

Land at Mill Meadows Farm Westbourne West Sussex

Archaeological Watching Brief



for
Kernon Countryside Consultants

on behalf of
Mr. and Mrs. J Barker

CA Project: AN0090
CA Report: AN0090_1

November 2019



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Archaeological Watching Brief

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Summary

Project Name: Mill Meadows Farm
Location: Westbourne, West Sussex
NGR: 475498 106841
Type: Watching Brief
Date: 3-4 & 15 October 2019
Planning Reference: 16/03998/FUL, 16/03999/FUL, 16/04001/FUL
Location of Archive: The Novium (Chichester Museum)
Site Code: MILL 19

An archaeological watching brief was undertaken by Cotswold Archaeology during groundworks associated with the development of new ponds and polytunnels at Mill Meadows Farm.

No features or deposits of archaeological interest were observed during the groundwork, beyond the remnant water meadow earthworks still visible in the topography of the site.



1. INTRODUCTION

- 1.1 In October 2019 Cotswold Archaeology (CA) carried out an archaeological watching brief for Kernon Countryside Consultants on behalf of Mr. and Mrs. J Barker at Mill Meadows Farm, Westbourne, West Sussex centred on National Grid Reference (NGR) 475498 106841 (see Figure 1) hereafter referred to as the 'site'. The watching brief was undertaken to fulfil a condition attached to a planning consent for new ponds and polytunnels on the site (Planning references: 16/03998/FUL, 16/03999/FUL, 16/04001/FUL).
- 1.2 The watching brief was carried out in accordance with a brief prepared by Naomi Langford Senior Planning Officer at Chichester District Council (CDC), and with a subsequent detailed *Written Scheme of Investigation (WSI)* produced by CA (2017) and approved by the CDC acting on the advice of Naomi Langford. The fieldwork also followed *Standard and guidance: Archaeological watching brief* (ClfA 2014). It was not monitored by Naomi due to the nature of the current findings.

The site

- 1.3 The site is a 0.46ha area within the south-eastern field of Mill Meadows Farm (Fig. 2). The site has a slight gradient as is largely impacted by the water-meadow earthworks (see dimensions and gradient in section 5.2) and lies at approximately 9.5m above Ordnance Datum (aOD) on the east side of site dipping gradually to approximately 7.8m aOD on the west side of site at the Apices. Mill Meadows Farm is accessed by Mill Lane to the east and comprises an area of pasture land east of Emsworth and south of Westbourne.
- 1.5 The underlying bedrock geology within the site consists of London Clay Formation: sedimentary bedrock laid down in the Palaeogene Period, approximately 56-34 million years ago. A superficial deposit of Head, a mix of gravel and clay, is recorded across the site, laid down 3 million years ago in the Quaternary Period, and this was corroborated by excavation at the site (section 5.1).



2. ARCHAEOLOGICAL BACKGROUND

2.1 The archaeological background given below is a succinct summary of a Historic Desk Based Assessment by Cotswold Archaeology (2017a).

Prehistoric (pre-AD 43)

2.2 No evidence of prehistoric activity has been recorded within the Site, and evidence within the surrounding study area is limited to the remains of a pit containing six insitu fragments of Neolithic pottery, recorded 350m to the north-east. Although truncated by ploughing, the pit also contained eleven pieces of worked flint which comprised six pieces of debitage, a flake, part of a core, and two short blades, all of Neolithic date. The only other evidence of recorded earlier prehistoric activity comprised a residual Mesolithic (10,000 – 4000 BC) or early Neolithic (4000 – 3000 BC) blade core, which had been reworked into an awl (Development Archaeology Services Ltd, 2012).

2.3 While there is no evidence of Early Bronze Age (2400 – 1500 BC) activity recorded within 500m of the Site, Middle Bronze Age (1500 – 1100 BC) activity is represented by a bronze palstave recorded 460m to the north-east, and a collared cremation urn c.930m to the northeast. The urn contained both human and animal remains, and a bone bead. Further evidence of Bronze Age activity within the area includes pottery recorded at Foxbury Lane, c. 890m to the northeast.

