

## **3 METHODOLOGY**

### **3.1 Introduction**

- 3.1.1 The geophysical survey was undertaken by Wessex Archaeology's in-house geophysics team between 06 – 09 & 13 – 14 March 2023. Field conditions at the time of the survey were mixed throughout, with heavy snow on 09 March. An overall coverage of 15.6 ha was achieved. A total of 0.4 ha was unsurveyed as LP\_015 was inaccessible due to electric fencing and there were deep ruts in LP\_002.
- 3.1.2 The methods and standards employed throughout the geophysical survey conform to that set out in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2023), as well as to current best practice, and guidance outlined by the Chartered Institute for Archaeologists' (CIfA 2014) and European Archaeologiae Consilium (Schmidt *et al.* 2015).

### **3.2 Aims and objectives**

- 3.2.1 The aims of the survey comprise the following:
- To determine, as far as is reasonably possible, the nature of the detectable archaeological resource within a specified area using appropriate methods and practices; and
  - To inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

- 3.2.2 In order to achieve the above aims, the objectives of the geophysical survey are:
- To conduct a geophysical survey covering as much of the specified area as possible, allowing for on-site obstructions;
  - To clarify the presence/absence of anomalies of archaeological potential; and
  - Where possible, to determine the general nature of any anomalies of archaeological potential.

### 3.3 Fieldwork methodology

- 3.3.1 The cart-based gradiometer system used a Leica Captivate RTK GNSS instrument, which receives corrections from a network of reference stations operated by the Ordnance Survey (OS) and Leica Geosystems. Such instruments allow positions to be determined with a precision of 0.02 m in real-time and therefore exceeds European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015).
- 3.3.2 The detailed gradiometer survey was conducted using four SenSys FGM650/3 magnetic gradiometers fixed horizontally 1 m apart on a non-magnetic cart with an effective sensitivity of 0.03 nT.

### 3.4 Data processing

- 3.4.1 Data from the survey were subjected to minimal correction processes. These comprise a 'Destripe' function ( $\pm 5$  nT thresholds), applied to correct for any variation between the sensors, and an interpolation used to grid the data and discard overlaps where transects have been collected too close together.
- 3.4.2 Further details of the geophysical and survey equipment, methods and processing are described in **Appendix 1**.

## 4 GEOPHYSICAL SURVEY RESULTS AND INTERPRETATION

### 4.1 Introduction

- 4.1.1 The detailed gradiometer survey has identified magnetic anomalies across the site, including medieval ridge and furrow, possible archaeological features, old field boundaries along with variations in the underlying natural deposits of the site. Drains and ferrous anomalies have also been identified. Results are presented as a series of greyscale plots (**Fig. 4, 6, 8, 10, 12, 14, 16, 18**) and archaeological interpretations (**Fig. 5, 7, 9, 11, 13, 15, 17, 19**) at a scale of 1:2000. The data are displayed at -2 nT (white) to +3 nT (black) for the greyscale image.
- 4.1.2 The interpretation of the datasets highlights the presence of potential archaeological anomalies, ferrous responses, burnt or fired objects, and magnetic trends (**Fig. 5, 7, 9, 11, 13, 15, 17, 19**). Full definitions of the interpretation terms used in this report are provided in **Appendix 2**.
- 4.1.3 Numerous ferrous anomalies are visible throughout the dataset. These are presumed to be modern in provenance and are not referred to, unless considered relevant to the archaeological interpretation.
- 4.1.4 It should be noted that small, weakly magnetised features may produce responses that are below the detection threshold of magnetometers. It may therefore be the case that more archaeological features may be present than have been identified through geophysical survey.



4.1.5 Gradiometer survey may not detect all services present on site. This report and accompanying illustrations should not be used as the sole source for service locations and appropriate equipment (e.g., CAT and Genny) should be used to confirm the location of buried services before any trenches are opened on site.

## 4.2 Gradiometer survey results and interpretation

4.2.1 A weak positive sub-rectilinear anomaly has been identified in LP\_014 at **4000 (Figure 17)**. It covers an area of 31 m x 25 m and varies between 0.8 – 4 m in width. It is 'F-shaped' in form and oriented north-east to south-west. It is located within an area of medieval ridge and furrow and two of its lengths are oriented roughly in line with this. This combined with its broad morphology and weak magnetic signal indicates it may be a natural drainage feature. It is however possible that the anomaly is a group of ditches that combine to form an enclosure of unknown origin.

4.2.2 Linear anomalies spaced between 5 m – 9 m have been detected across the site on various orientations (**Fig. 5, 7, 9, 11, 13, 15, 17, 19**). They are typical of ridge and furrow cultivation dating from the medieval and post-medieval periods. Those in LP\_001 & LP\_009 – 13 are particularly strong and have been detected previously in LiDAR as extant features. In LP\_009 – 14 the ridge and furrow is visible as extant features. In LP\_002, LP\_004, and LP\_007 the anomalies are weaker and less easy to define and may date from the medieval – post-medieval period. However, where the anomalies are stronger and morphology clearer (LP001, LP\_006 & LP\_009-016) a more confident date of medieval can be assigned due to the curved form of the anomalies. The anomalies are within the agricultural lands surrounding the medieval centres of Tonge, Belton, and Grace Dieu Priory.

4.2.3 A strong linear dipolar anomaly measuring 58 m in length and 2 – 5 m in width has been detected crossing LP\_001 at **4001 (Figure 5)**, oriented east – west. A parallel positive linear anomaly has been detected 53 m to the south of **4001** at **4002**. The anomaly is 1.2 m wide and 21 m in length (**Figure 5**). Both anomalies correspond with field boundaries mapped in the First Edition OS mapping from 1885 (Leicestershire Sheet IX, S.E), and are still visible on the OS mapping from 1967 (Derbyshire - Leicestershire, Sheet SL 42 SW). Another strong linear dipolar anomaly at **4003 (Figure 19)** measuring 54 m long and 1.2 – 9 m wide has been detected crossing LP\_016, north-west to south-east. A positive linear anomaly has been detected 180 m to the south-west at **4004 (Figure 19)**. It measures 144 m long by 1.4 m wide and crosses LP\_017 on a south-west to north-east orientation. Both anomalies correspond with field boundaries depicted on the First Edition OS mapping from 1883 (Leicestershire Sheet XVI.8) and are still depicted on the OS mapping from 1967 (Leicestershire, Sheet SK 41 NW).

4.2.4 A weak amorphous band of enhanced response at **4005 (Figures 9 & 11)** has been detected crossing LP\_003 on a north-east to south-west orientation. Given its morphology, location on a slope, and weak signal it is considered likely to be natural variations in the underlying deposits.

4.2.5 Various narrow weak positive and negative anomalies have been detected across the site. These are likely representative of the site's agricultural past in the form of cultivation and modern drainage.

4.2.6 An area of magnetic disturbance has been detected in LP\_005 at **4006 (Figure 11)**. It is located at the bottom of a slope and a fired clay drain is seen running into it from the west. It is likely that this is an area that water drains into and as a result has become more disturbed.



## 5 DISCUSSION

- 5.1.1 The detailed gradiometer survey has been successful in detecting anomalies of possible archaeological and agricultural origin.
- 5.1.2 A possible ditched enclosure of unknown origin has been detected in the south of the site, within an area of ridge and furrow. A more natural origin, such as a natural drainage feature, cannot however be ruled out.
- 5.1.3 Various anomalies representative of the past agricultural use of the land have been detected. Ridge and furrow cultivation dating mainly from the medieval period has been identified across the site. They are linked to the nearby medieval settlements including the villages of Belton and Tonge, as well as Grace Dieu Priory. Several former field boundaries have also been identified which correspond with field boundaries seen in the OS 1st edition (1883) mapping.
- 5.1.4 In addition to this natural variation in the underlying deposits, drains, and various magnetic trends have been identified across the site. Areas of ferrous and magnetic disturbance have been detected and are associated with the edges and entrances to fields.



## REFERENCES

### Bibliography

ADS 2013. *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service & Digital Antiquity Guides to Good Practice.

Mott Macdonald, 2022, *Snarrows Detailed Design: Historic Environment Desk-based Assessment*.

Chartered Institute for Archaeologists [CIfA] 2014 *Standards and guidance for archaeological geophysical survey*. Reading, CIfA.

Schmidt, A., Linford, P., Linford, N., David, A., Gaffney, C., Sarris, A. and Fassbinder, J. 2015. *Guidelines for the use of geophysics in archaeology: questions to ask and points to consider*. EAC Guidelines 2, Belgium: European Archaeological Council.

### Online resources

British Geological Survey 2022. *Geology of Britain Viewer*  
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed March 2023).

Google Earth website <http://earth.google.com> (accessed March 2023)

Historic England (HE) <https://historicengland.org.uk> (accessed March 2023)

National Library of Scotland (NLS) <https://maps.nls.uk/geo/explore/> (accessed March 2023)

### Cartographic sources

Ordnance Survey 1983 *Soil Survey of England and Wales Sheet 3, Soils of Midland and Western England*. Southampton.



## APPENDICES

### Appendix 1 Survey equipment and data processing

#### Survey methods and equipment

The magnetic data for this project were acquired using a non-magnetic cart fitted with four SenSys FGM650/3 magnetic gradiometers. The instrument has four sensor assemblies fixed horizontally 1 m apart allowing four traverses to be recorded simultaneously. Each sensor contains two fluxgate magnetometers arranged vertically with a 0.6 m separation and measures the difference between the vertical components of the total magnetic field within each sensor array. This arrangement of magnetometers suppresses any diurnal or low frequency effects.

The gradiometers have an effective resolution of  $\pm 8 \mu\text{T}$  over  $\pm 1000 \text{ nT}$  range. All of the data were then relayed to a CS35 tablet, running the MONMX program, which is used to record the survey data from the array of FGM650/3 probes at a rate of 20 Hz. The program also receives measurements from a GPS system, which is fixed to the cart at a measured distance from the sensors, providing real time locational data for each data point.

The cart-based system relies upon accurate GPS location data which is collected using a Carlson BRX7 system. This receives corrections from a network of reference stations operated by the Ordnance Survey, allowing positions to be determined with a precision of 0.02m in real-time and therefore exceed the level of accuracy recommended by European Archaeologiae Consilium recommendations (Schmidt *et al.* 2015) for geophysical surveys.

#### Post-processing

The magnetic data collected during the survey is downloaded from the system for processing and analysis using both commercial and in-house software. This software allows for both the data and the images to be processed in order to enhance the results for analysis; however, it should be noted that minimal data processing is conducted so as not to distort the anomalies.

Typical data and image processing steps may include:

- GPS DeStripe – Determines the median of each transect and then subtracts that value from each datapoint in the transect within the defined window. May be used to remove the striping effect seen within a survey caused by directional effects, drift, etc.
- Discard Overlaps - Intended to eliminate a track(s) that have been collected too close to one another. Without this, the results of the interpolation process can be distorted as it tries to accommodate very close points with potentially differing values.
- GPS Base Interpolation – Sets the X & Y interval of the interpolated data and the track radius (area around each datapoint that is included in the interpolated result).

Typical displays of the data used during processing and analysis:

- Greyscale – Presents the data in plan view using a greyscale to indicate the relative strength of the signal at each measurement point. These plots can be produced in colour to highlight certain features but generally greyscale plots are used during analysis of the data.





## Appendix 2 Geophysical interpretation

The interpretation methodology used by Wessex Archaeology separates the anomalies into four main categories: archaeological, modern, agricultural, and uncertain origin/geological.

The archaeological category is used for features when the form, nature and pattern of the anomaly are indicative of archaeological material. Further sources of information such as aerial photographs may also have been incorporated in providing the final interpretation. This category is further sub-divided into three groups, implying a decreasing level of confidence:

- Archaeology – used when there is a clear geophysical response and anthropogenic pattern.
- Possible archaeology – used for features which give a response, but which form no discernible pattern or trend.

The modern category is used for anomalies that are presumed to be relatively modern in date:

- Ferrous – used for responses caused by ferrous material. These anomalies are likely to be of modern origin.
- Modern service – used for responses considered relating to cables and pipes; most are composed of ferrous/ceramic material although services made from non-magnetic material can sometimes be observed.

The agricultural category is used for the following:

- Former field boundaries – used for ditch sections that correspond to the position of boundaries marked on earlier mapping.
- Ridge and furrow – used for broad and diffuse linear anomalies that are considered to indicate areas of former ridge and furrow.
- Ploughing – used for well-defined narrow linear responses, usually aligned parallel to existing field boundaries.
- Drainage – used to define the course of ceramic field drains that are visible in the data as a series of repeating bipolar (black and white) responses.

The uncertain origin/geological category is used for features when the form, nature and pattern of the anomaly are not sufficient to warrant a classification as an archaeological feature. This category is further sub-divided into:

- Increased magnetic response – used for areas dominated by indistinct anomalies which may have some archaeological potential.
- Trend – used for low amplitude or indistinct linear anomalies.
- Superficial geology – used for diffuse edged spreads considered to relate to shallow geological deposits. They can be distinguished as areas of positive, negative, or broad bipolar (positive and negative) anomalies.

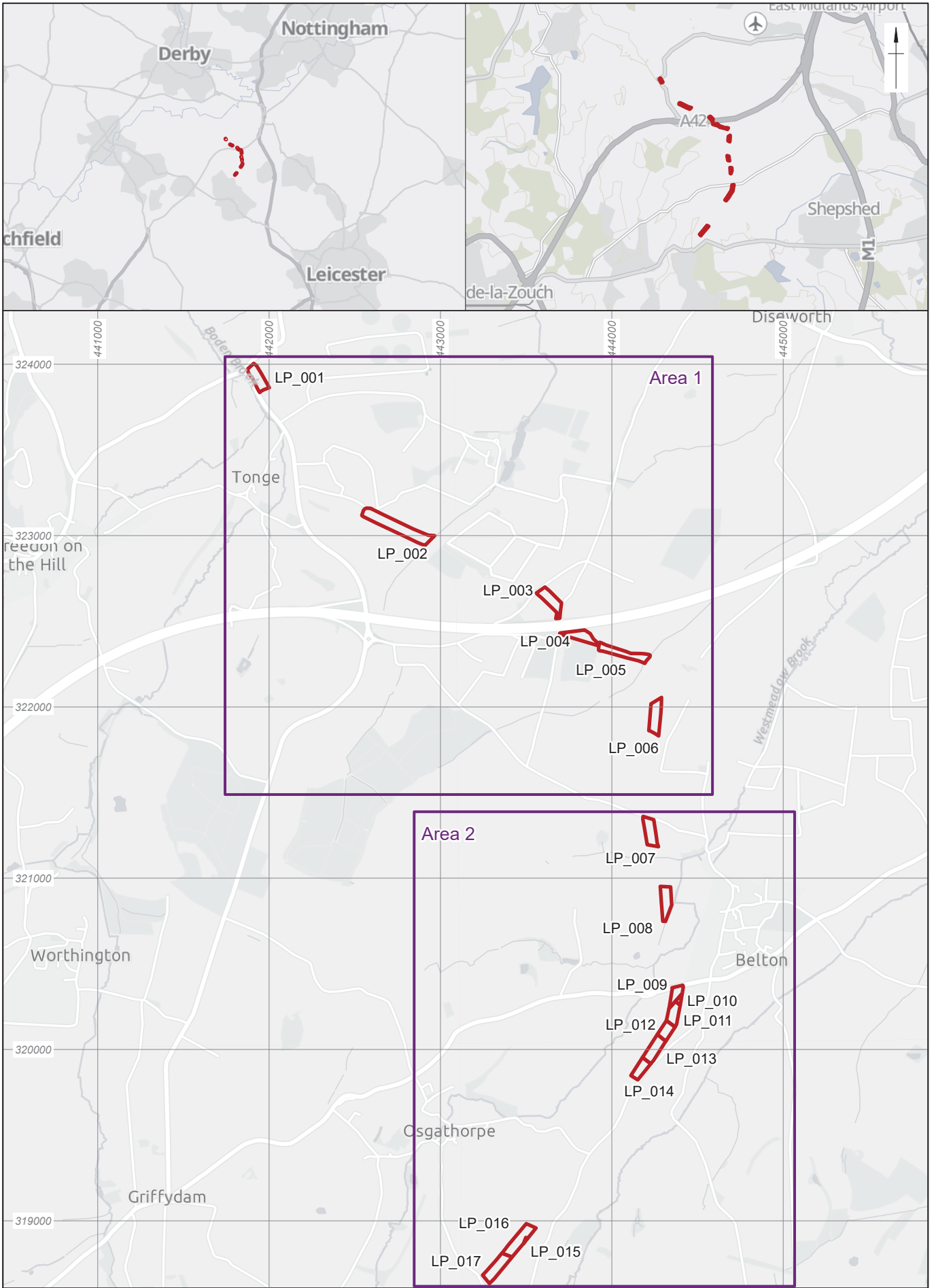




## Appendix 3 OASIS form

### Project Details:

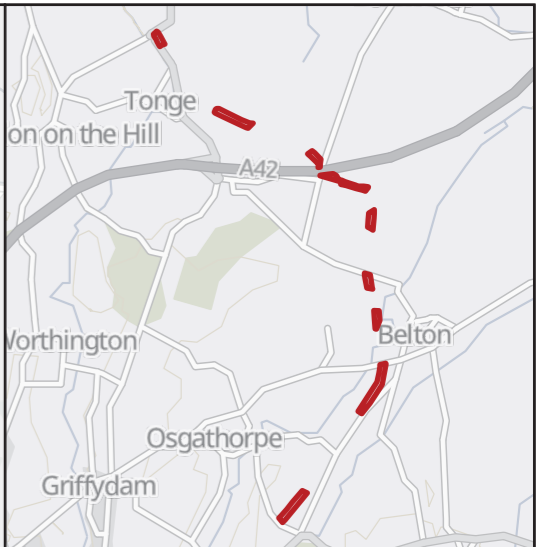
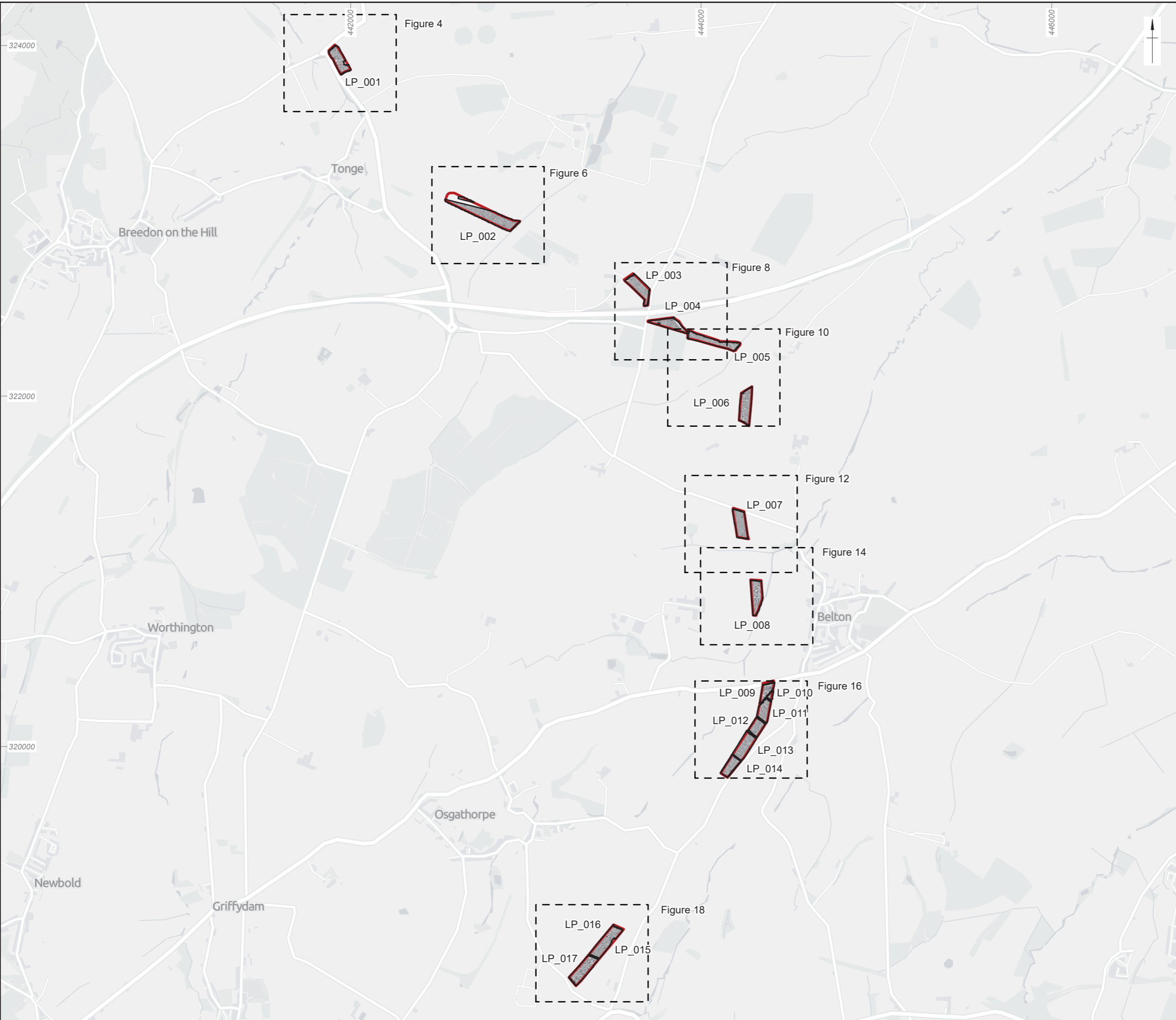
<b>Project name</b>		Snarrows Sewage Treatment Works to River Trent Transfer Main, Leicestershire			
<b>Type of project</b>		Detailed gradiometer survey			
<b>Project description</b>		<p>The detailed gradiometer survey has been successful in detecting anomalies of possible archaeological and agricultural origin.</p> <p>A possible ditched enclosure of unknown origin has been detected in the south of the site, within an area of ridge and furrow. A more natural origin, such as a natural drainage feature, cannot however be ruled out.</p> <p>Various anomalies representative of the past agricultural use of the land have been detected. Ridge and furrow cultivation dating mainly from the medieval period has been identified across the site and are linked to the nearby settlements with a medieval origin including the villages of Belton and Tonge, as well as Grace Dieu Priory. Several former field boundaries have also been identified which correspond with field boundaries seen in the OS 1st edition (1883) mapping.</p> <p>In addition to this natural variation in the underlying deposits, drains and various magnetic trends have been identified across the site. Areas of ferrous and magnetic disturbance have been detected and are associated with the edges and entrances to fields.</p>			
<b>Project dates</b>		<b>Start:</b> 06-03-2023		<b>End:</b> 14-03-2023	
<b>Previous work</b>		DBA			
<b>Future work</b>		N/A			
<b>Project Code:</b>	PN275930	<b>HER event no.</b>	N/A	<b>OASIS form ID:</b>	wessexar1-514148
		<b>NMR no.</b>	N/A		
		<b>SM no.</b>	N/A		
<b>Planning Application Ref.</b>		N/A			
<b>Site Status</b>		None			
<b>Land use</b>		Agricultural			
<b>Monument type</b>			<b>Period</b>		
<b>Project Location:</b>					
<b>Site Address</b>	Moor Lane, Tonge			<b>Postcode</b>	DE73 8BB
<b>County</b>	Leicestershire	<b>District</b>	North West Leicestershire	<b>Parish</b>	Breedon On The Hill; Isley Cum Langley; Belton; Osgathorpe;
<b>Study Area</b>	15.9 ha	<b>Height OD</b>	54 – 91 m aOD	<b>NGR</b>	441918, 323985 to 443255, 318676
<b>Project Creators:</b>					
<b>Name of Organisation</b>		Wessex Archaeology			
<b>Project brief originator</b>		Severn Trent Water	<b>Project design originator</b>		Severn Trent Water
<b>Project Manager</b>		Chris Breedon	<b>Project Supervisor</b>		Jo Instone-Brewer
<b>Sponsor or funding body</b>		Severn Trent Water	<b>Type of Sponsor</b>		Private
<b>Project Archive and Bibliography:</b>					
<b>Physical archive</b>	N/A	<b>Digital Archive</b>	Geophysical survey and report	<b>Paper Archive</b>	N/A
<b>Report title</b>	Snarrows Sewage Treatment Works to River Trent Transfer Main, Leicestershire			<b>Date</b>	2023
<b>Author</b>	Wessex Archaeology	<b>Description</b>	Unpublished report	<b>Report ref.</b>	PN275930.03





