



## Longnor STW, Longnor, Staffordshire

Earthwork Survey





**LONGNOR SEWAGE TREATMENT WORKS,  
LONGNOR, STAFFORDSHIRE**

**Earthwork Survey**

Prepared for:  
MWH Global,  
Gregge Street,  
Heywood,  
Lancashire,  
OL10 2DX

by  
**Wessex Archaeology**  
Unit R6,  
Riverside Block,  
Sheaf Bank Business Park,  
Prospect Road,  
Sheffield,  
S2 3EN

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## QUALITY ASSURANCE

SITE CODE	<b>75361</b>	ACCESSION CODE		CLIENT CODE	<b>P8804</b>
PLANNING APPLICATION REF.		NGR	<b>408915, 364603</b>		

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**LONGNOR STW,  
LONGNOR, STAFFORDSHIRE**

**Earthwork Survey**

**Contents**

	Summary.....	iv
	Acknowledgements.....	v
<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
	1.1 Project Background.....	1
	1.2 The Site, location and geology.....	1
<b>2</b>	<b>AIMS AND OBJECTIVES.....</b>	<b>2</b>
	2.1 Aims.....	2
	2.2 Objectives.....	2
<b>3</b>	<b>METHODOLOGY.....</b>	<b>2</b>
	3.1 Earthwork Survey.....	2
<b>4</b>	<b>RESULTS.....</b>	<b>3</b>
	4.1 Introduction.....	3
	4.2 Interpretation.....	3
<b>5</b>	<b>DISCUSSION.....</b>	<b>3</b>
	5.1 Evidential Value.....	3
	5.2 Historical Value.....	4
	5.3 Conclusions.....	4
<b>6</b>	<b>REFERENCES.....</b>	<b>5</b>

**Figures**

Figure 1	Site location plan
Figure 2	Hachure plan
Figure 3	Interpretive hachure plan
Figure 4	Site boundary overlain on Longnor map, c.1800
Figure 5	Site boundary overlain on 1879-1880 Ordnance Survey map

**Plates**

Plate 1	Southern edge of northwest field showing shallow ridge and furrows, looking northeast
Plate 2	North-south field boundary, looking south
Plate 3	Northern edge of possible platform, looking east



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**LONGNOR STW,  
LONGNOR, STAFFORDSHIRE****Earthwork Survey****Summary**

Wessex Archaeology (WA) was commissioned by MWH Global to undertake a programme of archaeological survey on the site of a proposed sewage treatment works at Longnor, Staffordshire (National Grid Reference 408915, 364603). The site comprises pasture with extant earthworks immediately north of the River Manifold.

The archaeological implications of the proposal could not be adequately assessed on the basis of available information (Whiteley 2010), and therefore an archaeological evaluation by earthwork survey was requested by Sarah Whiteley, Senior Conservation Archaeologist for the Peak District National Park Authority (PDNPA). The initial report has been updated to include the area to the north of the original survey area where a proposed sewer pipe will be located.

Earthwork survey was carried out using a Leica GNSS Viva GPS with survey points taken at the top-of-slope and break-of-slope on all visible earthworks within the footprint of development. From this a hachure plot was produced and tied in to an Ordnance Survey 1:2500 map of the area.

Analysis of historic mapping indicates that the majority of the remaining earthworks are the remnants of field boundaries associated with the enclosures that were in existence before the River Manifold was canalised in the late 18<sup>th</sup>/early 19<sup>th</sup> century. A single square earthwork measuring 15 x 12m suggests a possible platform for a structure.

The earthworks recorded are types represented elsewhere in the region. However, the direct association of these earthworks with the canalisation of the river makes them significant in a local context.

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**LONGNOR STW,  
LONGNOR, STAFFORDSHIRE****Earthwork Survey****Acknowledgements**

This project was commissioned MWH Global and Wessex Archaeology is grateful to Shauna Barrett, Alanna Gilligan and Ian Webster in this regard. Wessex Archaeology would also like to thank Sarah Whiteley of the Peak District National Park Authority (PDNPA) for her assistance in the project.