Roman (AD 43 – AD 410)

2.4 No evidence of Roman activity has been recorded within the Site, and evidence within the wider landscape is limited to a pottery scatter located c. 890m to the northeast, and a bronze *sestertius* of Antonius Pius, and coins of Constantine, and Trajan c. 680m to the northwest (Development Archaeology Services Ltd 2012).

2.5 Evidence of Roman activity within the wider landscape also includes the road running between Bitterne (*Clausentum*) to Chichester (*Noviomagus*), c. 1km south of the Site.

2.6 Based on the evidence discussed above, it probable that this area of Westbourne comprised part of an area of agricultural land during the prehistoric and Roman periods, and was located away from areas of settlement to the north.



Early medieval and medieval (AD 410 – 1539)

- 2.7 The Site is located within the historic parish of Westbourne, which is suggested to take its name from the River Ems, originally referred to as the Bourne, which forms part of the western boundary parish as well as the county boundary between Hampshire and West Sussex (Chichester District Council 2007).
- 2.8 Settlement is likely to have comprised a series of tenements during the medieval period. This is recorded on documents of the late 12th century, as a series of small cottager holdings. Evidence of medieval activity recorded within the area comprises the site of a medieval deer park, c. 470m to the northeast. This was documented in the early 12th century, but the exact location of this park is unknown.
- 2.9 During the medieval period, the core of settlement is likely to have been located to the north of the Site, encompassing the parish Church, and is likely that the site formed part of a wider agricultural hinterland, to the south of the settlement.

Post-medieval and modern (1540 to present)

- 2.10 During the post-medieval period, agricultural activity continued within the landscape surrounding Westbourne; by the end of the 18th century there were c. 660 acres of common fields and 670 acres of commons in the parish. The landscape was subject to enclosure between 1818 and 1823, with the commons subsequently enclosed in 1859 (Development Archaeology Services Ltd, 2012).
- 2.11 The site appears to be associated with the 'bedwork-type' of floated meadows, which were associated with a number of features within the village via the River Ems, during the post-medieval period (18th century) onwards, but more broadly had their technical peak in the 17th century (CA 2017a, 24). The 1785 Survey and Plans of the Estates of Richard Barwell in Westbourne show the site (then part of 'South Meadow') to be spatially and functionally associated with water courses channelled towards Lumley Mill (extant Grade II* Listed building) to the south, whereby the control of water-flow to for the operation of the mill would have been directly affected by the flooding of the site, and consequently both elements would have been regarded as complimentary components of this historic landscape (CA 2017a, 28-29).

2.12 Topography shows the water meadows on site were historically fed by the channel immediately to the east (mill-race) and drained to the channel to the west of site (River Ems). By the twentieth century this form of agriculture would have been rendered unprofitable by advances in mechanical farming methods, if it had still utilised this function by this point (CA 2017a, 23-26)

3. AIMS AND OBJECTIVES

3.1 The objectives of the archaeological works were:

- to monitor groundworks, and to identify, investigate and record all significant buried archaeological deposits revealed on the site during the course of the development groundworks;
- at the conclusion of the project, to produce an integrated archive for the project work and a report setting out the results of the project and the archaeological conclusions that can be drawn from the recorded data.

4. METHODOLOGY

Trench 1 Location and Constraints

4.1 **Trench 1**, encompassing the entire excavated watching brief area. It was a 730m² sub-rectangular trench (16% of site area) parallel with, and between the Apices of two 'Bedwork' Water Meadow earthwork ridges known as 'Beds', and centred on the furrow-like water meadow channel base or drain (**103**). **Trench 1** base was divided into three areas, as an earlier attempt at making pond banks was going to be reused for the current construction of ponds (Figure 2), and these earlier banks were not dug through, only reinforced. This earlier construction also meant that there was moderate modern alteration and disturbance to the original integrity of the water meadow earthwork at this point (Figure 2).

