



# Outseats Farm Alfreton, Derbyshire

Archaeological Trial Trench Evaluation



Ref: 86561.02  
February 2017



**Outseats Farm  
Alfreton, Derbyshire**

**Archaeological Trial Trench Evaluation**

**Prepared for:**  
GK Heritage Ltd.  
Quayside Tower  
2nd Floor  
252-260 Broad Street  
Birmingham  
B1 2HF

**On behalf of:**  
The Wheeldon Group  
Wheeldon Brothers Ltd.  
Wheeldon House  
Prime Park Way  
Derby  
DE1 3QB

**Prepared by:**  
**Wessex Archaeology**  
Unit R6  
Riverside Block  
Sheaf Bank Business Park  
SHEFFIELD  
South Yorkshire  
S2 3EN

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

**February 2017**

**Report Ref 86561.02**



## Quality Assurance

<b>Project Code</b>	86561	<b>Accession Code</b>	N/A	<b>Client Ref.</b>	
<b>Planning Application Ref.</b>		<b>Ordnance Survey (OS) national grid reference (NGR)</b>	442300, 355650		

<b>Version</b>	<b>Status*</b>	<b>Prepared by</b>	<b>Checked and Approved By</b>	<b>Approver's Signature</b>	<b>Date</b>
v01	I	Stuart Pierson			
File:	S:\Projects\86561\Reports\v01\				
V02	E	Ashley Tuck	Richard O'Neill	<i>Richard O'Neill</i>	10/02/17
File:	S:\Projects\86561\Reports\v02\				
File:					
File:					
File:					
File:					

\* I = Internal Draft; E = External Draft; F = Final

## 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.



# Outseats Farm Alfreton, Derbyshire

## Archaeological Trial Trench Evaluation

### Contents

Summary.....	iii
Acknowledgements.....	iv
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 Project background .....	1
1.2 The Site.....	1
<b>2 ARCHAEOLOGICAL BACKGROUND .....</b>	<b>1</b>
2.1 Introduction .....	1
2.2 Recent investigations in the area .....	2
<b>3 METHODOLOGY.....</b>	<b>2</b>
3.1 Aims and objectives .....	2
3.2 Fieldwork methodology .....	2
<b>4 ARCHAEOLOGICAL RESULTS.....</b>	<b>3</b>
4.1 Introduction .....	3
4.2 General stratigraphy.....	3
4.3 Undated features .....	3
4.4 Modern features .....	4
4.5 Natural features .....	4
4.6 Negative results .....	4
<b>5 ARTEFACTUAL EVIDENCE.....</b>	<b>4</b>
5.1 Summary.....	4
<b>6 ENVIRONMENTAL EVIDENCE .....</b>	<b>4</b>
6.1 Introduction .....	4
6.2 Background and summary quantification .....	4
6.3 Methodology .....	5
6.4 Results .....	5
6.5 Discussion.....	6
<b>7 DISCUSSION.....</b>	<b>6</b>
7.1 Summary.....	6
7.2 Conclusion .....	6



<b>8</b>	<b>STORAGE AND CURATION.....</b>	<b>6</b>
8.1	Museum .....	6
8.2	Archive .....	6
8.3	Discard policy .....	7
8.4	Security copy .....	7
<b>9</b>	<b>REFERENCES.....</b>	<b>8</b>
9.1	Bibliography .....	8
9.2	Online sources: .....	9
<b>10</b>	<b>APPENDICES.....</b>	<b>10</b>
	Appendix 1: Trench Context Tables.....	10
	Appendix 2: Environmental data .....	14
	Appendix 3: OASIS Form.....	15

## Figures

Figure 1	Site location
Figure 2	Trench locations overlain onto geophysical results
Figure 3	Plan and section of Trench 3
Figure 4	Plan and section of Trench 7
Figure 5	Plan and section of Trench 13
Figure 6	Plan and section of Trench 15