Fieldwork was carried out by Iain McIntyre and Ashley Tuck. The report was researched and compiled by Iain McIntyre and Grace Corbett with illustrations by Chris Breeden. The project was managed for Wessex Archaeology by Richard O'Neill.

**LONGNOR STW,  
LONGNOR, STAFFORDSHIRE****Earthwork Survey****1 INTRODUCTION****1.1 Project Background**

1.1.1 Wessex Archaeology (WA) was commissioned in September 2010 by MWH Global to undertake a programme of archaeological survey on the site of a proposed sewage treatment works at Longnor, Staffordshire (hereafter, 'the Site'). The Site is centred on National Grid Reference (NGR) 408915, 364603. In October 2011 Wessex Archaeology was commissioned to carry out further survey at the Site in order to include the route of the sewer pipe which was not included in the previous survey (**Figure 1**).

1.1.2 The north-west of the Site corresponds to an area of well preserved ridge and furrow earthworks. The remains of field boundaries associated with the enclosures that were in existence before the river was canalised in the early 19th century also survive here as a series of low banks and lynchets.

1.1.3 The archaeological implications of the proposal could not be adequately assessed on the basis of available information (Whiteley 2010) and therefore an archaeological evaluation by earthwork survey was requested by Sarah Whiteley, Senior Conservation Archaeologist for the Peak District National Park Authority (PDNPA).

**1.2 The Site, location and geology**

1.2.1 The Site encompasses an area of approximately 0.7 hectares and is located approximately 300m south from the centre of the village of Longnor and immediately north of the river Manifold. A sewer pipe will run from the existing Severn Trent Water building in Longnor to the proposed Site, with a further small section of pipe leading from the Site to the River Manifold. Buxton Road (B5053) lies on the western side of the Site (**Figure 1**).

1.2.2 The northern end of the Site sits at approximately 278 metres above Ordnance Datum (aOD) from there it slopes south to the base of the slope at 257m aOD. The southern end of the sites sits on a flat plateau at approximately 257m aOD.

1.2.3 The Site lies within three distinct fields with low-lying dry-stone walls, thick hedge or small streams as boundaries. The current use of the fields at the time of the survey was for grazing.

1.2.4 The bedrock geology is composed of Kinderscoutian Longnor sandstones of the Carboniferous period overlain by a superficial geology of alluvial clay, silt, sand and gravel (British Geological Survey 1978).

## **2 AIMS AND OBJECTIVES**

### **2.1 Aims**

2.1.1 The aim of the field survey was to gather sufficient information to establish presence/absence, character and extent of the earthwork remains within the Site.

### **2.2 Objectives**

2.2.1 The objectives were to:

- establish the presence/absence, character and extent of extant earthwork remains within the Site that may be threatened by the proposed development;
- produce a report which will present the project information in sufficient detail to allow interpretation without recourse to the project archive;
- provide an interpretation of results, placing them in a local and regional context;
- facilitate judgements on the status of the archaeological resource and allow the formulation of an appropriate response ('a mitigation strategy') to the impact of any surviving archaeological features and deposits.

## **3 METHODOLOGY**

### **3.1 Earthwork Survey**

3.1.1 All fieldwork was undertaken in accordance with recognised professional standards issued by the Institute for Archaeologists (2008) and English Heritage (2007).

3.1.2 Earthwork survey was carried out using a Leica GNSS Viva GPS. Survey points were taken at the top-of-slope and break-of-slope on all visible earthworks with points along each at no more than 0.5m apart.

3.1.3 Only the observable earthworks within the footprint of development were surveyed. Notes on surface condition, land use and topography, as well as specific observations on the earthworks themselves, were taken and recorded using Wessex Archaeology's pro forma recording sheets and recording system.

3.1.4 A photographic record was generated consisting of digital (.jpg) photographs to aid in the interpretation of the Site.

3.1.5 Fieldwork was carried out on the 4<sup>th</sup> August 2010 and October 27<sup>th</sup> 2011.

## 4 RESULTS

### 4.1 Introduction

4.1.1 A hachure plot was produced and tied in to an Ordnance Survey 1:2500 map of the area. **Figure 2** shows the result of the earthwork survey.