4.2 The fieldwork followed the methodology set out within the WSI (CA 2017b). An archaeologist was present during intrusive groundworks comprising the above **Trench 1**, but also a prior Topographic survey of the site area (0.46ha) in the north-east corner of the south-eastern field (Figures 1 & 2).



4.3 Where archaeological deposits were encountered written, graphic and photographic records were compiled in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*.

4.4 The archive from the evaluation is currently held by CA at their offices in Andover. Subject to the agreement of the legal landowner the site archive will be deposited with Chichester's Museum Service. A summary of information from this project, set out within Appendix C will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIGURES 2-5)

Geology

5.1 The natural geological substrate (**102**) consisting of ≤ 70 mm sub angular flint gravel in a light grey iron-mottled silty clay matrix was revealed at an approximate depth of 0.26m below present ground level. This was overlain by a light grey iron-mottled silty clay subsoil within the water meadow beds (**101**) averaging 0.16m in thickness, which was in turn sealed by 0.1m of dark greyish brown clayey silt topsoil (**100**).

Trench 1

5.2 **Trench 1** only revealed the depth of the water meadow earthwork, which was the very base of the drainage channel (**103**). When excavated, a remnant secondary fill of light brownish grey silty clay (**104**) was found to a depth of 0.11m beneath the topsoil. The base was a flat 0.2m wide channel which rose moderately on either side by a height of 0.1m before changing to a shallower gradient up to the Apex of the beds on either side (Figure 3). The width of the earthwork channels within the site area (measured from Apex to Apex at the centre of each ridge 'Bed') was approximately 17m, with a height at the point of the excavated section of up to 0.66m. There was a 1.2° gradient to the channel where at the east end of **Trench 1** the basal channel (**103**) was 0.95m higher than at the west end.

6. DISCUSSION

6.1 Despite the archaeological potential of the application area (see archaeological background above), the watching brief identified no further archaeological remains to the already evident water meadow earthworks within the area of observed



groundworks. The absence of prior archaeological deposits may suggest that considerable truncation occurred in their construction, not least that no subsoil was evident in the channels/drains, only in the bedwork, and the current excavation was centred on- and aligned to this element of the water meadow earthwork.

- 6.2 Furthermore, other modern drainage pipes could be seen draining into the western flanking water channel (River Ems), and also traversing beneath the eastern flanking water channel (mill-race) that were aligned discordantly with the water-meadow earthworks and constitute further modern disturbance to these topographically visible features.

7. CA PROJECT TEAM

Fieldwork was undertaken by Jeremy Clutterbuck. The report was written by Jeremy Clutterbuck. The illustrations were prepared by Gemma Bowen. The archive has been compiled by Richard Paxford, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Ray Kennedy.