## Plates

Front Cover:	Excavated trench
Plate 1:	Trench 3, undated pit 304 from south
Plate 2:	Trench 3; pit 304 in extended area
Plate 3:	Trench 7, undated gully 704 from north east
Plate 4:	Trench 13, undated pit 1306 from south
Plate 5:	Trench 15, undated pit 1504 from north
Plate 6:	Trench 2, natural feature 204 from north
Plate 7:	Trench 3, tree throw hole 306 from north
Plate 8:	Trench 1, blank trench from west

## Tables

Table 1:	Sample provenance summary
Table 2:	Assessment of the charred plant remains and charcoal



# **Outseats Farm Alfreton, Derbyshire**

## **Archaeological Trial Trench Evaluation**

### **Summary**

Wessex Archaeology was commissioned by The Wheeldon Group to undertake an archaeological evaluation prior to determination of a planning application for a housing development at Outseats Farm, Alfreton, Derbyshire (NGR 442300, 355650).

Four undated archaeological features were present on site, comprising two pits, a gully and a possible elongated pit or tree throw. These features likely represent low intensity land use of the site, perhaps relating to post-medieval or earlier agricultural activity. The presence of tree throw holes suggests that the site was formerly wooded although this is likely to have predated the late 19th century. Available historic mapping (1880 onwards) shows the site has remained relatively unchanged as open farmland from the late 19th until the present day. Trees were therefore likely felled prior to agricultural exploitation, although it is not possible to ascribe a date to this.

The absence of significant archaeology suggests that the site formerly lay at some distance from any settlement. These conclusions support those of a previous phase of evaluation undertaken by Wessex Archaeology in 2012 immediately to the north of this site. No trace of a medieval boundary associated with the nearby medieval Carnfield Hall estate was found.

The results of this evaluation are consistent with the positive results of the previous geophysical survey which located a number of natural features and ploughing trends. However, with the exception of a gully, the geophysical survey did not locate the few undated archaeological features that were present.

The project archive is currently held at the offices of Wessex Archaeology in Sheffield. A copy of this report will be submitted to the Derbyshire HER and the site archive considered for deposition with the Archaeology Data Service, subject to discussion with the Derbyshire County Council Development Control Archaeologist. Traditional museum deposition is not anticipated due to the lack of artefactual archive and the policies of the relevant museum. An OASIS form, wessexar1-275185, has been provisionally completed and will be finalised in due course.



# **Outseats Farm Alfreton, Derbyshire**

## **Archaeological Trial Trench Evaluation**

### **Acknowledgements**

This project was commissioned by The Wheeldon Group and Wessex Archaeology is grateful to Sean Ingle in this regard. Wessex Archaeology would also like to thank Guy Kendall of GK Heritage Consultants Ltd and Steve Baker, the Derbyshire County Council Development Control Archaeologist, for their contributions to the project.

The report was compiled by Stuart Pierson and Ashley Tuck and illustrations were prepared by Joanna Debska. The environmental samples were processed by Liz Chambers. The flots were sorted by Nicki Mulhall and assessed by Inés López-Dóriga. The project was managed for Wessex Archaeology by Richard O'Neill. Fieldwork was directed by Andy Swann with the assistance of Stuart Pierson and Ifigenia Klopa.



# Outseats Farm Alfreton, Derbyshire

## Archaeological Trial Trench Evaluation

### 1 INTRODUCTION

#### 1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by The Wheeldon Group (hereafter 'the Client') to carry out an archaeological evaluation on land at Outseats Farm, Alfreton, Derbyshire (hereafter 'the Site'). The work was carried out prior to determination of a planning application for housing development, and followed on from a geophysical survey (Wardell Armstrong Archaeology 2016) and a Written Scheme of Investigation (WSI) (GK Heritage 2016) which indicated the potential for the survival of archaeological features within the Site.
- 1.1.2 Following discussions between Guy Kendall and Steve Baker, the Derbyshire County Council (DCC) Development Control Archaeologist (DCA), G.K. Heritage produced a WSI proposing a programme of evaluation trenching (GK Heritage 2016). The work was required in order to investigate the archaeological potential of the Site, and to inform the extent and nature of any further work that may be required.