4.1.2 All observable earthworks were very shallow in nature with heights of no more than 0.4m. Often the break-of-slope at the base of the earthworks was imperceptible.

### 4.2 Interpretation

4.2.1 **Figure 3** shows the subsequent interpretation of the results.

4.2.2 Within the northeast field long parallel ridges are observed running approximately north-south (**Plate 1**). These represent ridge and furrow earthworks; their southern ends sitting within the proposed footprint of development.

4.2.3 Within the southern end of the Site a series of earthworks were observed; the majority orientated north-south or east-west (**Plate 2**). Analysis of map evidence, including a late 18<sup>th</sup>-/early 19<sup>th</sup>-century map of Longnor held in the Derbyshire Record Office (**Figure 4**) and an 1879-1880 Ordnance Survey map (**Figure 5**), indicates that the majority of these earthworks are the remains of former field boundaries associated with the enclosures that were in existence before the River Manifold was canalised in the late 18<sup>th</sup>/early 19<sup>th</sup> century.

4.2.4 The only earthwork that does not correspond to a former field boundary was located to the southwest of the Site (**Plate 3**). A single square earthwork measuring 15 x 12m suggests a possible platform for a structure. The location of this platform to the former field boundaries may indicate a structure associated with these enclosures.

4.2.5 No further archaeological features were observed within the new Site boundary during the survey conducted in October 2011. Ridge and furrow was identified to the east of the Site however this was outside of the pipeline route. An area of disturbance was noted at the southeast of the Site, where the proposed sewer pipe leads to the River.

## 5 DISCUSSION

### 5.1 Evidential Value

5.1.1 Determination of the significance of the remains outlined below comes from the assessment of the earthworks in relation to English Heritage (2008) guidance.

5.1.2 The physical earthworks themselves are shallow, often being no more than 0.4m high.



- 5.1.3 The Historic Environment Record (HER; Heritage Gateway) records numerous examples of the types of earthwork identified on the Site occurring elsewhere in the region.
- 5.1.4 The ridge and furrow system observed on the Site is not unique to the area. Similar earthworks are observed at Hollinsclough (HER No. 50991) and Sheen (HER No. 50951), within five kilometres of the Site.
- 5.1.5 Evidence for past field boundaries can also be observed at Fawfieldhead (HER No. 50934), four kilometres from the Site, as well as at Hollinsclough (HER No. 05518) and Sheen (HER No. 50960).
- 5.1.6 The possible platform observed in the southwest of the Site is also not unique to the area. Other examples of building platforms can be observed at Hurdlow Town (HER No. 6863), five kilometres to the northeast, and Sheen (HER No. 50947).