Coordinate system: OSGB 1936 British National Grid  
Contains Ordnance Survey data © Crown copyright and database right 2023.  
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.



Date: 23/03/2023	Created by: LJ	Revision: 1	Scale: 1:30,000 at A4	
Figure 1: Survey location and site boundary				



-  Detailed survey extent
-  Site boundary



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


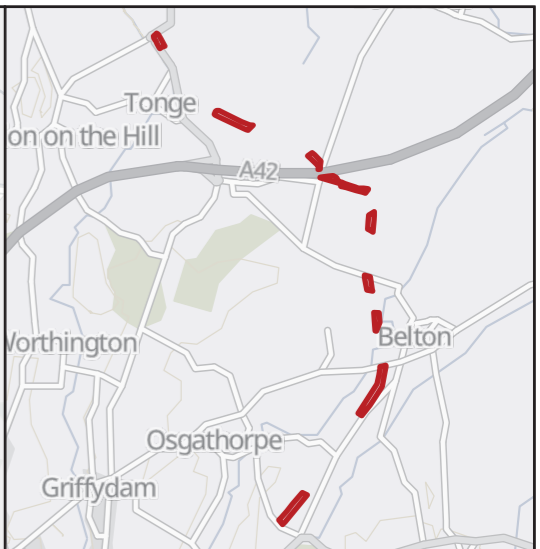
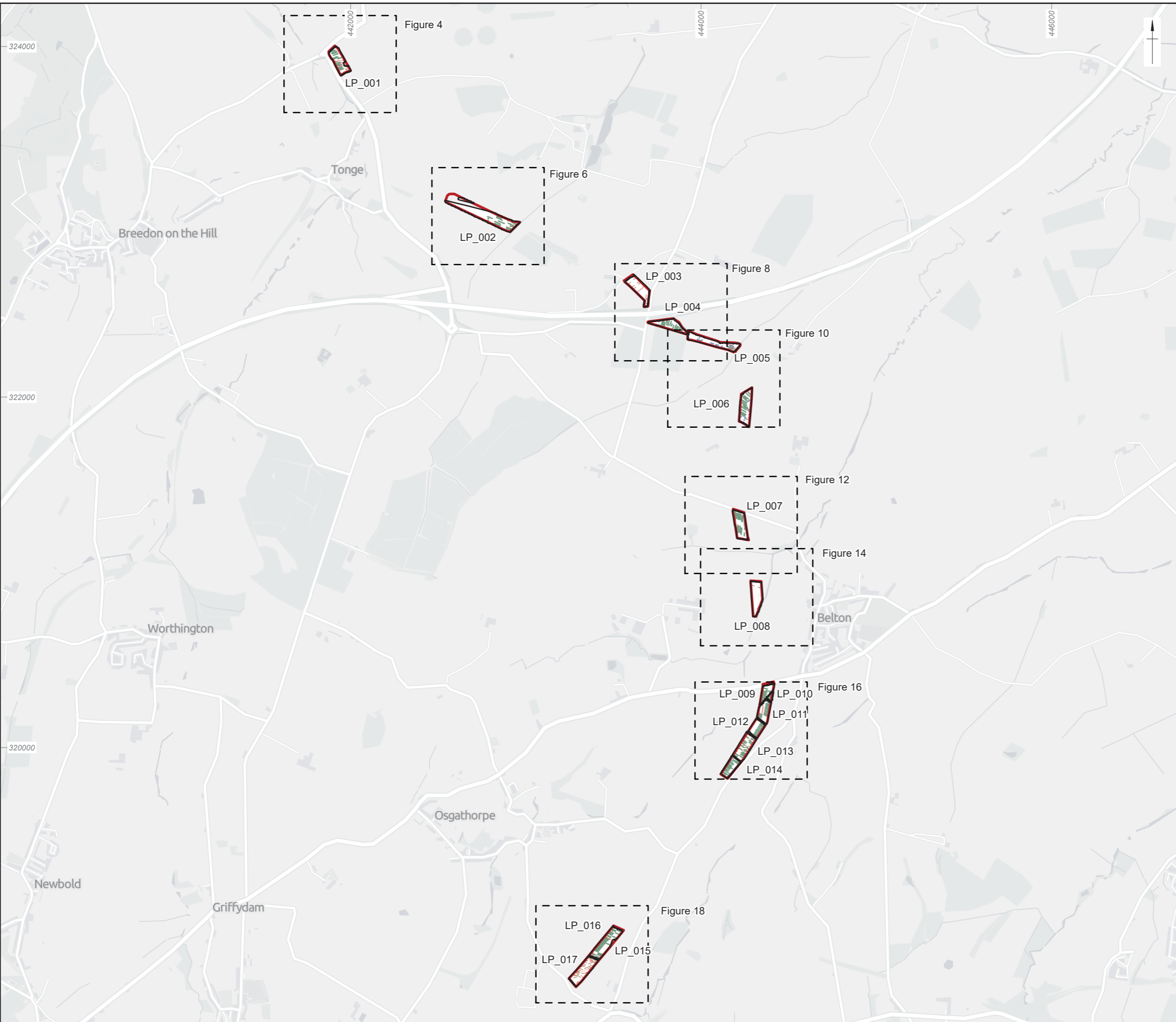
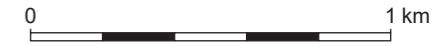
Date: 23/03/2023	Created by: LJ	
Scale: 1:21,000 at A3	Revision: 1	

Figure 2: Detailed gradiometer survey results: overall greyscale data



- Detailed survey extent
- Site boundary
- Possible archaeology
- Former field boundary
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Geology
- Increased response
- Ferrous

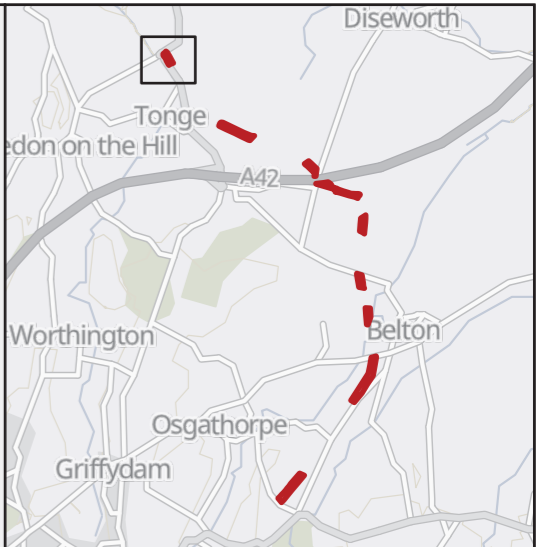
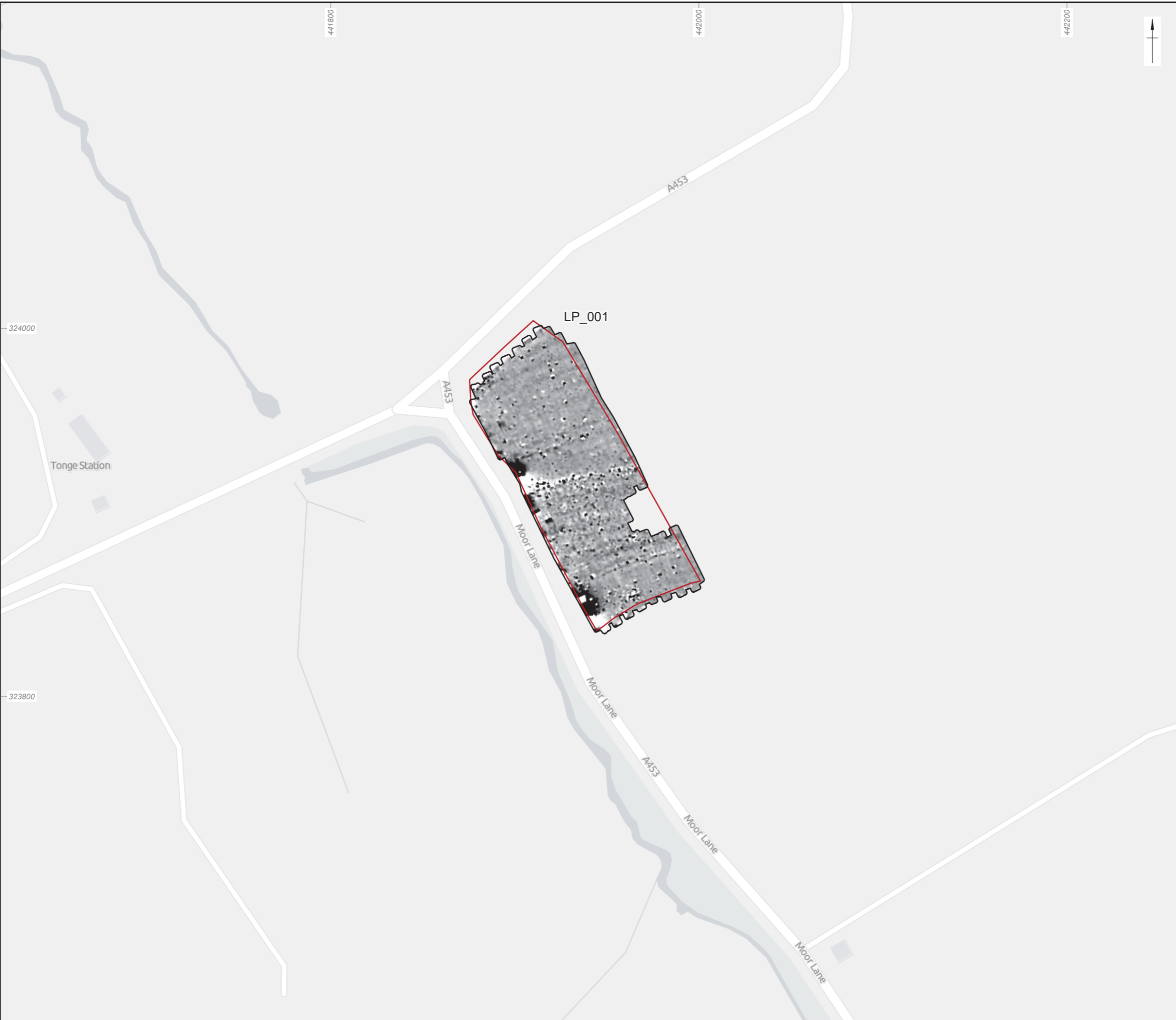


Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:21,000 at A3	Revision: 1	

Figure 3: Detailed gradiometer survey results: overall interpretation





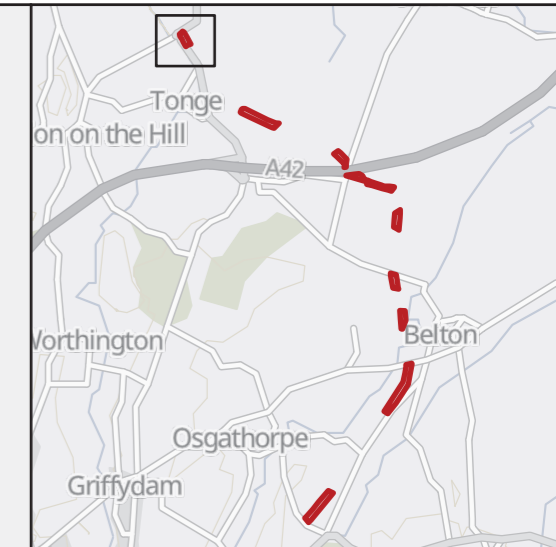
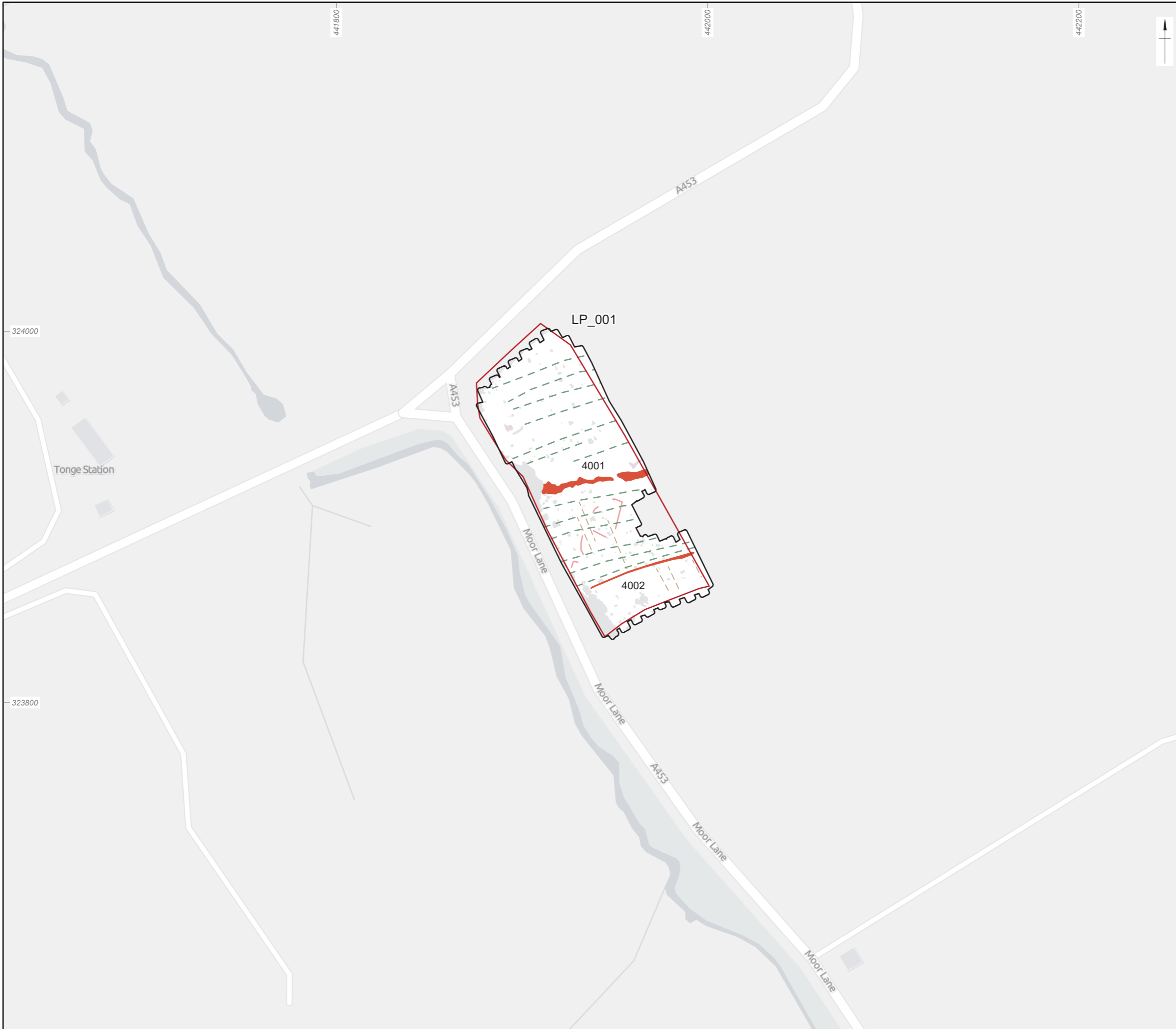
- Site boundary
- Detailed survey extent











Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	


Figure 4: Detailed gradiometer survey results: greyscale plot LP\_001

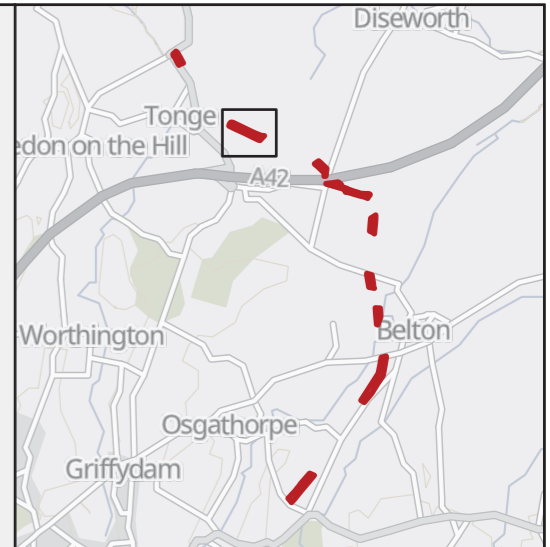
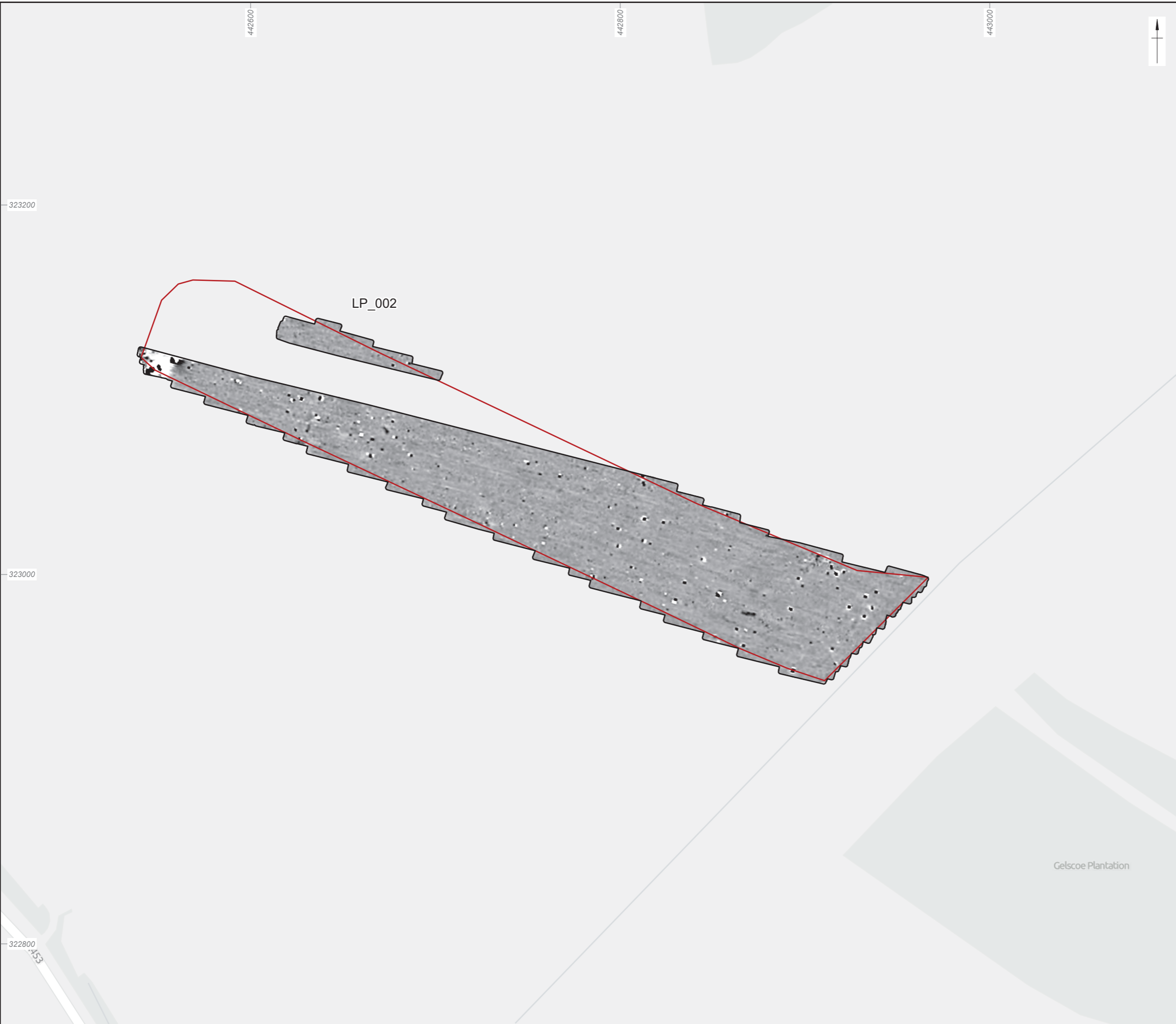