8. REFERENCES

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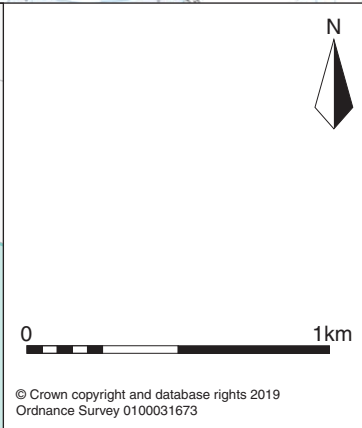
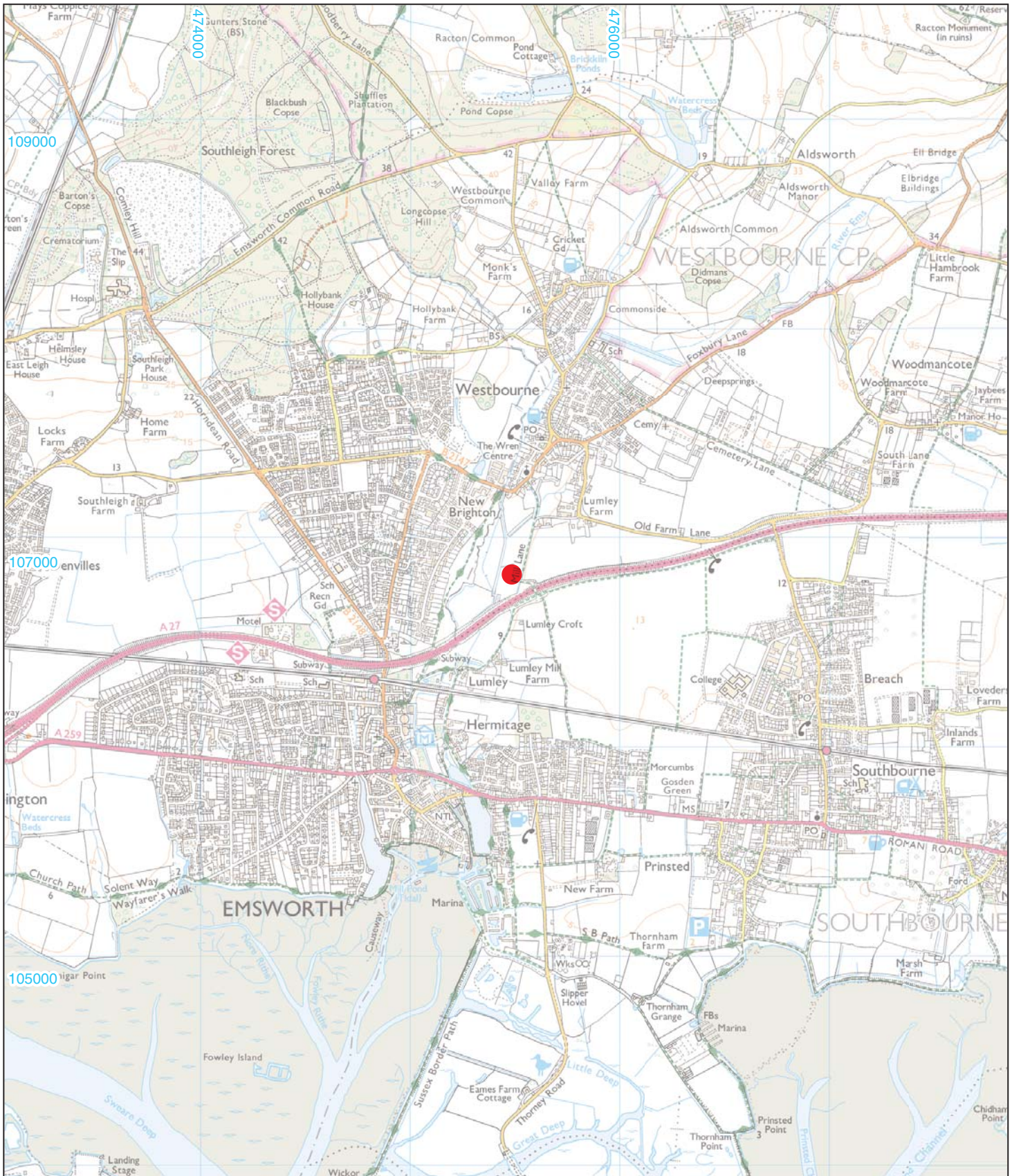


APPENDIX A: CONTEXT DESCRIPTIONS

Trench No.	Context No.	Type	Fill of	Context interpretation	Description	L (m)	W (m)	Depth/thickness (m)	Spot-date
1	100	Layer		Topsoil	Dark greyish brown clayey silt	50.3	14.6	0.1	modern
1	101	Layer		Subsoil	Light grey iron-mottled silty clay with occasional charcoal flecks	50.3	14.6	0.16	
1	102	Layer		Natural	Light grey iron-mottled silty clay with 50% ≤70mm sub angular flint gravel	50.3	14.6	>0.18	
1	103	Cut		Base of water meadow earthwork	Sinuuous Linear, gentle slope but broken more moderately to flat base	>1.8	0.8	0.76	Post-med
1	104	Fill	102	Secondary Fill	Light brownish grey silty clay	>30	0.66	0.11	Post-med