## **5.2 Historical Value**

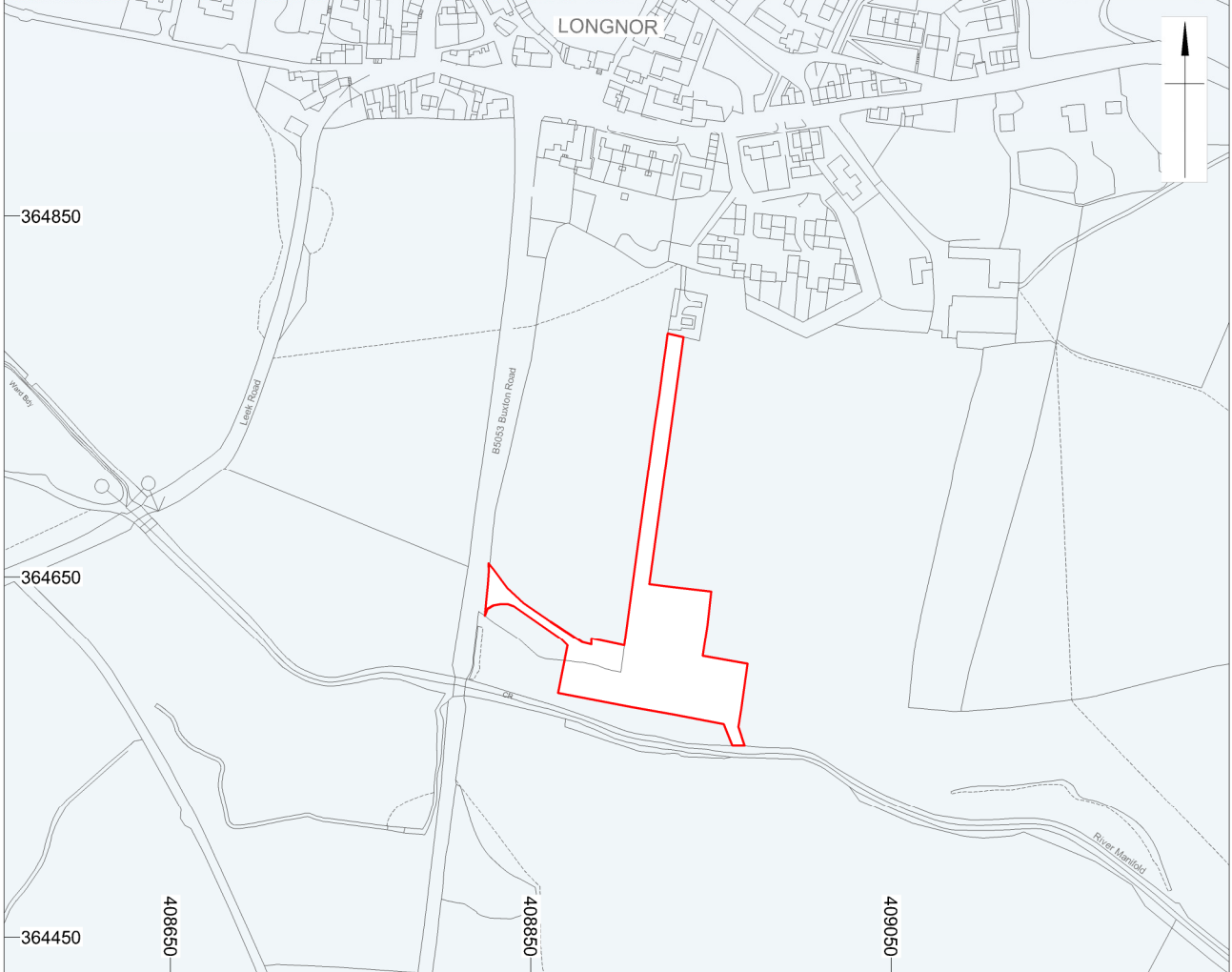
- 5.2.1 Though the individual earthworks are not unique, and examples are seen in many surrounding villages and across the Peak District National Park, as a group the earthworks illustrate the changing nature of post-medieval agricultural land use in the region through enclosure and tenant farming. In addition, the association of the field boundaries with the canalisation of the river makes them of high local interest, as there are few clear examples of river canalisation in the area.


## **5.3 Conclusions**

- 5.3.1 Extant earthworks representative of ridge and furrow, former field boundaries and a possible building platform were identified by the survey. The earthworks appear to predate the canalisation of the River Manifold in the late 18<sup>th</sup>/early 19<sup>th</sup> century. The quality of the earthworks present on the site is considered low, however their significance, when placed in a local context, is high, due to their association with the river canalisation.
- 5.3.2 The proposed development includes construction of an access road, RBC (Rotating Biological Contactor), two reed beds, a dry stone wall, a timber post and rail fence, removal of a hedge and associated drainage works. The local significance of the earthworks, as a rare example of the impact of river canalisation in the area, will be severely denuded by the proposed development.