-  Detailed survey extent
-  Site boundary
-  Former field boundary
-  Historic cultivation
-  Agricultural feature
-  Trend
-  Geology
-  Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 5: Detailed gradiometer survey results: interpretation LP_001		



- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


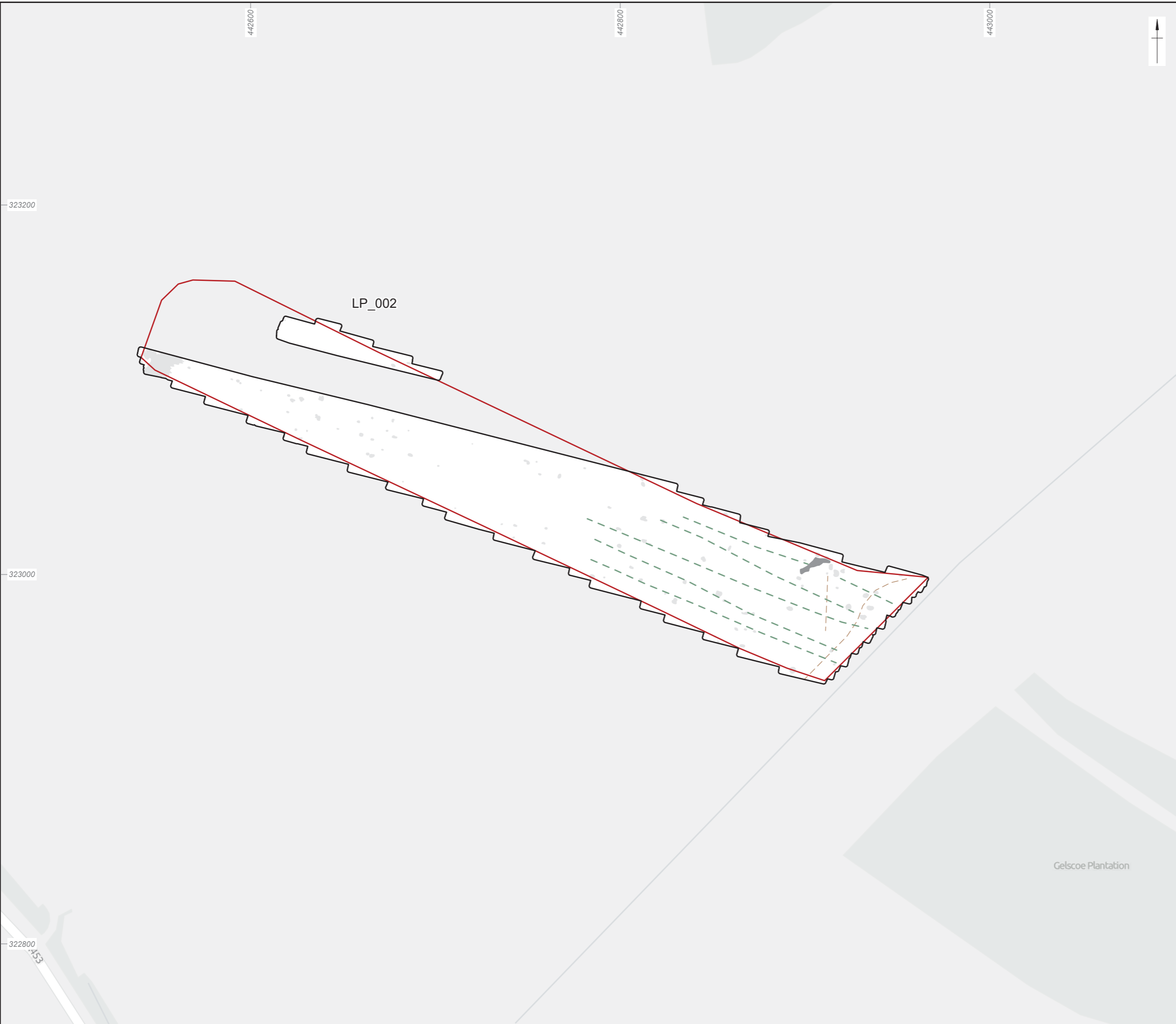






Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	


Figure 6: Detailed gradiometer survey results: greyscale plot LP\_002



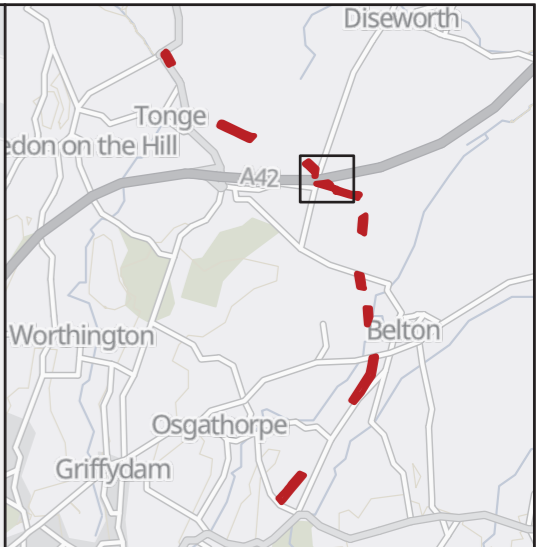
-  Detailed survey extent
-  Site boundary
-  Historic cultivation
-  Agricultural feature
-  Increased response
-  Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 7: Detailed gradiometer survey results: interpretation LP_002		





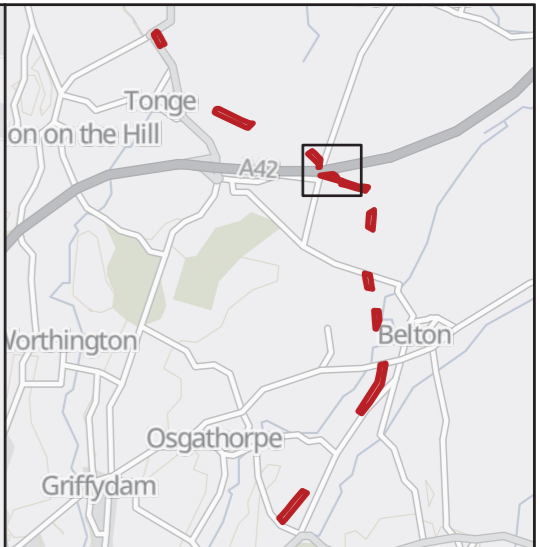
- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 8: Detailed gradiometer survey results: greyscale plot LP\_003 - 005



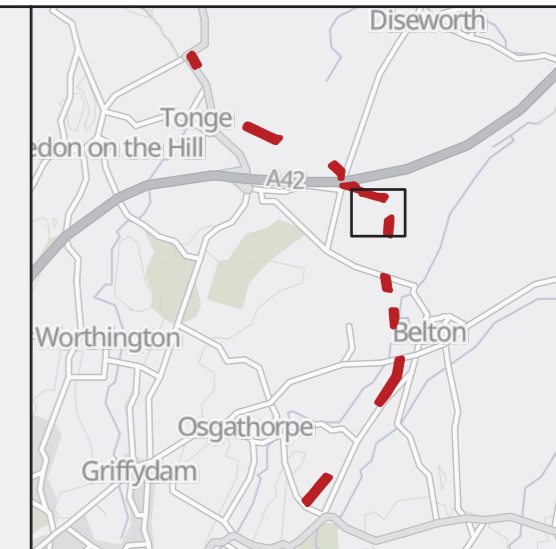
- Detailed survey extent
- Site boundary
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Geology
- Increased response
- Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 9: Detailed gradiometer survey results: interpretation LP\_003 - 005



- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


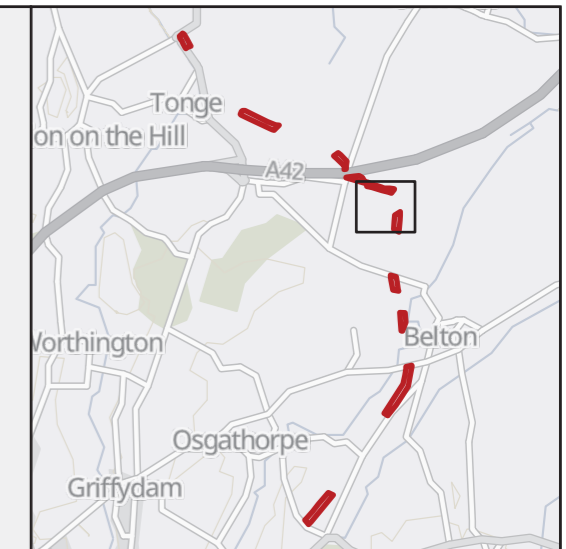
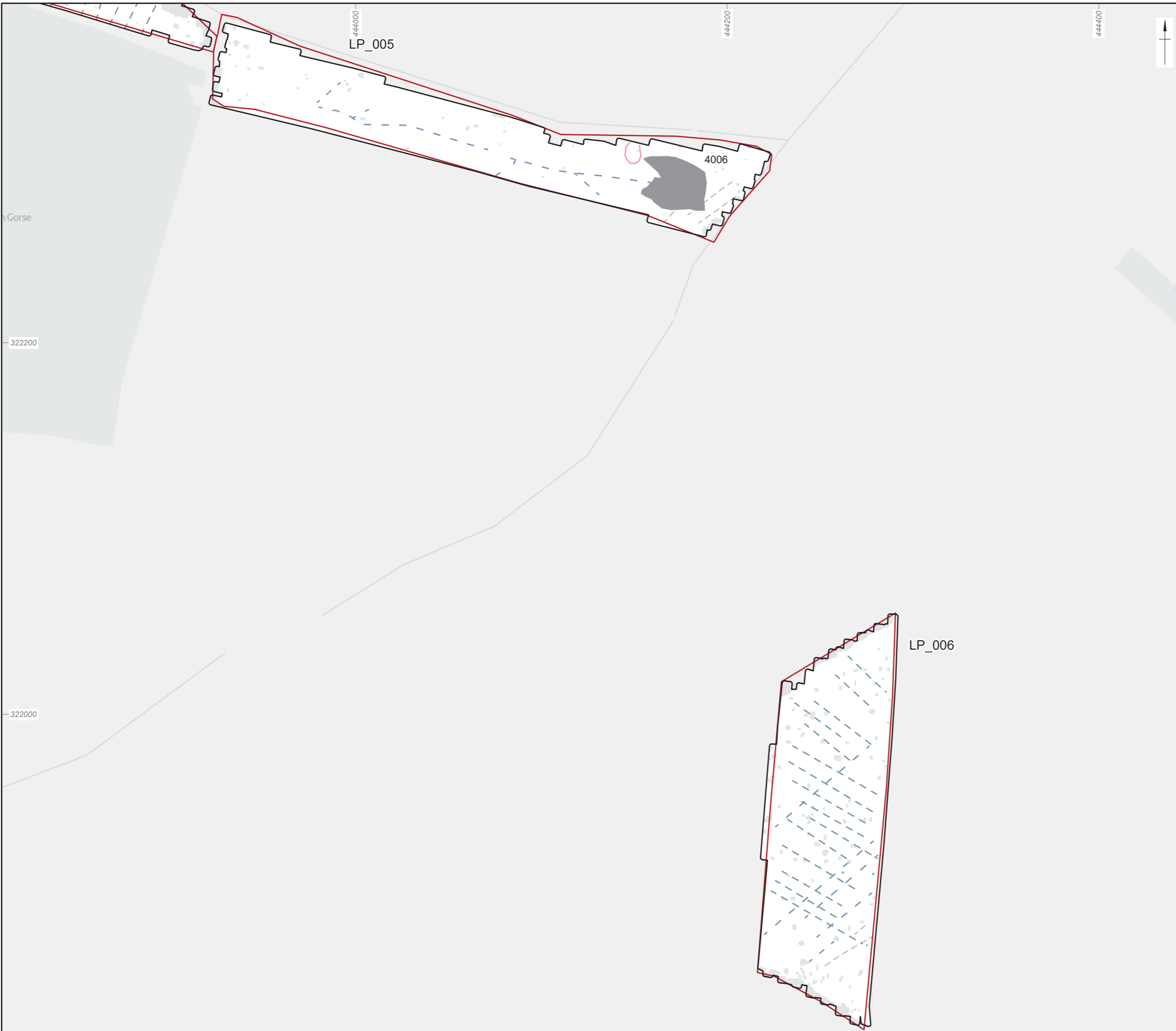
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 10: Detailed gradiometer survey results: greyscale plot LP\_005 & 006

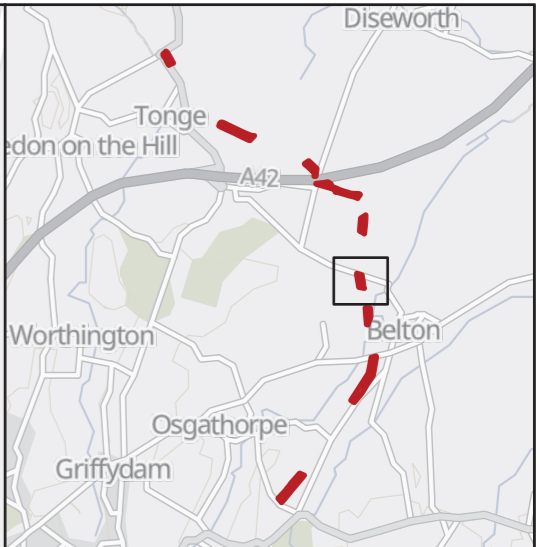
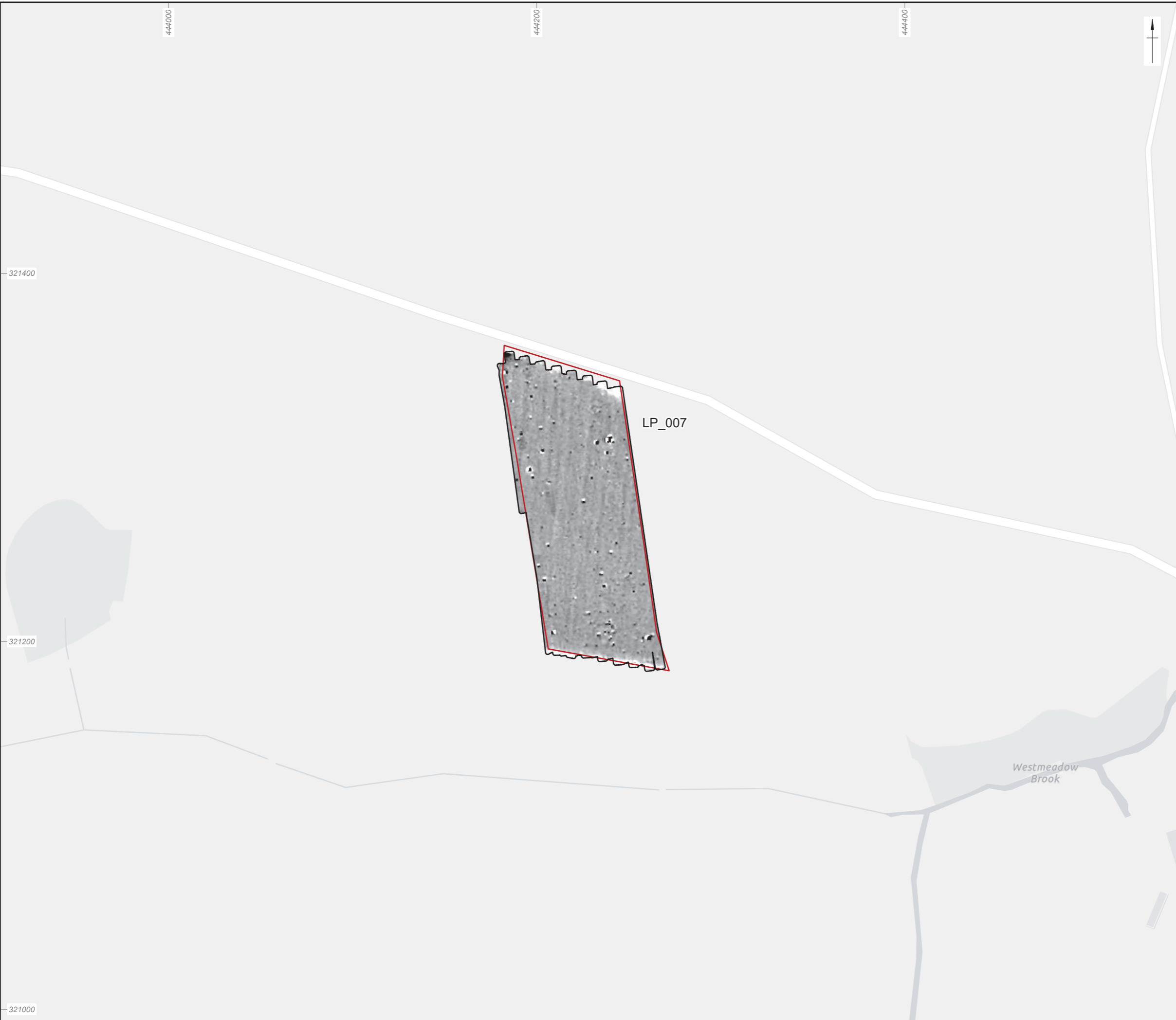


- Detailed survey extent
- Site boundary
- Possible archaeology
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Increased response
- Ferrous

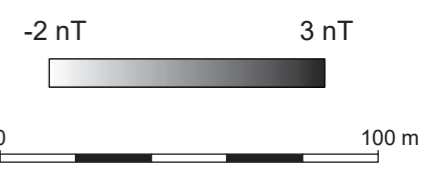


Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 11: Detailed gradiometer survey results: interpretation LP_005 & 006		