#### 1.2 The Site

- 1.2.1 The whole development site, centred on Ordnance Survey grid reference 442300, 355650, comprises a total of ten fields extending over c.14.9 ha, bounded by Mansfield Road to the north, allotments and a housing estate to the west and by the Alfreton to Chesterfield railway line to the east. The area under evaluation comprised three fields on the eastern boundary of the Site and this area also formed the extent of the geophysical survey (Figures 1 and 2).
- 1.2.2 The Site is currently under pasture. Topographically the northern and southern parts of the Site slope down from around 112.5 m above Ordnance Datum (aOD) towards a small brook, lying at around 105 m aOD, which runs east to west across the northern third of the Site. The Site is underlain by Pennine Coal Measures of Carboniferous Age defined as interbedded mudstone and sandstone (British Geological Survey 2017).

### 2 ARCHAEOLOGICAL BACKGROUND

#### 2.1 Introduction

- 2.1.1 The WSI for the Site (GK Heritage 2016) noted that there are no designated heritage assets within the Site boundary. No prehistoric or Romano-British sites or findspots are recorded within the development area, however; scattered evidence within the wider area does not preclude the potential for features of these periods on the Site.
- 2.1.2 The Grade II\* Listed Building of Carnfield Hall lies some 180 m east of the Site boundary. It has been noted that the Hall is of 16th to 17th-century origin, with place name evidence



from the 15th-century suggesting an earlier medieval date. Demolished former buildings may have survived archaeologically. The medieval boundary of the estate is unknown.

- 2.1.3 Available online historic mapping (Old Maps 2017), from 1880 onwards, demonstrates that the Site was open farmland from the late 19th century to the present day.

## **2.2 Recent investigations in the area**

- 2.2.1 A previous archaeological evaluation undertaken in the northern area of the wider development site (Wessex Archaeology 2012) found no evidence of archaeological remains. During the 2012 evaluation, a natural hollow or pond was seen measuring c.12 m in length and 0.63 m in depth.

## **3 METHODOLOGY**

### **3.1 Aims and objectives**

- 3.1.1 The aim of the evaluation was to record the location, extent, date and character of any surviving archaeological remains within the Site.

- 3.1.2 Specific objectives were:

- *to examine the range of objects that were in use, their status, presence of imports, etc.;*
- *to identify any geoarchaeological deposits, if possible;*
- *to identify the ecofactual and environmental potential of the archaeological features and deposits if revealed;*
- *to undertake sufficient post excavation analysis to confidently interpret archaeological features identified during site works and the analysis of artefacts and samples to identify the potential scope for detailed analysis in future mitigation; and*
- *to report the results of the evaluation excavation and post excavation analysis and place them within their local and regional context and to compile and deposit a site archive at a suitable repository.*

### **3.2 Fieldwork methodology**

- 3.2.1 The methodology for excavation, recording and artefact analysis is detailed in the Written Scheme of Investigation (GK Heritage 2016) and is summarised below.
- 3.2.2 Excavation of trenches was undertaken using a mechanical excavator fitted with a toothless ditching bucket under the direct supervision of a suitably qualified archaeologist. Machining ceased at the first archaeological horizon or the level of natural geology, whichever was reached first.
- 3.2.3 All revealed deposits were hand cleaned and planned at an appropriate scale. A sufficient sample of exposed archaeological features was excavated to establish their extent, form, date, function and relationship to other features. The recommended sampling strategy laid out in the WSI was followed, comprising 10% or more of linear features and 50% of discrete features excluding stakeholes.
- 3.2.4 All recording took place in accordance with standard Wessex Archaeology methodologies. Environmental samples were taken as appropriate following the guidelines set out in the WSI.

- 3.2.5 All work was undertaken in accordance with the relevant Chartered Institute for Archaeologists' (CIfA 2014a and b) and Historic England (2015) standards and guidance.