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 Site location/Development area

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Site location

Figure 1



Development area



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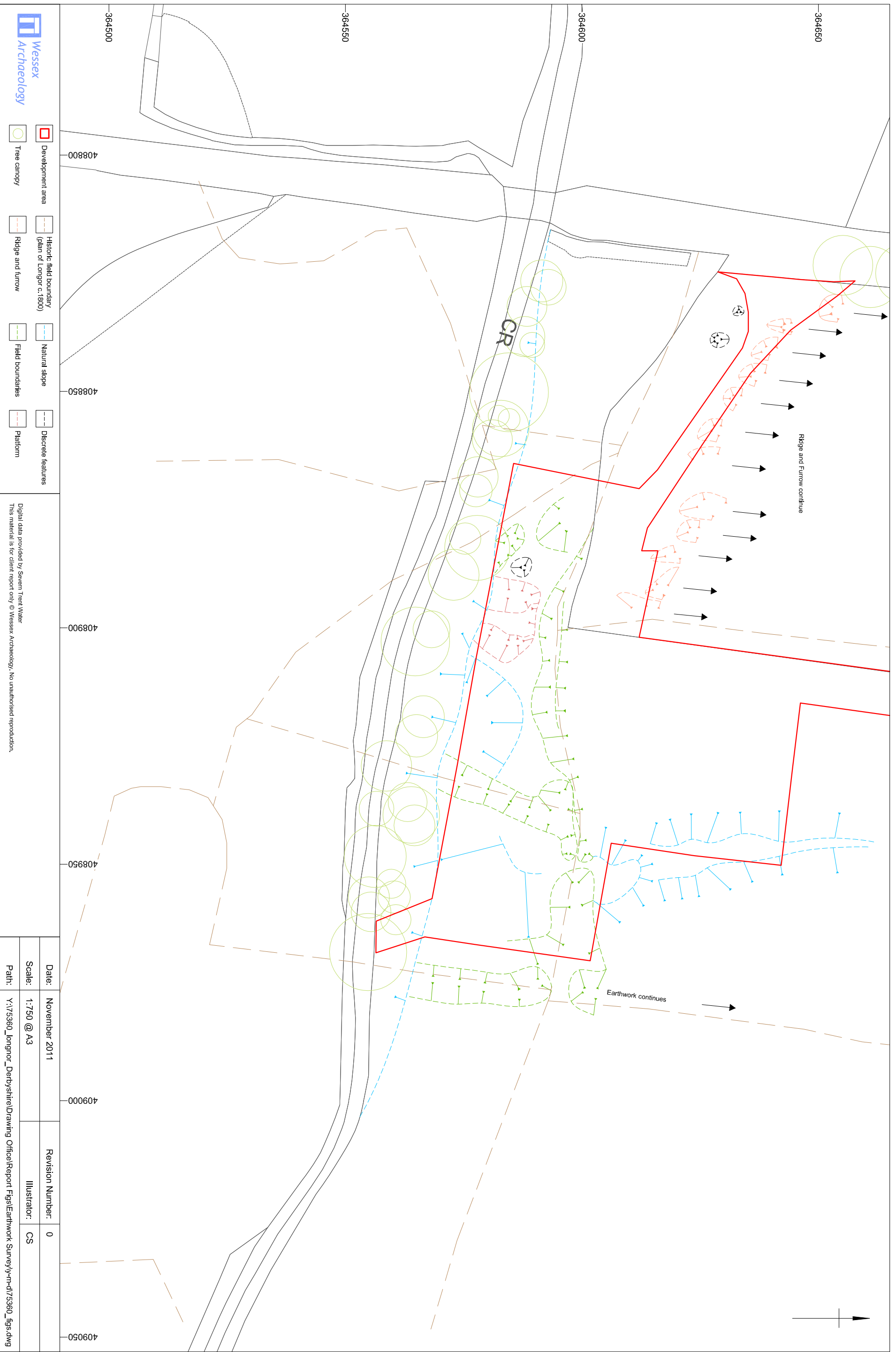
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Illustrator: CS