- Site boundary
- Detailed survey extent

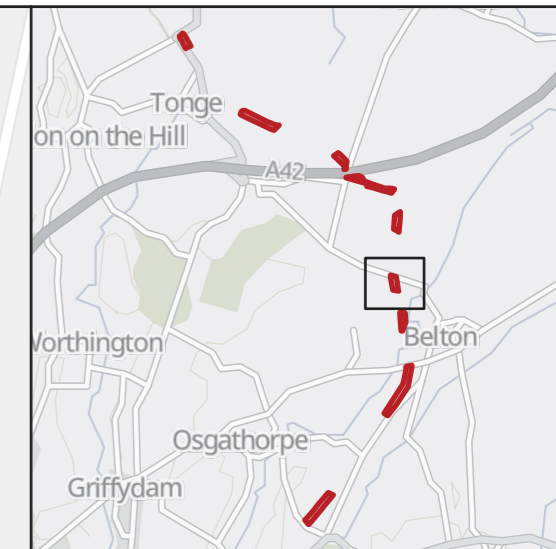
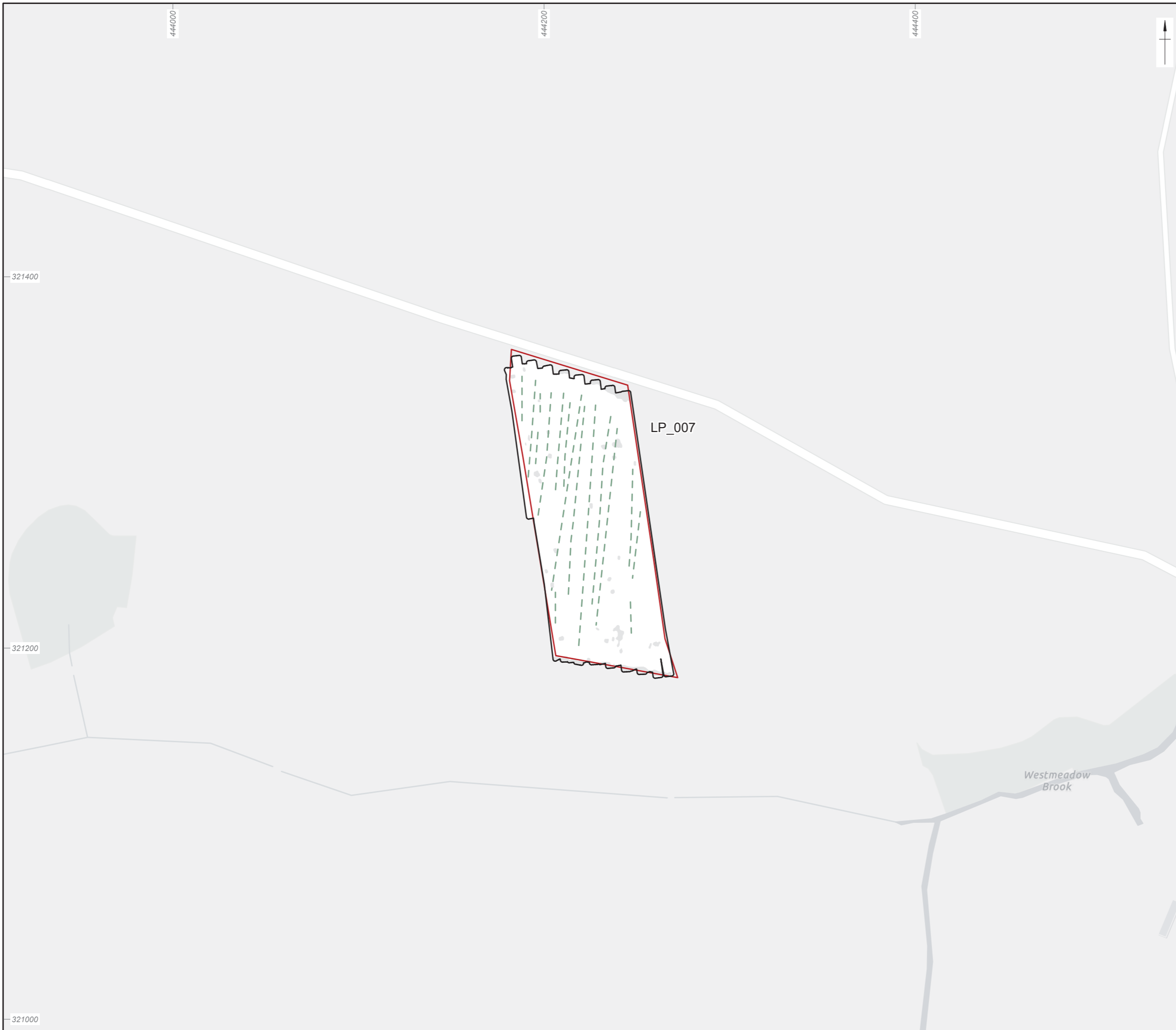






Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 12: Detailed gradiometer survey results: greyscale plot LP\_007




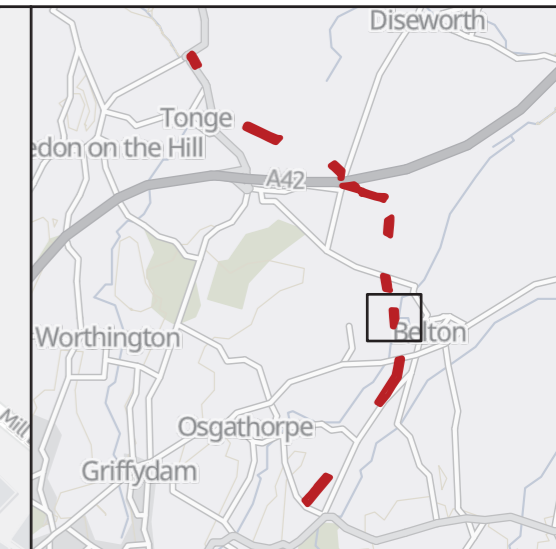
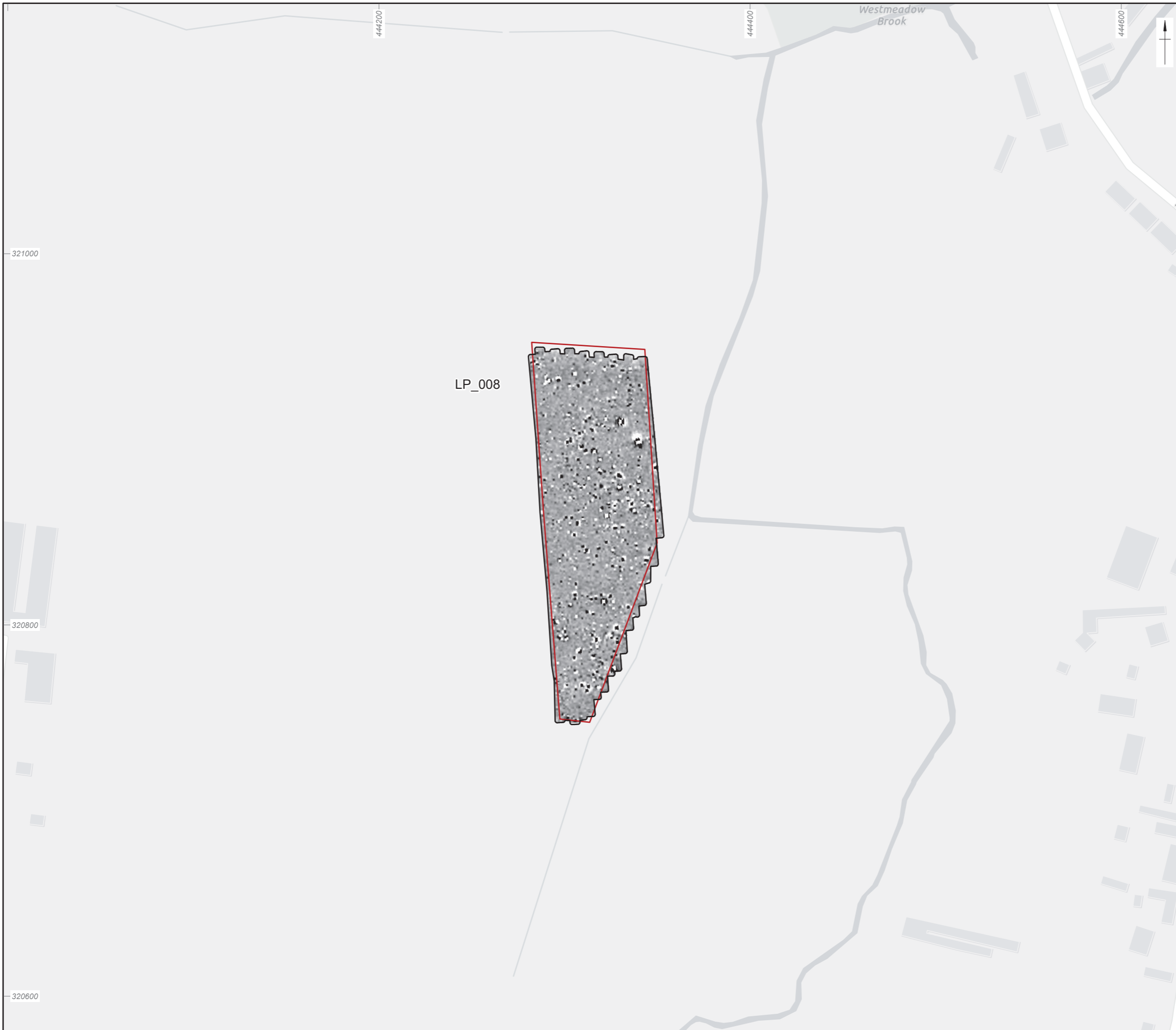


-  Detailed survey extent
-  Site boundary
-  Historic cultivation
-  Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 13: Detailed gradiometer survey results: interpretation LP_007		

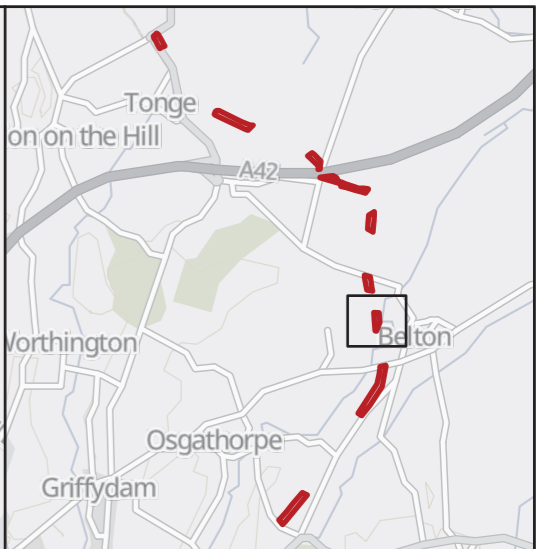
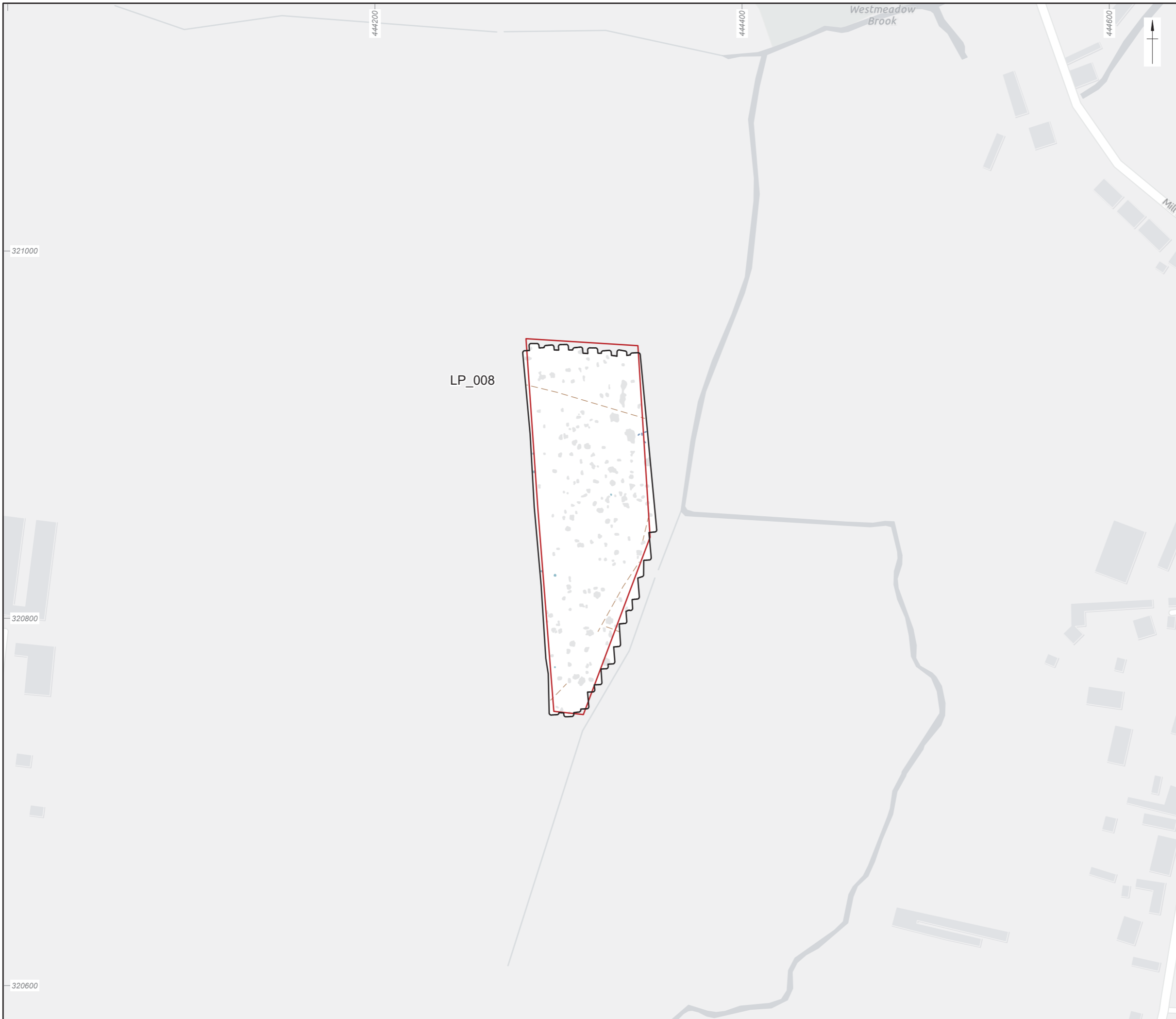








- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 14: Detailed gradiometer survey results: greyscale plot LP_008		



-  Detailed survey extent
-  Site boundary
-  Possible archaeology
-  Agricultural feature
-  Drain
-  Ferrous

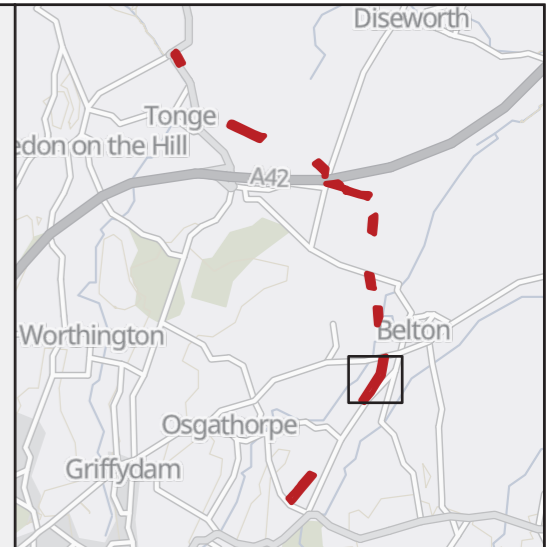
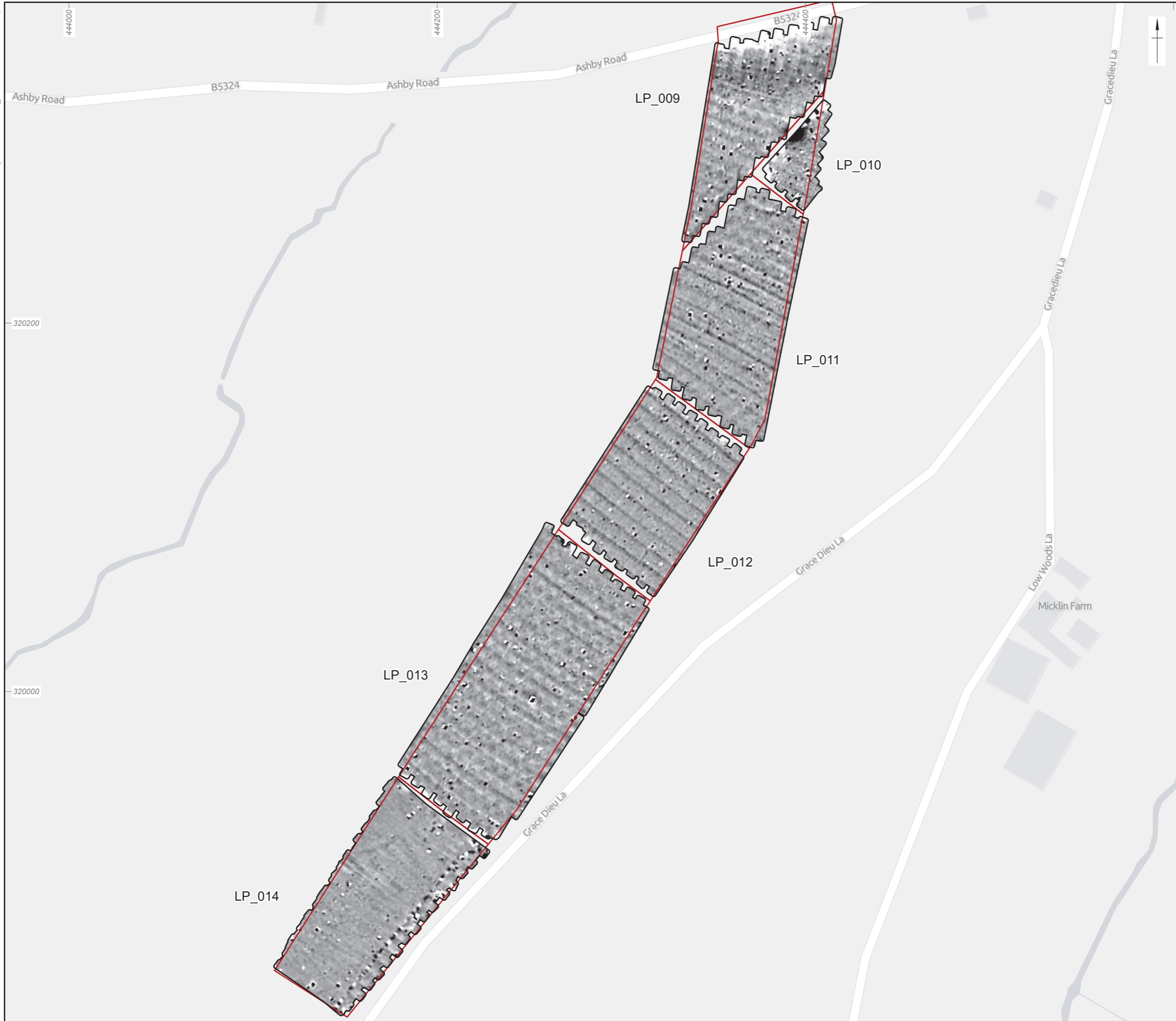


Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

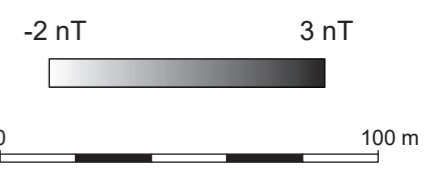
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 15: Detailed gradiometer survey results: interpretation LP_008		



X:\Projects\1275930\GIS\_ArcPro\1275930\1275930.aprx



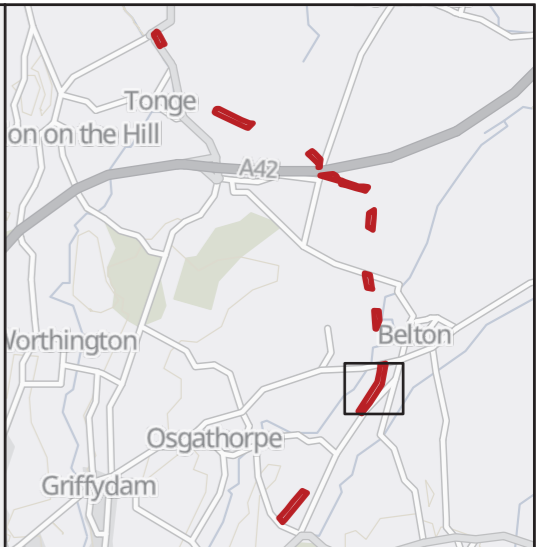
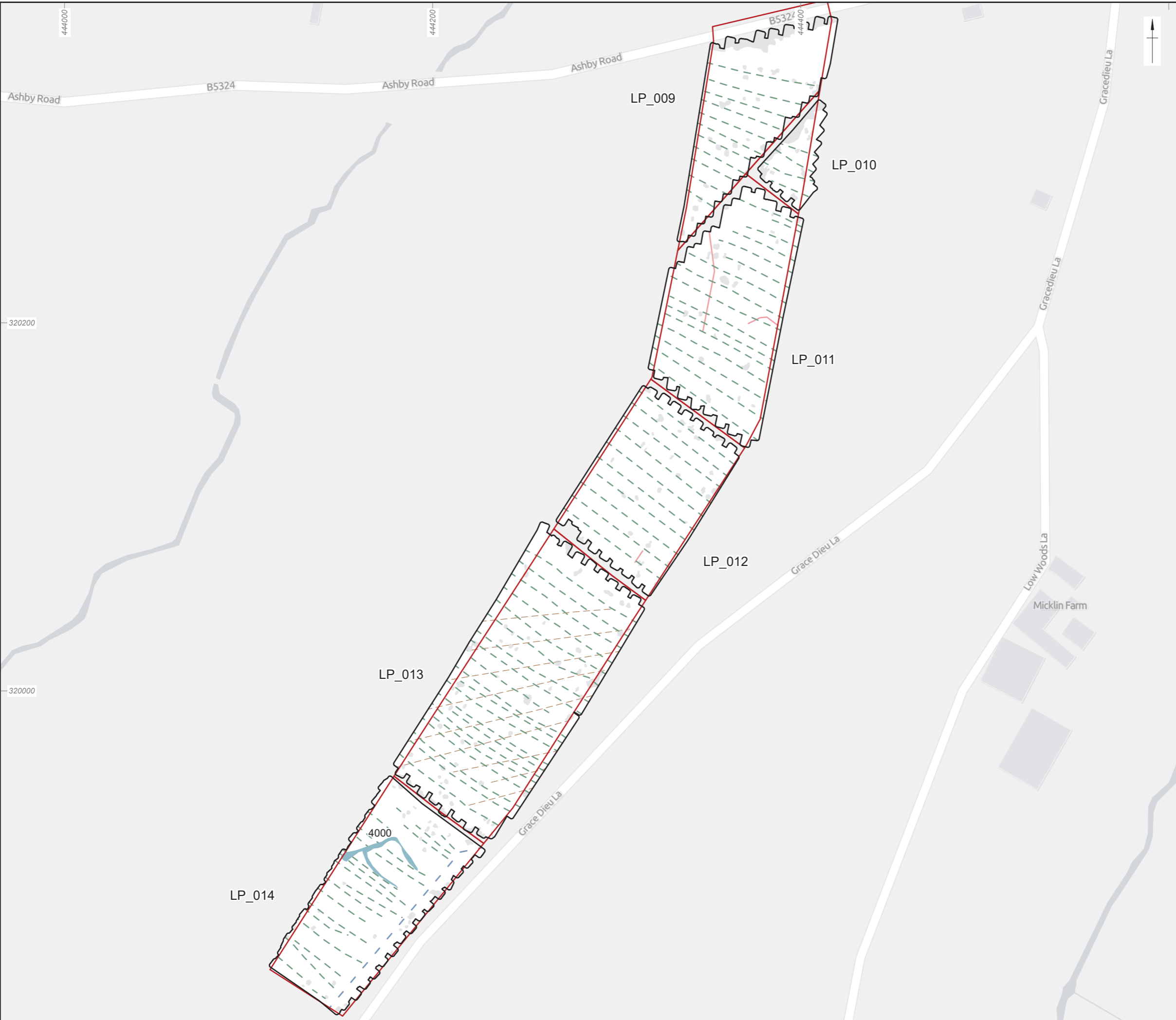
- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 16: Detailed gradiometer survey results: greyscale plot LP\_009 - 014