APPENDIX B: OASIS REPORT FORM

PROJECT DETAILS		
Project Name	Mill Meadows Farm, Westbourne	
Short description	An archaeological watching brief was undertaken by Cotswold Archaeology during groundworks associated with the development of new ponds and polytunnels at Mill Meadows Farm. No features or deposits of archaeological interest were observed beyond the remnant water meadows earthworks still visible in the topography of the site during the groundworks.	
Project dates	3-4 & 15 October 2019	
Project type	Watching Brief	
Previous work	None	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Mill Meadows Farm, Westbourne, West Sussex	
Study area (M ² /ha)	0.46ha	
Site co-ordinates	475498 106841	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator	Naomi Langford (Chichester District Council)	
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Ray Kennedy	
Project Supervisor	Jeremy Clutterbuck	
MONUMENT TYPE	None	
SIGNIFICANT FINDS	None	
PROJECT ARCHIVES		
	Intended final location of archive (museum/Accession no.)	Content
Physical	Andover	Ceramics
Paper	Andover	Context sheets,
Digital	Andover	Database, digital photos
BIBLIOGRAPHY		
CA (Cotswold Archaeology) 2019 <i>Mill Meadows Farm, Westbourne, West Sussex: Archaeological Watching Brief</i> . CA typescript report AN0090_1		





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PROJECT TITLE
 Mill Meadows Farm, Westbourne,
 West Sussex

FIGURE TITLE
 Site location plan

DRAWN BY	GB	PROJECT NO.	AN0090	FIGURE NO.	
CHECKED BY	DJB	DATE	31/10/2019		
APPROVED BY	JC	SCALE@A4	1:25,000		1



- Site boundary
- Evaluation trench
- Cut feature
(excavated / unexcavated)
- Topographic survey results
- Ⓐ ↑ Ⓐ Location of section



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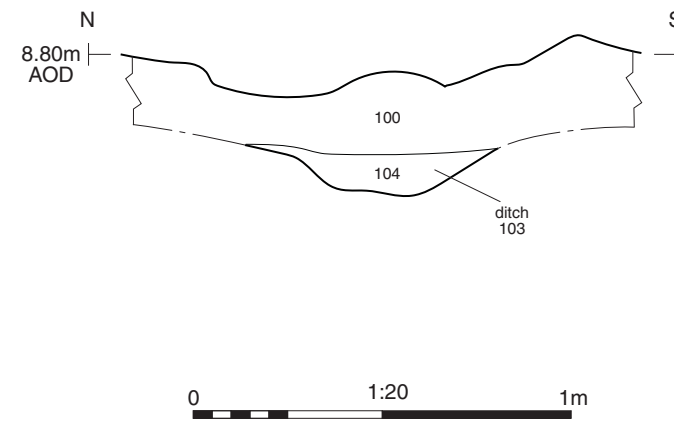
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PROJECT TITLE
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FIGURE TITLE
 Trench location plan with topographic
 survey

<small>DRAWN BY</small> GB	<small>PROJECT NO.</small> AN0090	<small>FIGURE NO.</small> 2
<small>CHECKED BY</small> DJB	<small>DATE</small> 04/11/2019	
<small>APPROVED BY</small> JC	<small>SCALE@A3</small> 1:600	

Section AA



Oblique view of Section AA through basal channel 'drain' (103) of water meadow earthwork, looking north-west (1m scale)



Basal channel 'drain' (103) of water meadow earthwork, looking south-west (1m scales)

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FIGURE TITLE
Section and photographs

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CHECKED BY DJB DATE 04/11/2019
APPROVED BY JC SCALE@A3 1:20 3



View across Trench 1, looking south-west (1m scale)