Hachure plan

Figure 2







 Site location/Development area

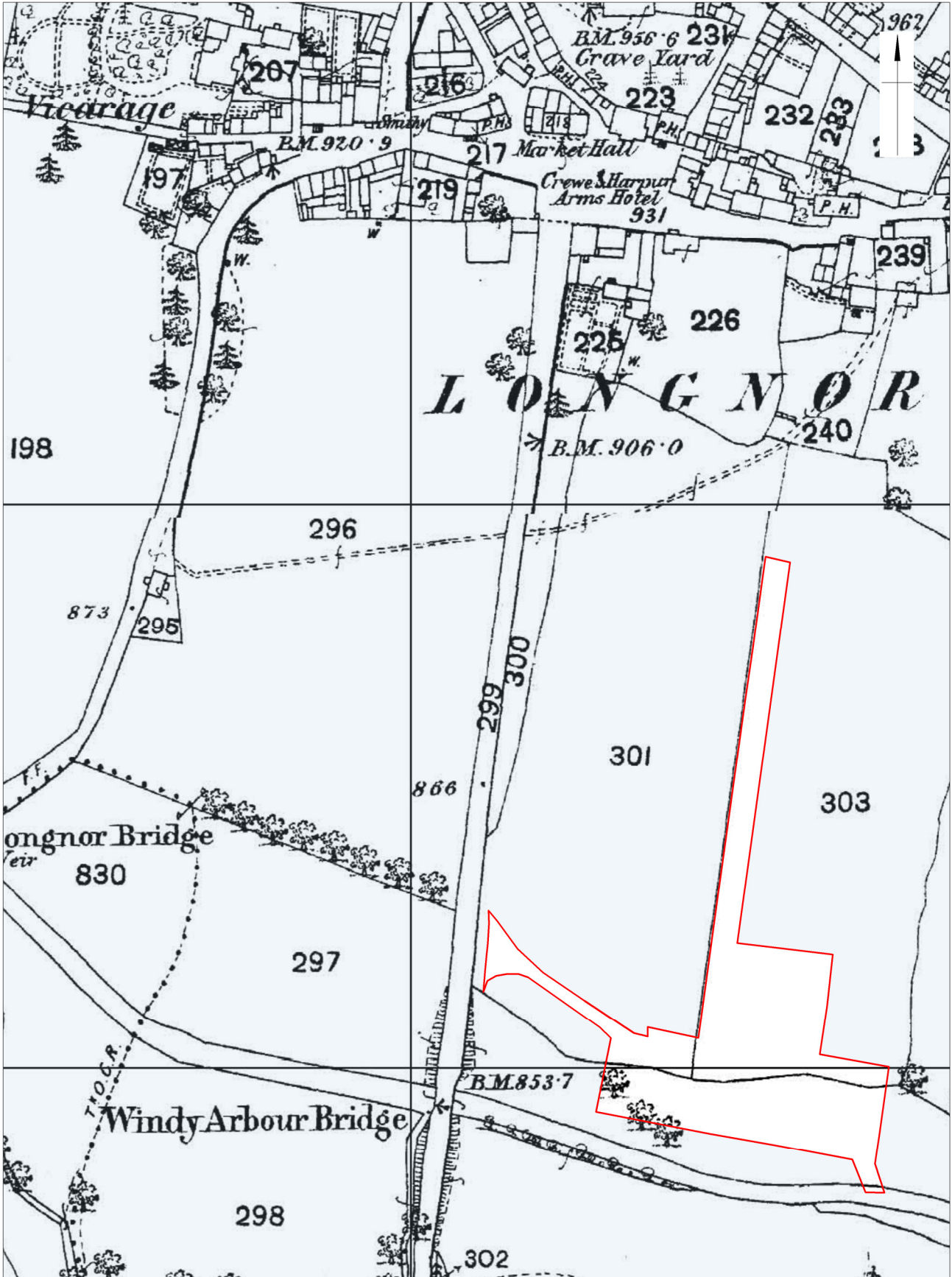
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Site boundary overlain on Longnor map, c.1800.

Figure 4



 Site location/Development area

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Site boundary overlain on 1879-80 Ordnance Survey map.

Figure 5





Plate 1: Southern edge of northwest field showing shallow ridge and furrow, looking northeast.



Plate 2: North-south field boundary, looking south.

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Plate 3: Northern edge of possible platform, looking east.

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**WESSEX ARCHAEOLOGY LIMITED.**

**Registered Head Office:** Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.

Tel: 01722 326867 Fax: 01722 337562 [info@wessexarch.co.uk](mailto:info@wessexarch.co.uk)

With regional offices in **Maidstone** and **Sheffield**

For more information visit [www.wessexarch.co.uk](http://www.wessexarch.co.uk)