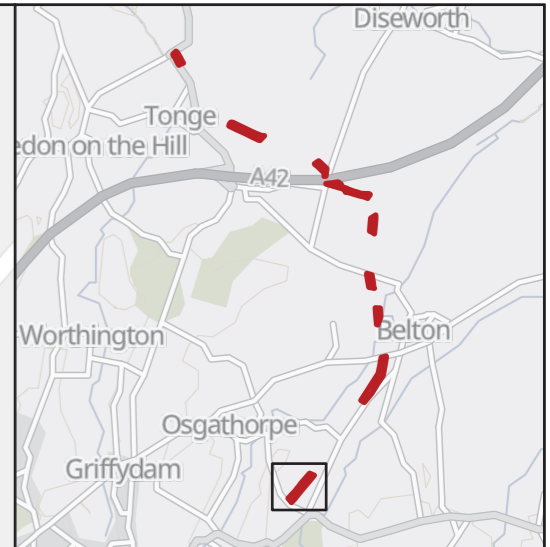
- Detailed survey extent
- Site boundary
- Possible archaeology
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Ferrous



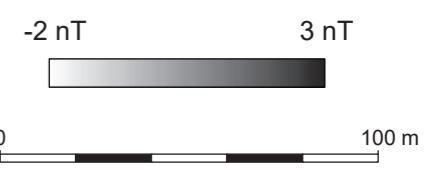
Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 17: Detailed gradiometer survey results: interpretation LP\_009 - 014



- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


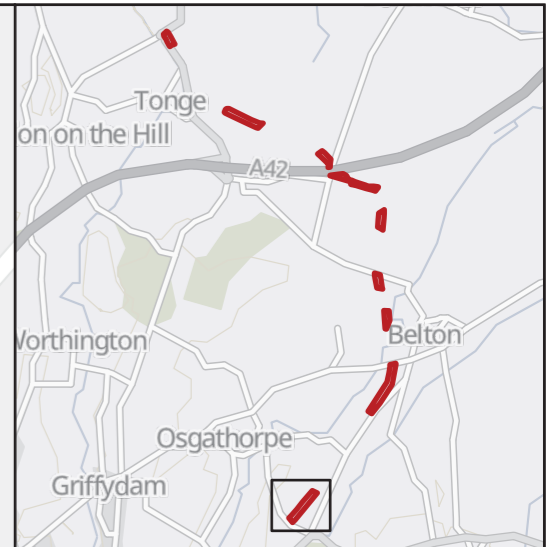
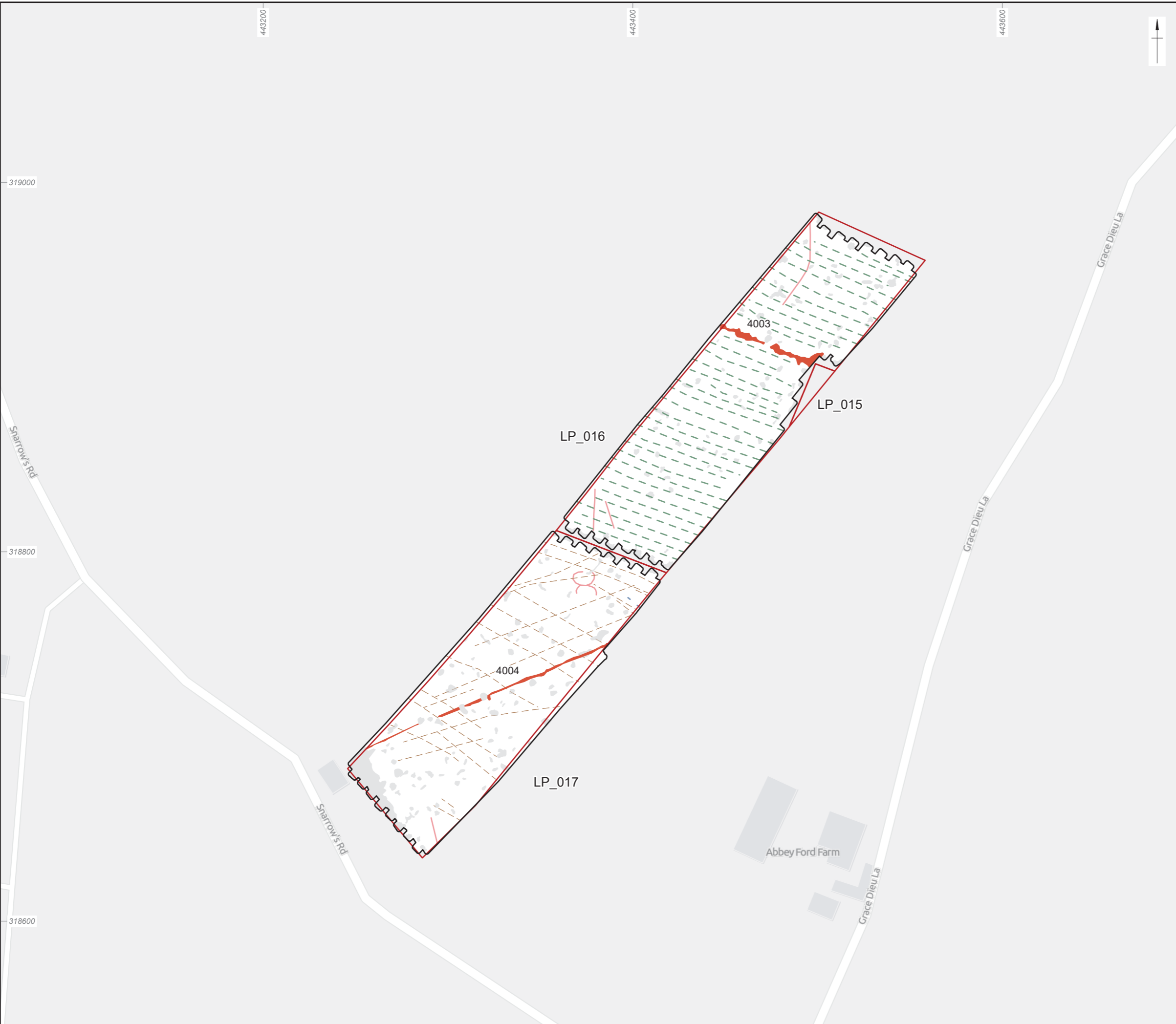
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 18: Detailed gradiometer survey results: greyscale plot LP\_015 - 017



- Detailed survey extent
- Site boundary
- Former field boundary
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 19: Detailed gradiometer survey results: interpretation LP\_015 - 017

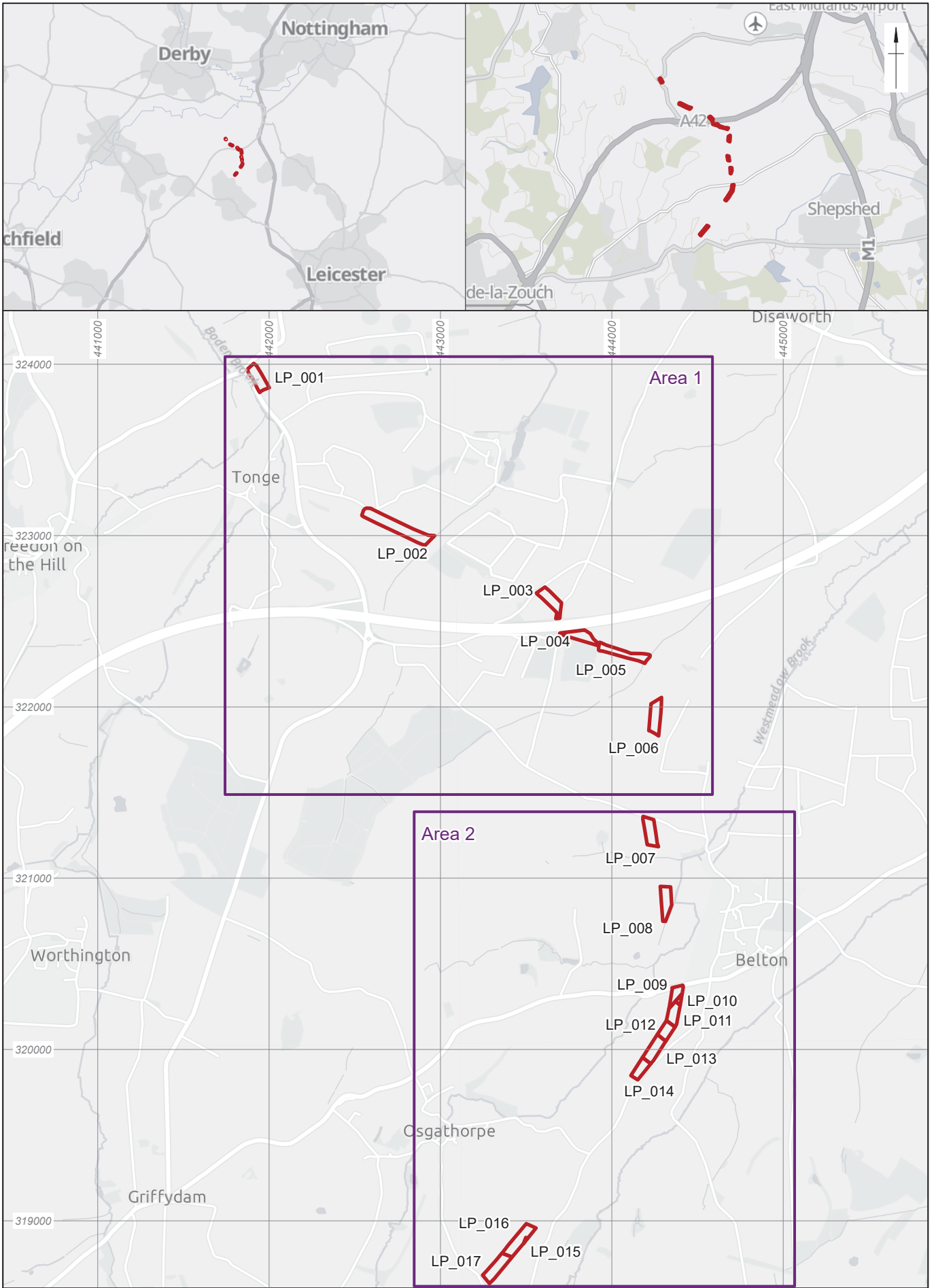




Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB  
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk



FS 606559



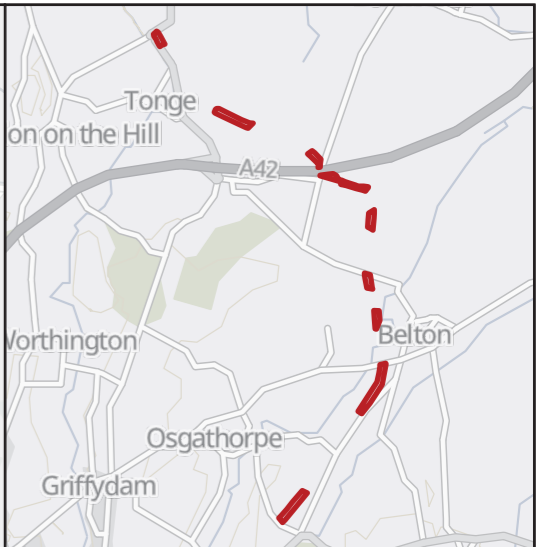
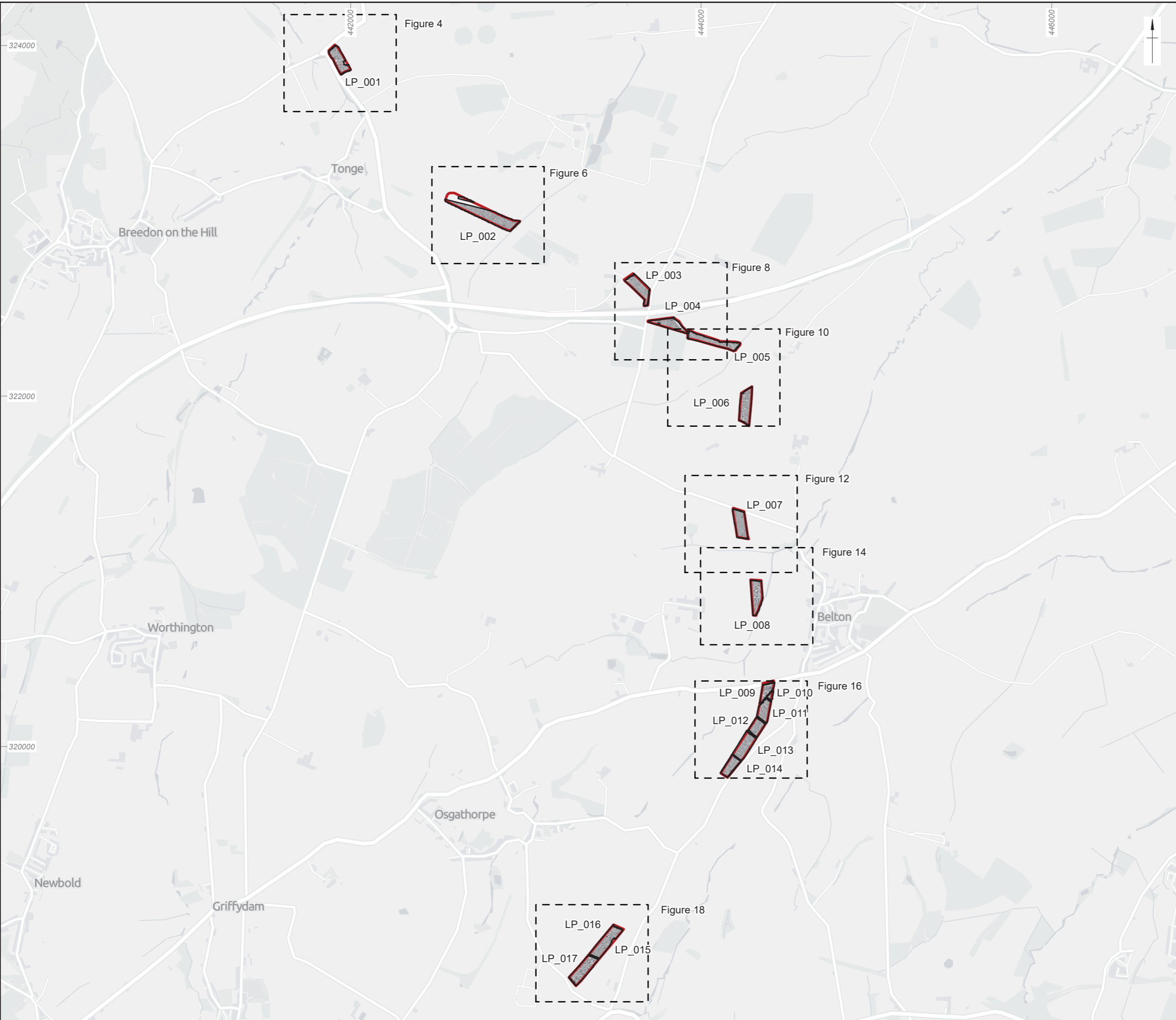
Coordinate system: OSGB 1936 British National Grid  
Contains Ordnance Survey data © Crown copyright and database right 2023.  
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

0 1 km

Date: 23/03/2023 Created by: LJ Revision: 1 Scale: 1:30,000 at A4



Figure 1: Survey location and site boundary



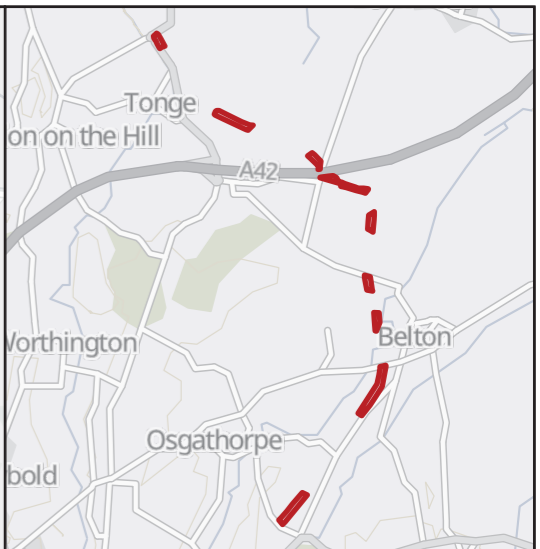
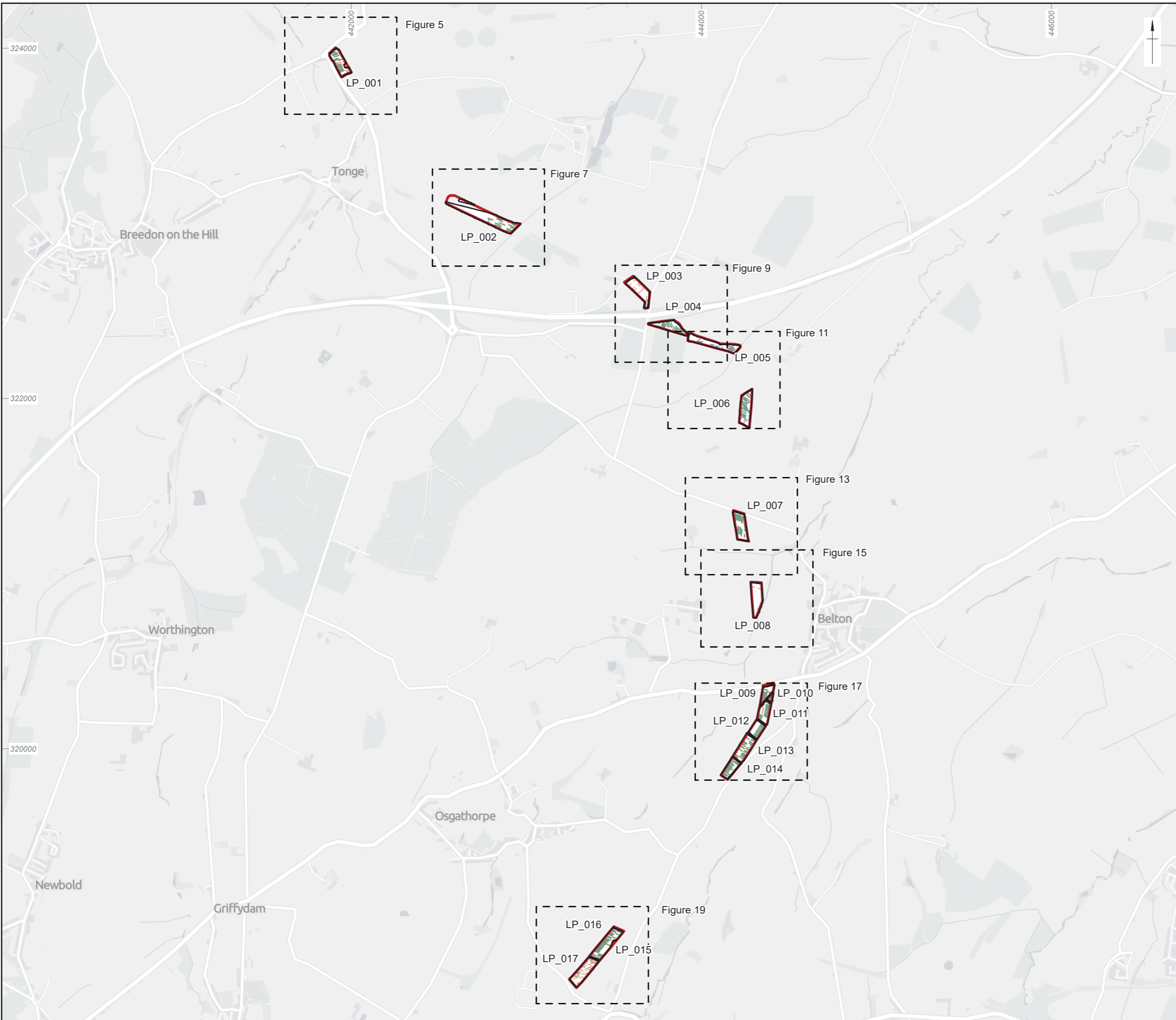
- Detailed survey extent
- Site boundary



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:21,000 at A3	Revision: 1	

Figure 2: Detailed gradiometer survey results: overall greyscale data



- Detailed survey extent
- Site boundary
- Possible archaeology
- Former field boundary
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Geology
- Increased response
- Ferrous