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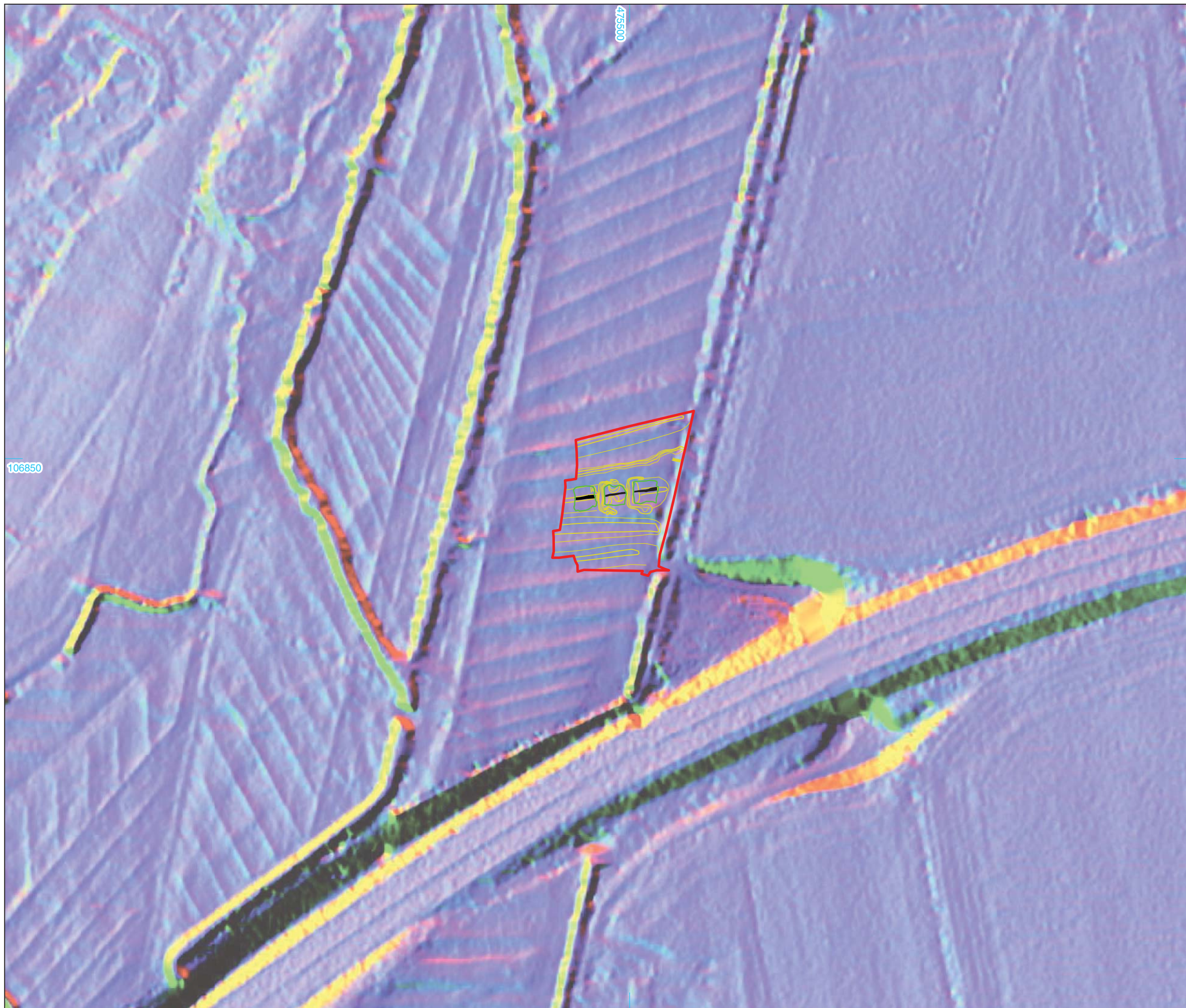
PROJECT TITLE

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FIGURE TITLE

Trench 1: photograph

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CHECKED BY	DJB	DATE	04/10/2019	
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- Site boundary
- Evaluation trench
- Cut feature
- Topographic survey results



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PROJECT TITLE
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FIGURE TITLE
 Trench location plan and topographic
 survey results overlain LiDAR

DRAWN BY GB CHECKED BY DJB APPROVED BY JC	PROJECT NO. AN0090 DATE 04/11/2019 SCALE@A3 1:2000	FIGURE NO. 5
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