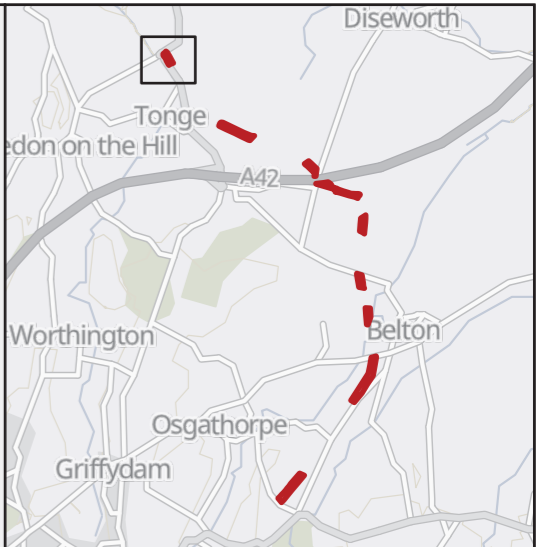
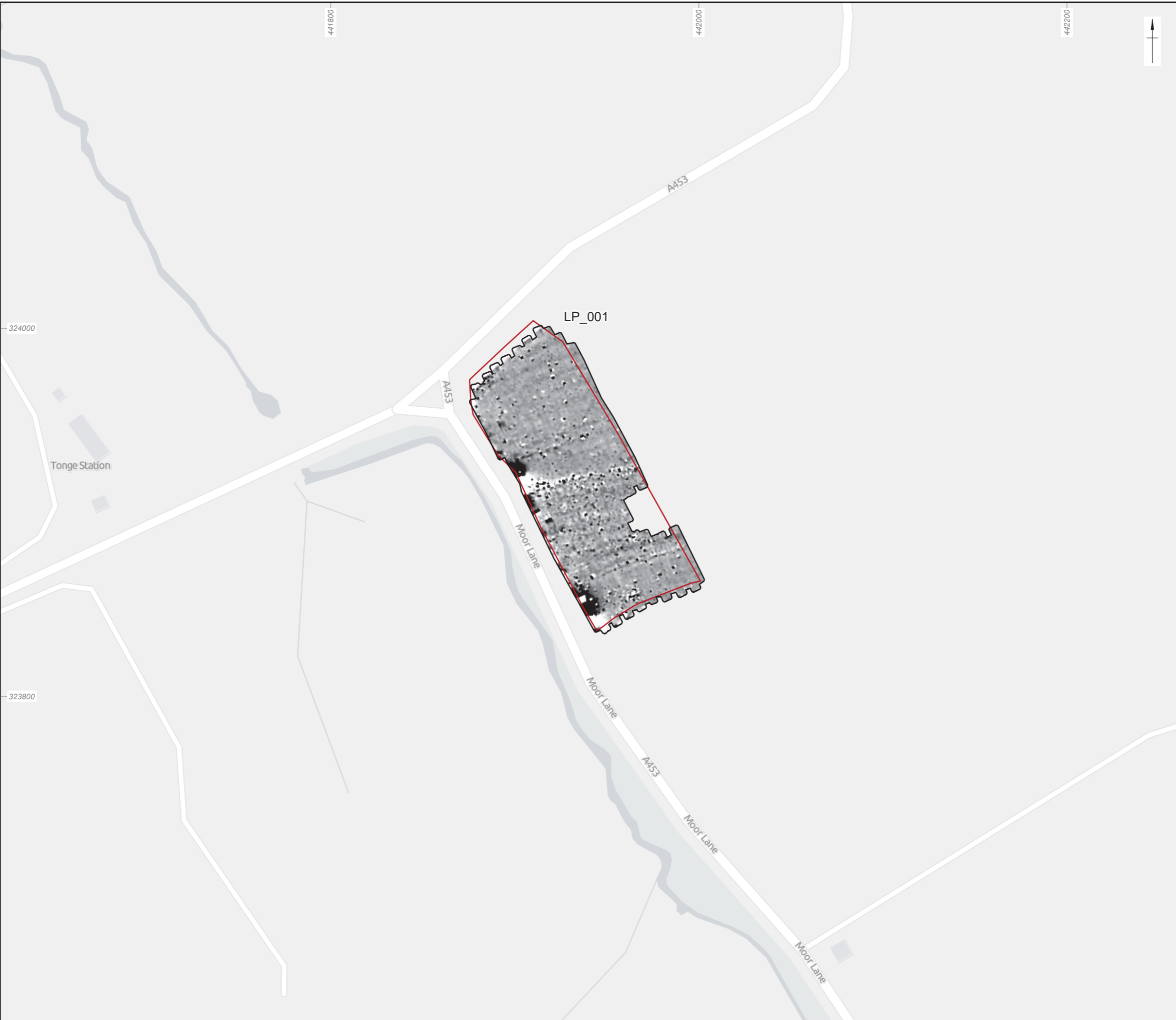


Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:21,000 at A3	Revision: 0	

Figure 3: Detailed gradiometer survey results: overall interpretation





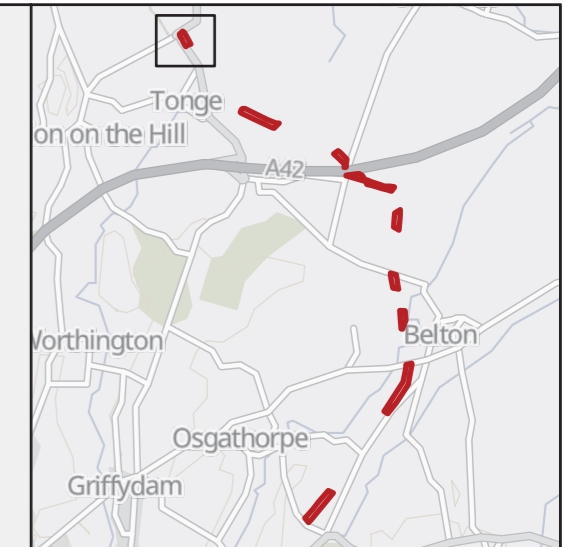
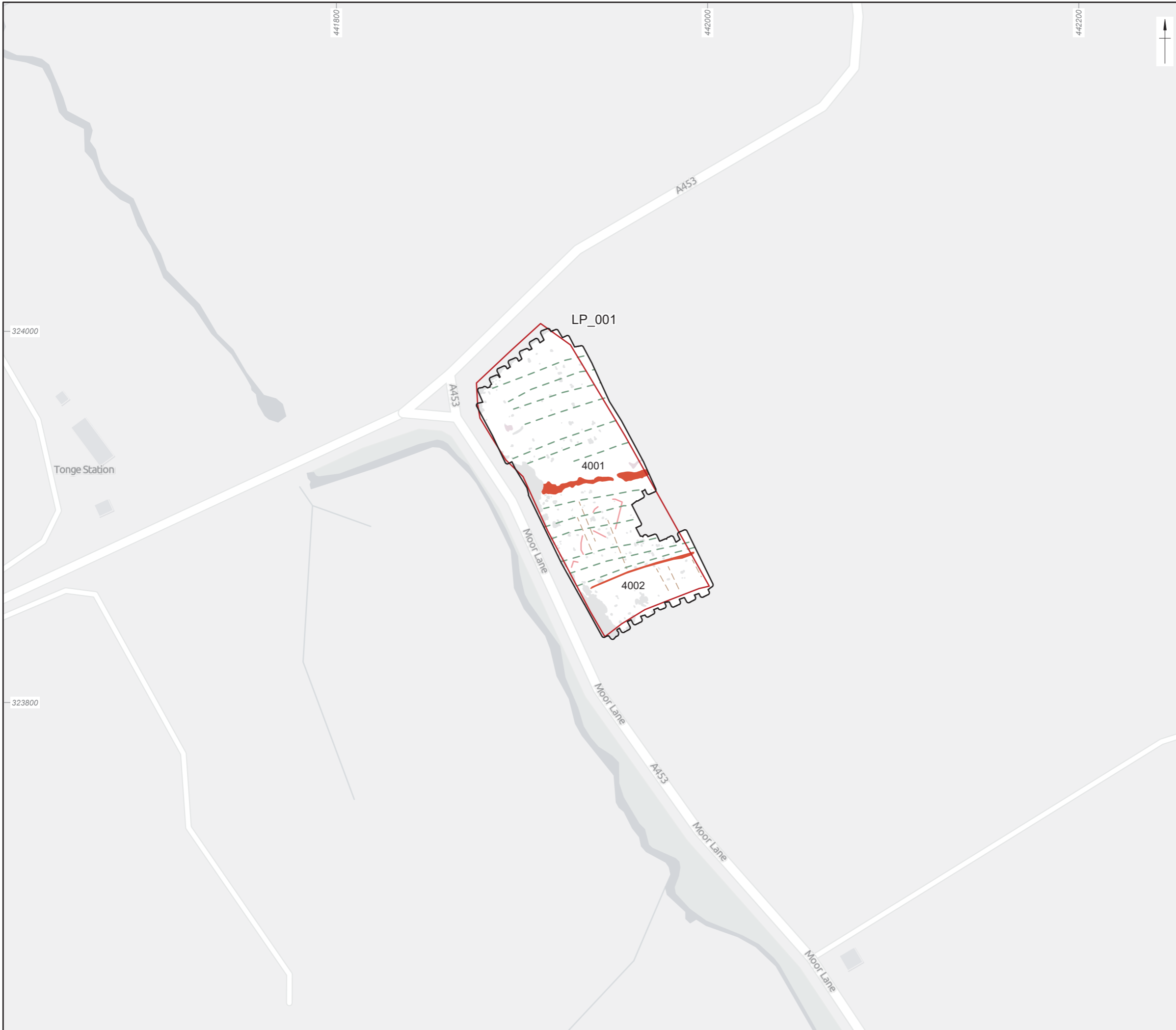
- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 4: Detailed gradiometer survey results: greyscale plot LP\_001

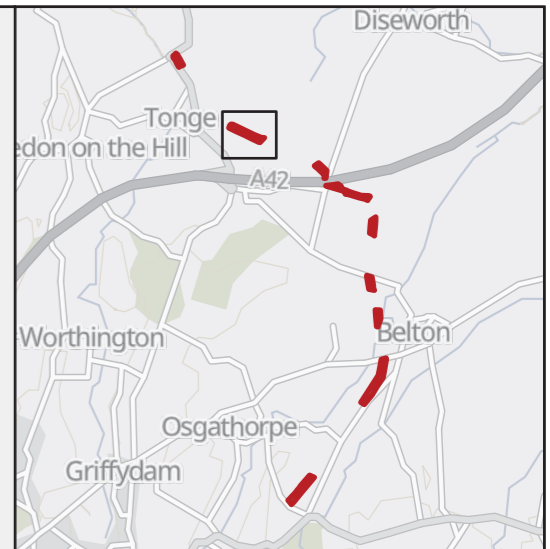
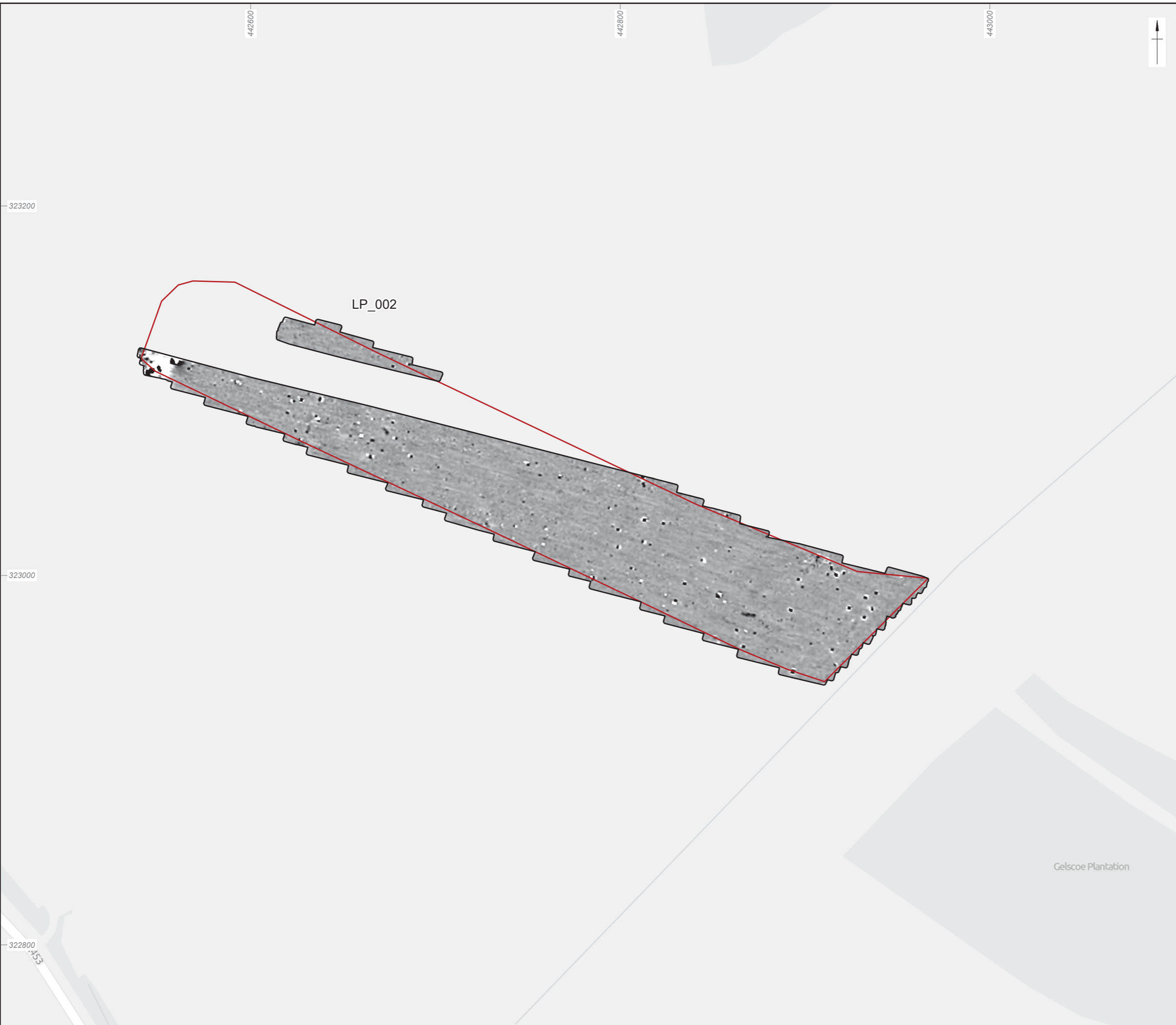


- Detailed survey extent
- Site boundary
- Former field boundary
- Historic cultivation
- Agricultural feature
- Trend
- Geology
- Ferrous

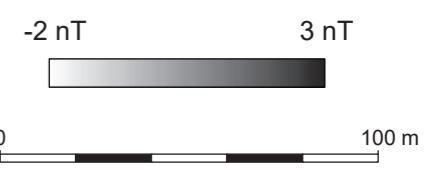


Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 5: Detailed gradiometer survey results: interpretation LP_001		



- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


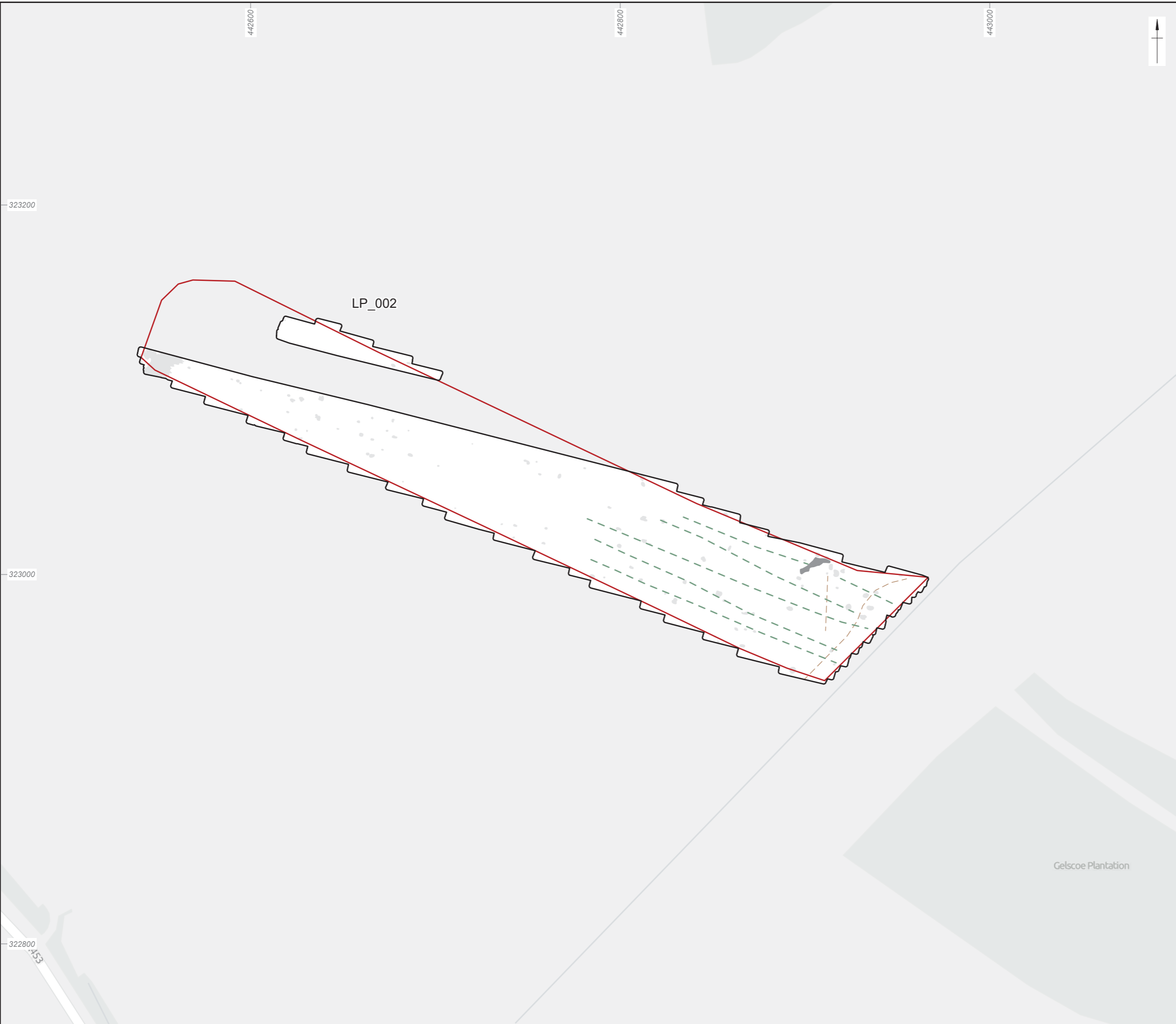
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 6: Detailed gradiometer survey results: greyscale plot LP\_002

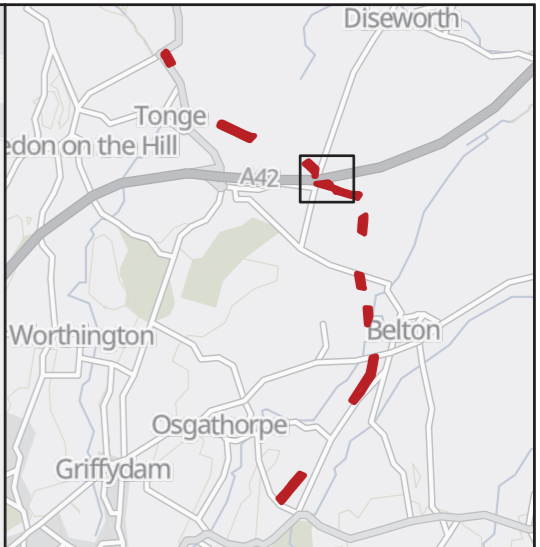


- Detailed survey extent
- Site boundary
- Historic cultivation
- Agricultural feature
- Increased response
- Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 7: Detailed gradiometer survey results: interpretation LP_002		



- Site boundary
- Detailed survey extent

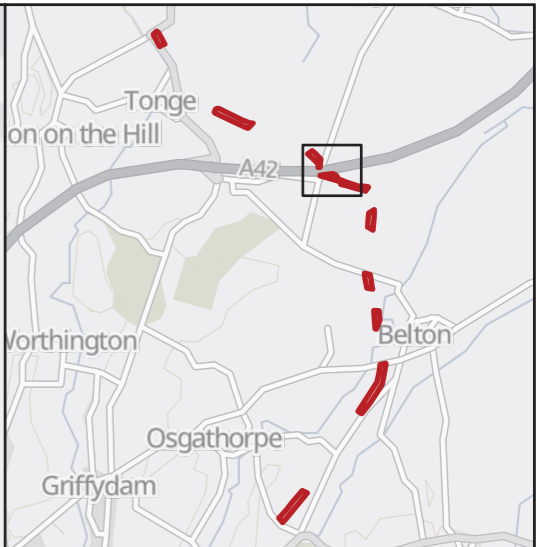


Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 8: Detailed gradiometer survey results: greyscale plot LP\_003 - 005





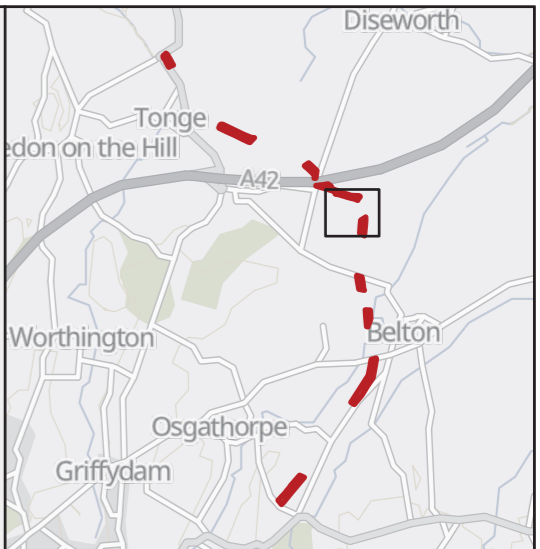
- Detailed survey extent
- Site boundary
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Geology
- Increased response
- Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 9: Detailed gradiometer survey results: interpretation LP\_003 - 005



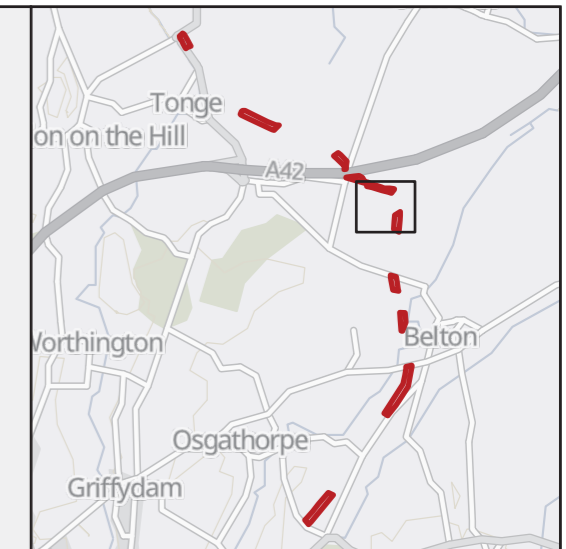
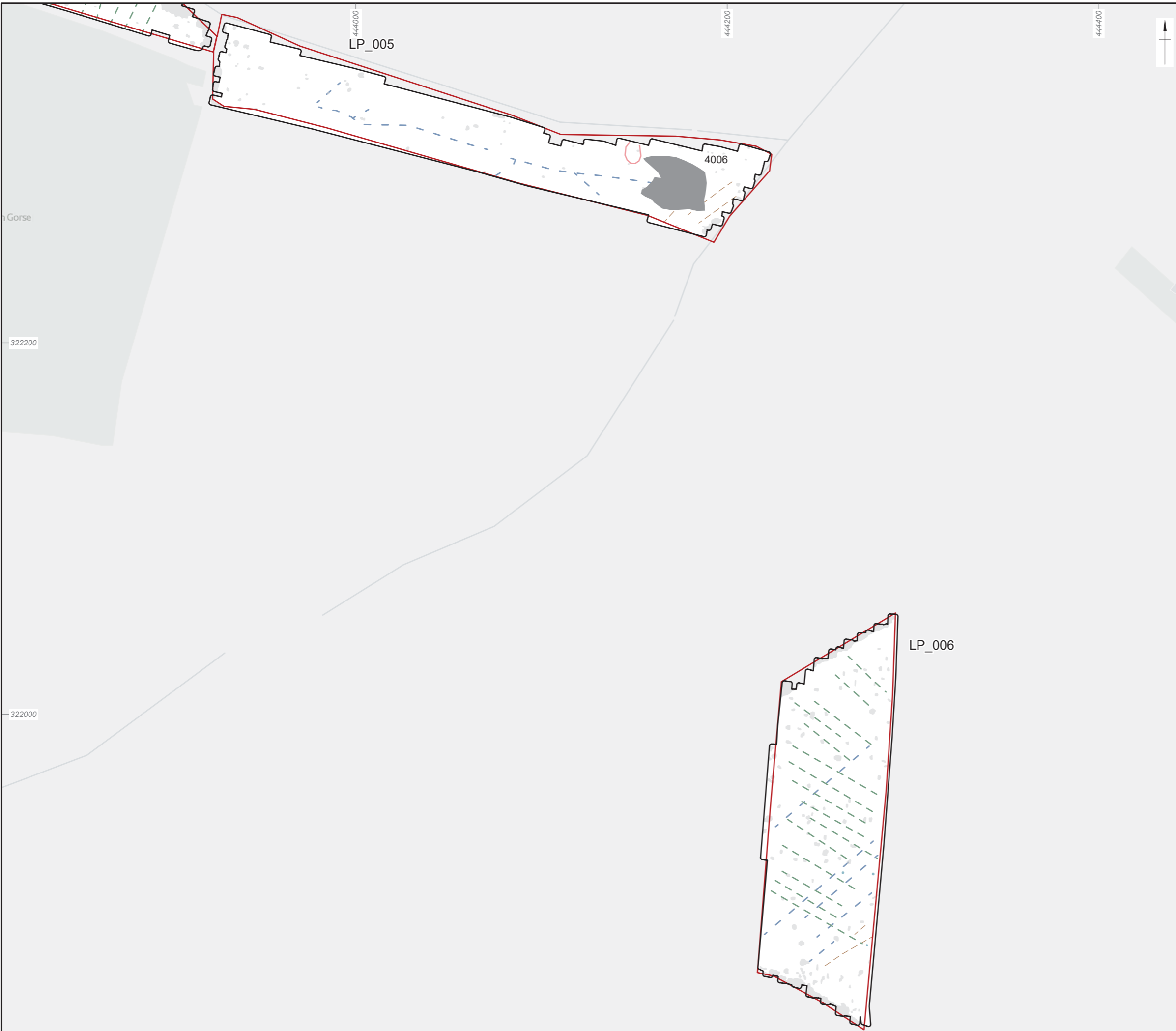
- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 10: Detailed gradiometer survey results: greyscale plot LP\_005 & 006



- Detailed survey extent
- Site boundary
- Possible archaeology
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Increased response
- Ferrous

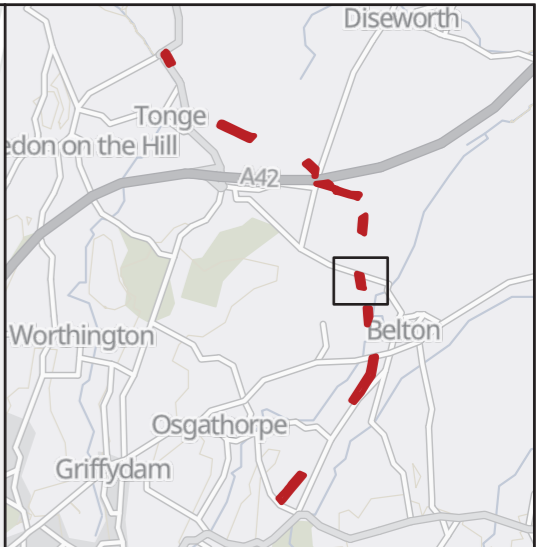
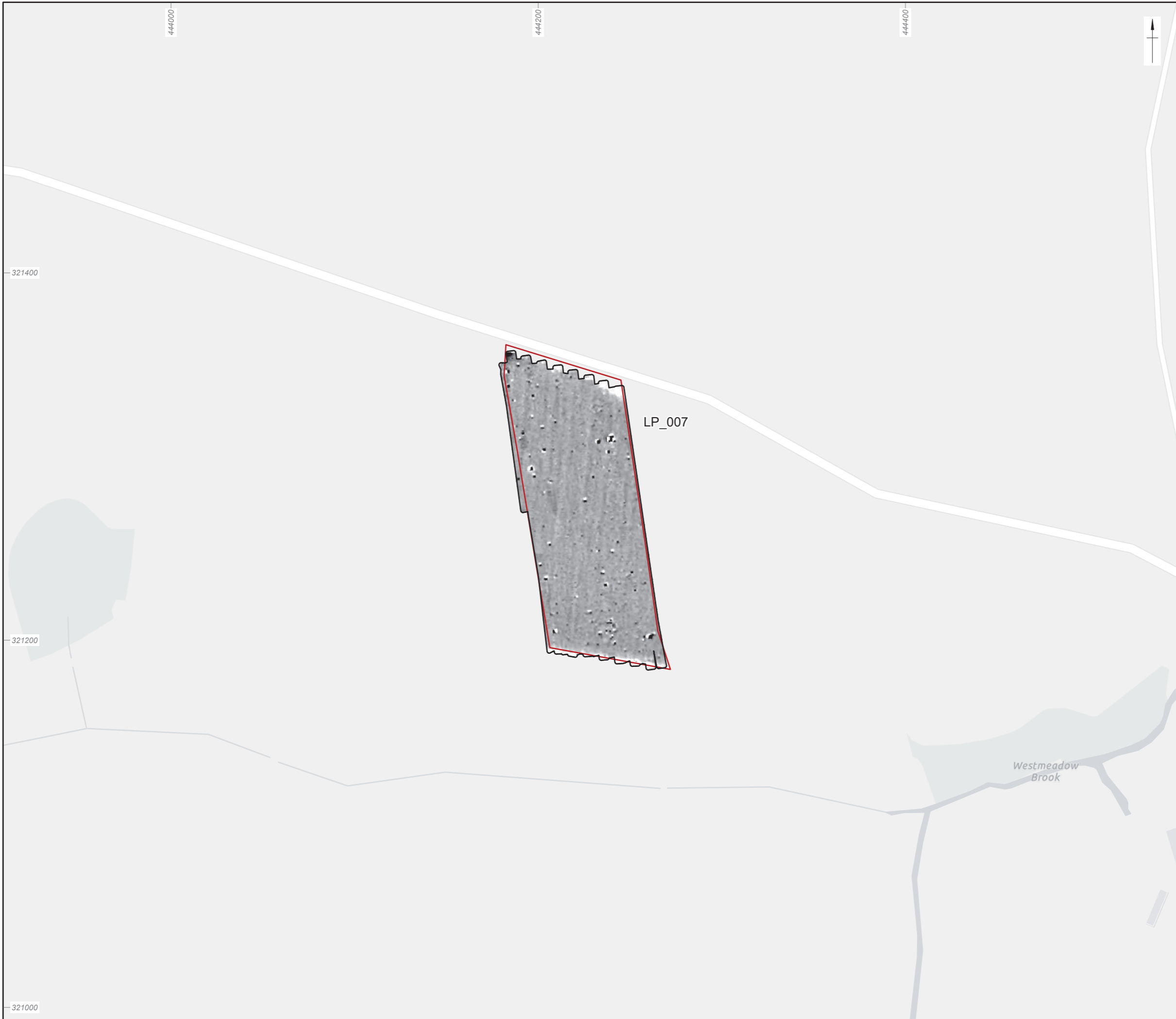




Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

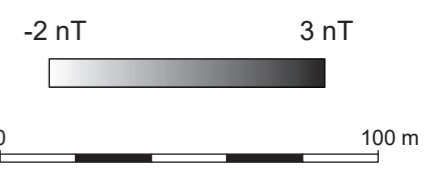
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 11: Detailed gradiometer survey results: interpretation LP\_005 & 006





-  Site boundary
-  Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


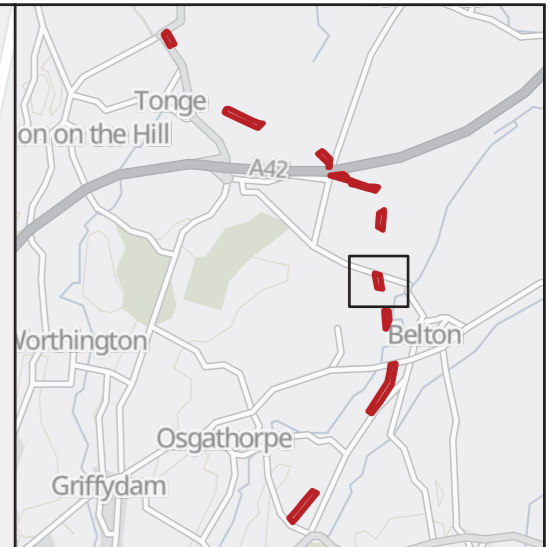
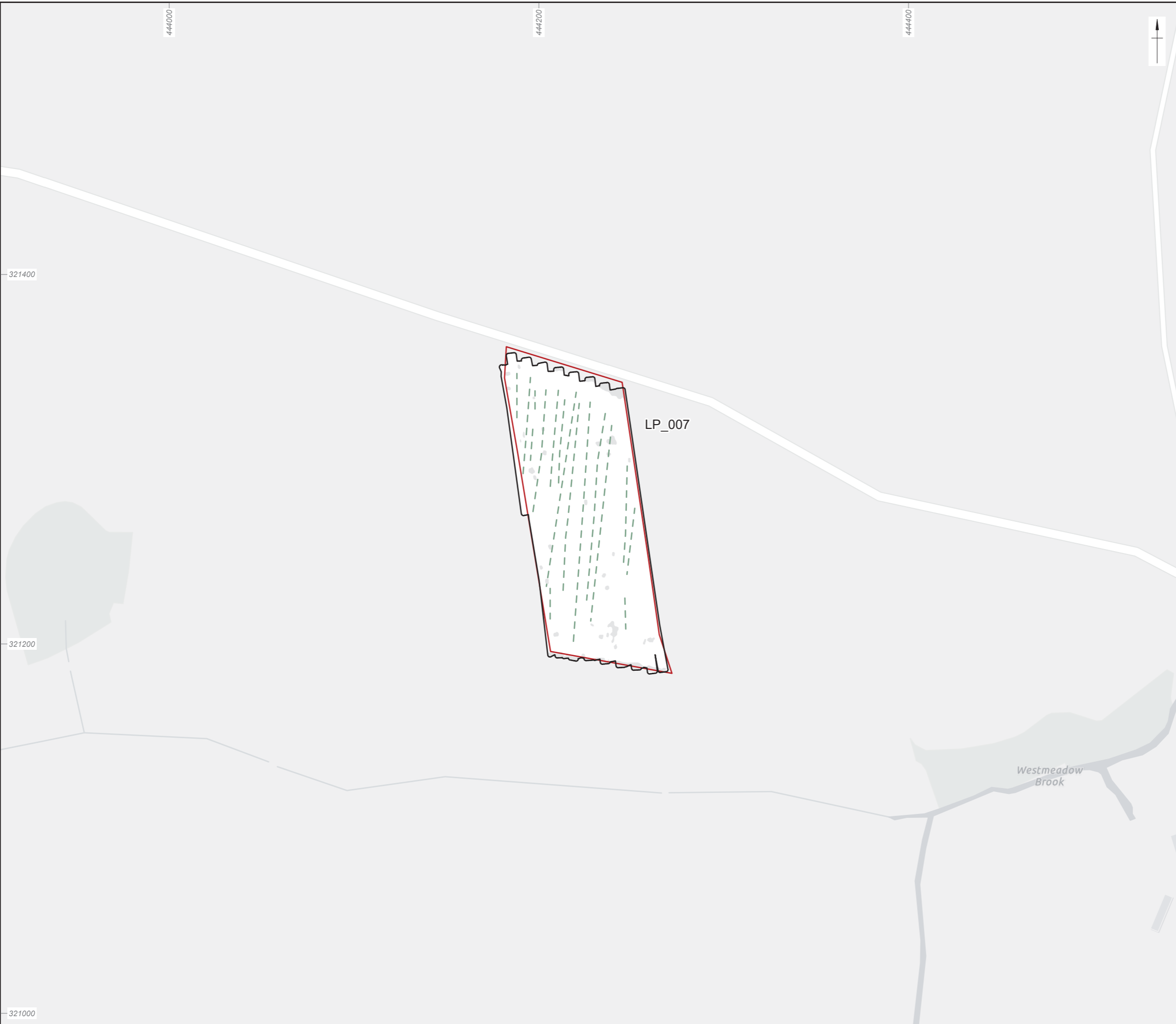




Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	


Figure 12: Detailed gradiometer survey results: greyscale plot LP\_007

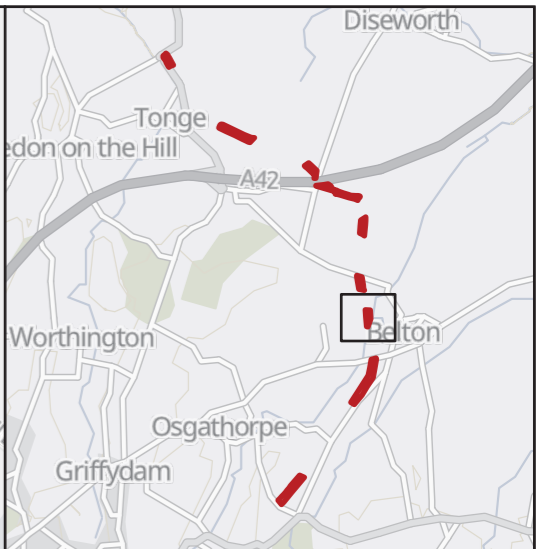
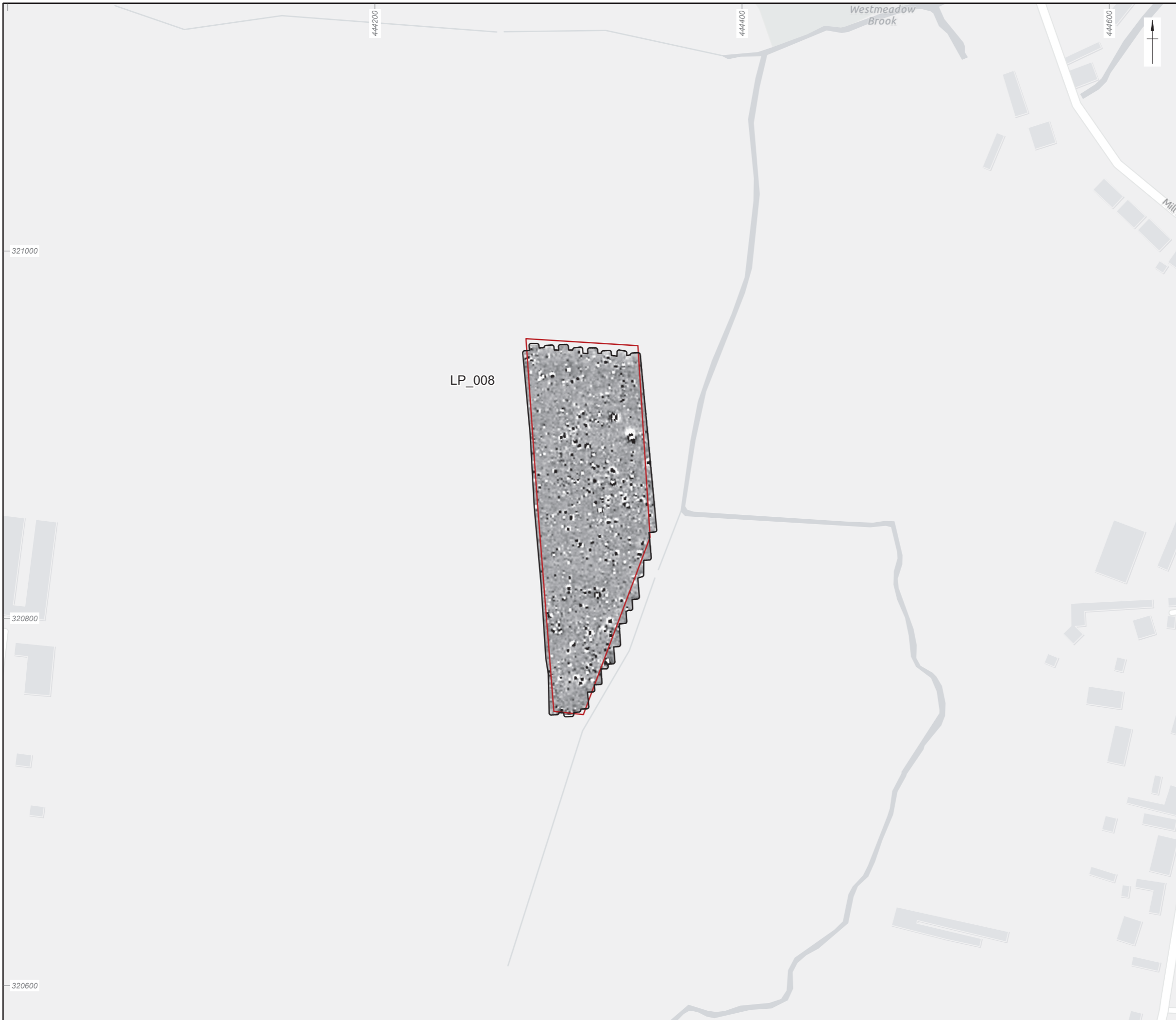




-  Detailed survey extent
-  Site boundary
-  Historic cultivation
-  Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 13: Detailed gradiometer survey results: interpretation LP_007		



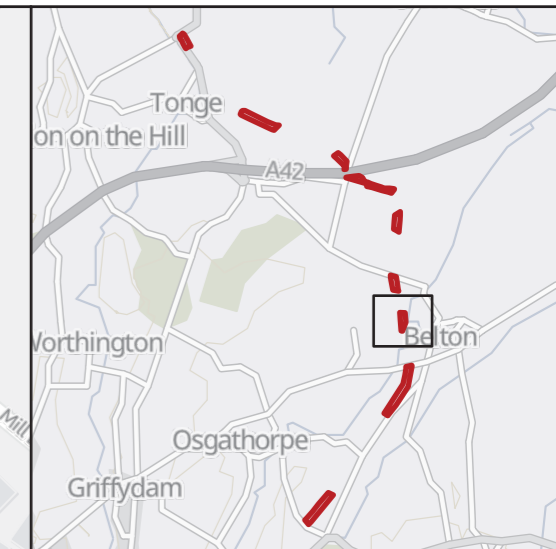
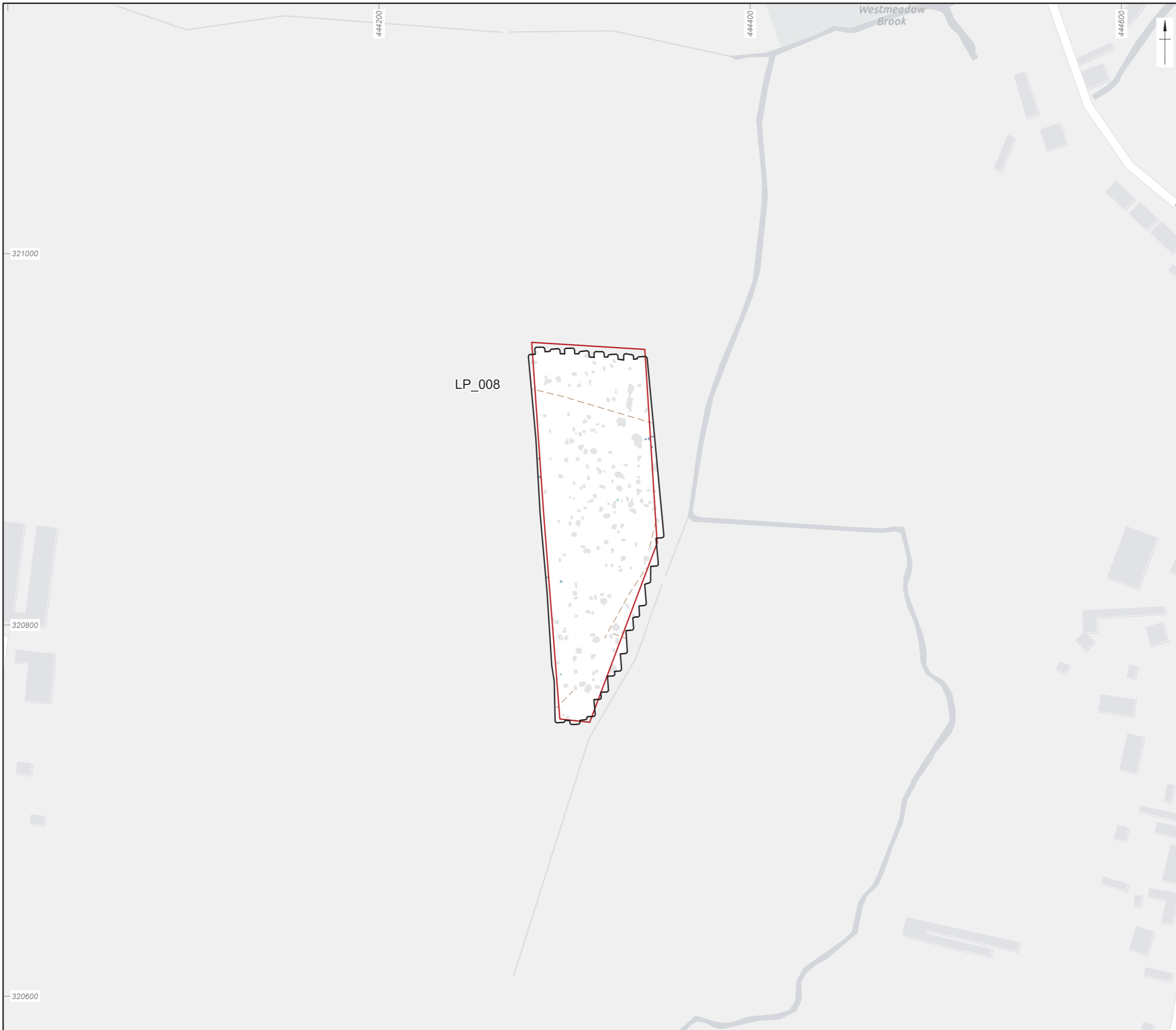
-  Site boundary
-  Detailed survey extent









Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	


Figure 14: Detailed gradiometer survey results: greyscale plot LP\_008



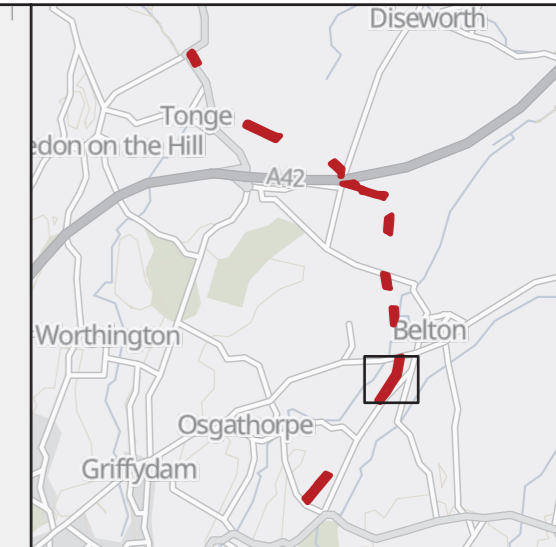
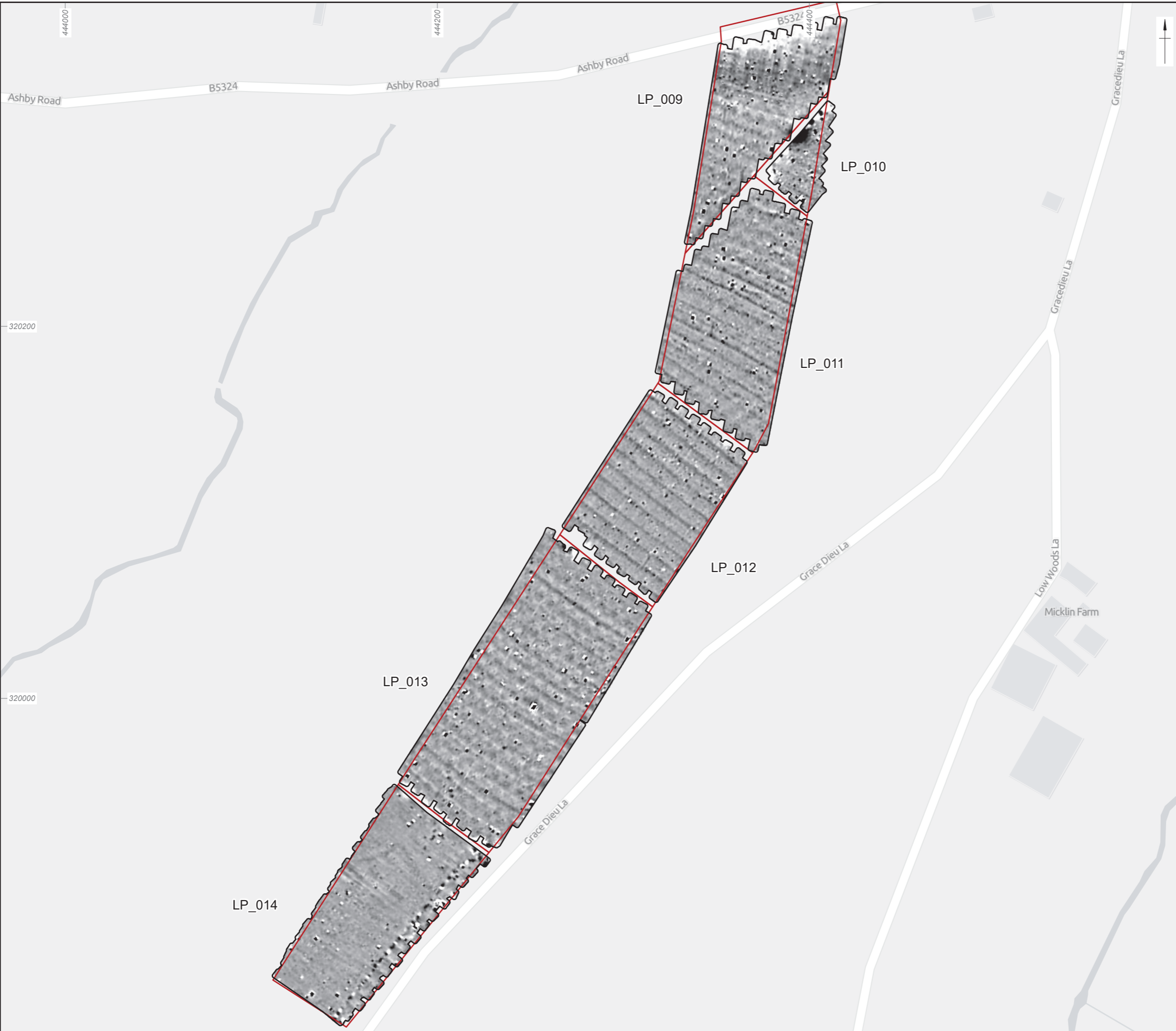
-  Detailed survey extent
-  Site boundary
-  Possible archaeology
-  Agricultural feature
-  Drain
-  Ferrous



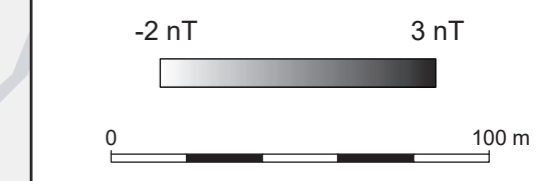
Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	
Figure 15: Detailed gradiometer survey results: interpretation LP_008		

X:\Projects\1275930\GIS\_ArcPro\1275930\1275930.aprx



- Site boundary
- Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


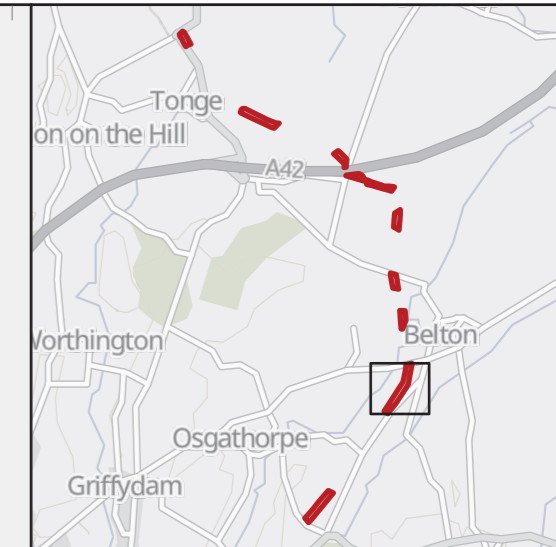
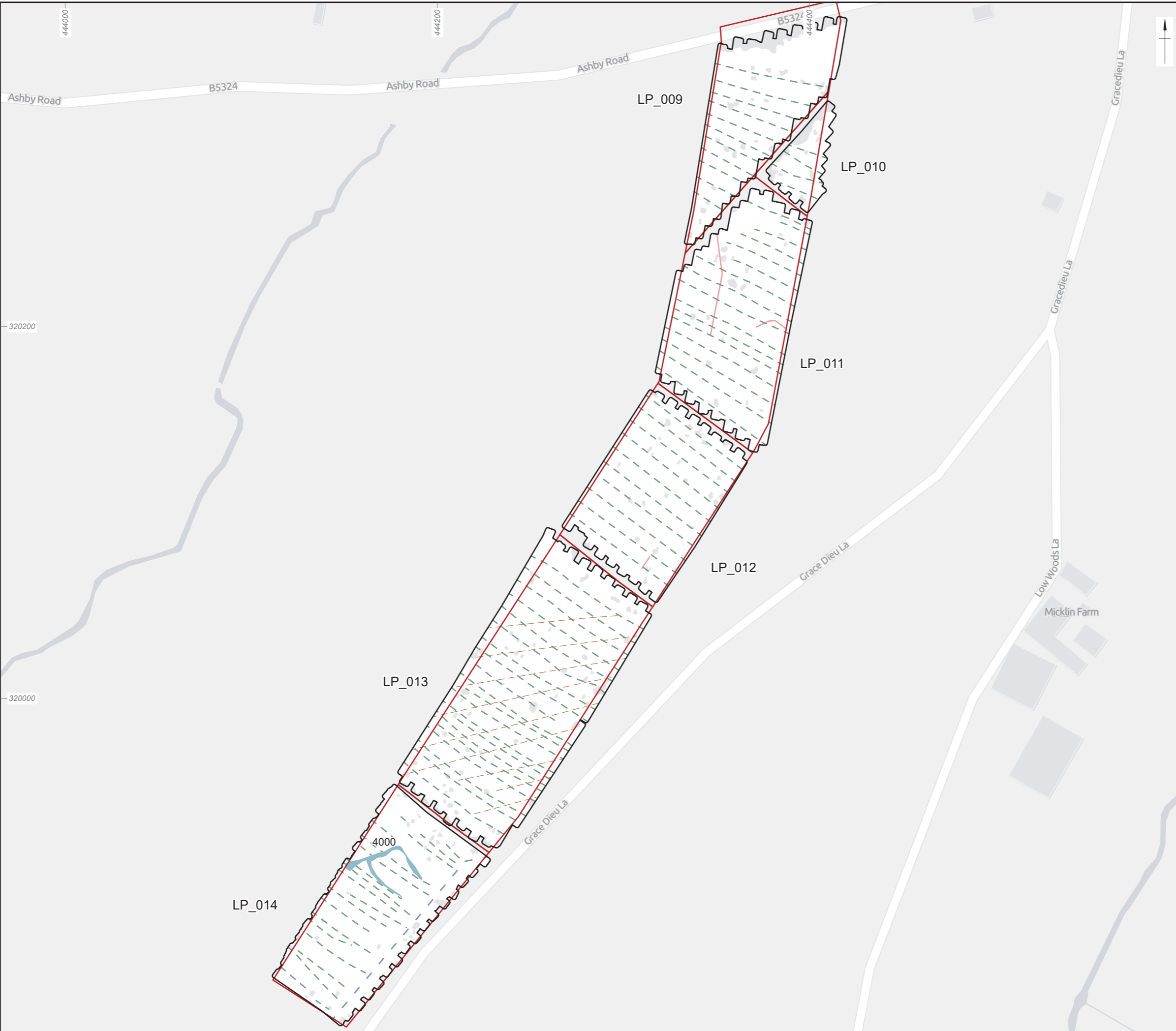
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 16: Detailed gradiometer survey results: greyscale plot LP\_009 - 014



X:\Projects\1275930\GIS\_ArcPro\1275930\1275930.aprx



- Detailed survey extent
- Site boundary
- Possible archaeology
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Ferrous

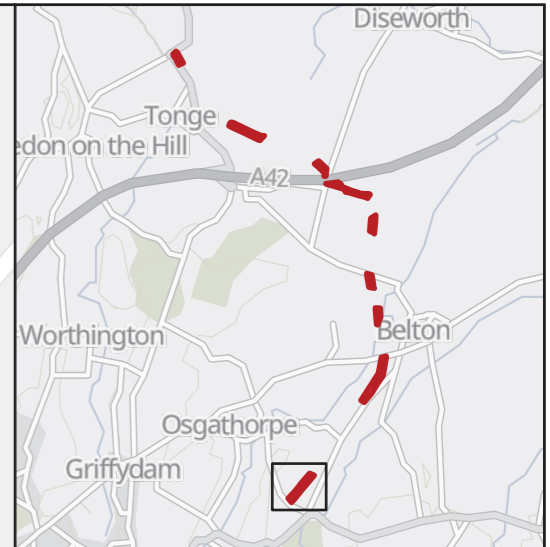




Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

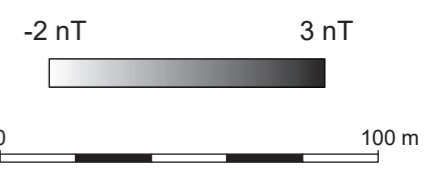
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 17: Detailed gradiometer survey results: interpretation LP\_009 - 014





-  Site boundary
-  Detailed survey extent



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.


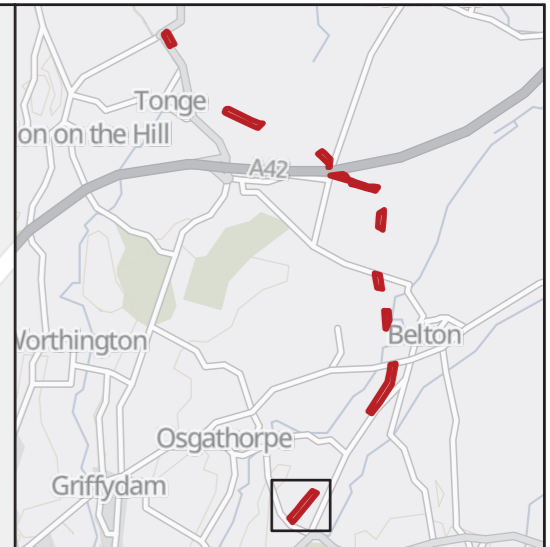
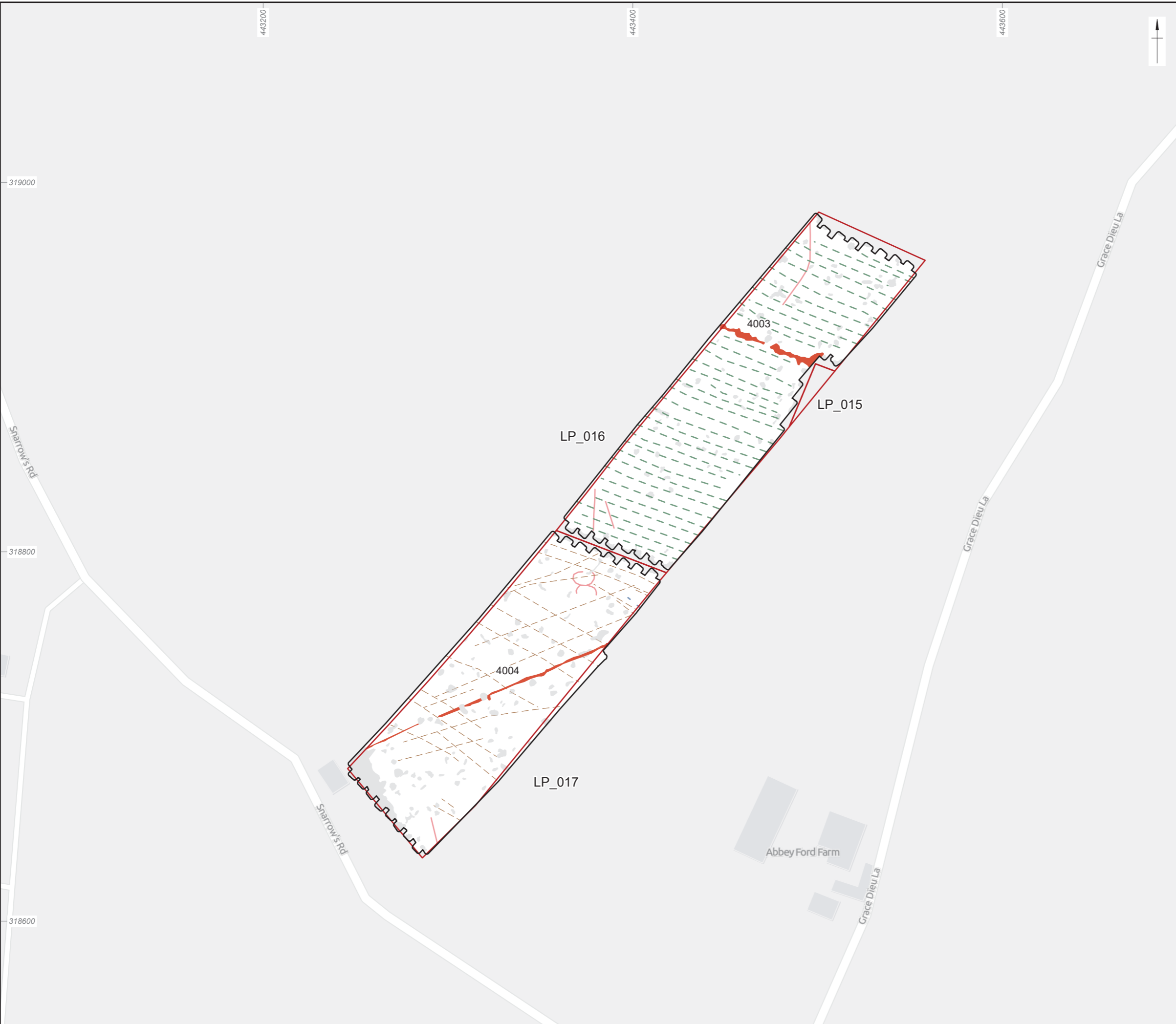
Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 18: Detailed gradiometer survey results: greyscale plot LP\_015 - 017



- Detailed survey extent
- Site boundary
- Former field boundary
- Historic cultivation
- Agricultural feature
- Trend
- Drain
- Ferrous



Coordinate system: OSGB 1936 British National Grid  
 Contains Ordnance Survey data © Crown copyright and database right 2023.  
 This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 23/03/2023	Created by: LJ	
Scale: 1:2,000 at A3	Revision: 1	

Figure 19: Detailed gradiometer survey results: interpretation LP\_015 - 017