## **4 ARCHAEOLOGICAL RESULTS**

### **4.1 Introduction**

- 4.1.1 The following section provides a summary of the information held in the Site archive, with a full list of context numbers and context descriptions within the excavation area contained in Appendix 1.
- 4.1.2 16 evaluation trenches were excavated (Figure 2). In total, four undated archaeological features were excavated, located in trenches 3, 7, 13 and 15. Natural or modern features were found in trenches 2, 3 and 8.

### **4.2 General stratigraphy**

- 4.2.1 The natural undisturbed geological substrate was light grey orange or light yellow orange silt clay. Relict ploughsoil subsoil was present in all trenches, consisting of mid-light yellow or orange brown silt clay. Topsoil was dark brown silt loam. Total soil depths ranged from 0.3 m to 0.5 m with the proportion of topsoil to subsoil variable across the Site.

### **4.3 Undated features**

- 4.3.1 Pit 304 (Figure 3, Plates 1 and 2) lay partially within the initial stripped area of trench 3. Feature 304 contained loose mid orange brown silt clay with sparse angular stones (305). At the request of the DCA the trench was extended 10 m around the feature, which clarified that 304 was an isolated feature, whether a large elongated pit or a tree throw, up to 2.2 m in length, 1 m in width and 0.48 m in depth. The pit contained no artefacts. Environmental remains (see Section 6 below) only indicated a broad date for the pit, from the Bronze Age onwards, although charcoal was present. A geophysical anomaly was detected in the area of feature 304; however the excavated feature is much smaller than the geophysical feature and this apparent correlation may be coincidence. Other nearby geophysical responses did not correlate with any identified archaeological features.
- 4.3.2 Undated gully 704 (Figure 4, Plate 3), ran north-east to south-west across trench 7. Gully 704 was 0.5 m wide, 0.17 m deep and had a concave profile. The fill of 704 was loose mid orange brown silt clay with sub-angular ironstone inclusions (705). Gully 704 correlates approximately with a linear geophysical anomaly. As with the pit in Trench 3 no artefacts were present and environmental remains (Section 6 below) provided only a broad date for the gully from the Bronze Age onwards; charcoal was again present.
- 4.3.3 Pit 1306 (Figure 5, Plate 4) in trench 13 may have been of either archaeological or geological in origin. Pit 1306 was 0.98 m in diameter and 0.18 m deep and was circular with a concave profile. The fill of 1306 was reddish brown silt clay containing flat stones. The pit did not correlate with a geophysical response.
- 4.3.4 Trench 15 contained pit 1504 (Figure 6, Plate 5), which was 0.7 m in diameter and 0.2 m deep. The sides were concave with a flat base. Pit 1504 had a fill of pale red brown silty clay with charcoal and small fired clay inclusions. The pit was fully excavated but again no artefacts were recovered. At the request of the DCA the trench was extended 10 m around the pit which proved that 1504 was an isolated feature. As in trench 3, a large geophysical response was detected in the area surrounding pit 1504. It is likely that the presence of the much smaller archaeological feature within this geophysical response is coincidental.



#### 4.4 Modern features

- 4.4.1 A machine-dug pit (706) with straight sides was re-excavated in trench 7 (Plate 6). Pit 706 was 0.75 m wide, 1.6 m deep and extended out of the evaluation trench. The fill of machine-dug pit 706 was a mixture of the topsoil and natural with organic material, suggesting that the pit had been backfilled with the arisings from its excavation. No dating evidence was seen.
- 4.4.2 Trench 8 contained three land drains, one of which was excavated and found to consist of a land drain filled with coal.

#### 4.5 Natural features

- 4.5.1 Trench 2 contained an irregular natural pit or hollow 1.7 m by 1.2 m in plan and 0.17 m deep (204, Plate 7), with a mid brown sandy loam fill. The shape of the feature in plan comprised two “lobes” which may have been formed by the action of surface water or through some other natural process.
- 4.5.2 Trench 3 contained a tree throw (306, Plate 8), 2.35 m in diameter and 0.22 m deep with a mid to dark brown loamy silt mixed with dirty greyish yellow material of the same texture (308).
- 4.5.3 Additional shallow irregular tree throw holes were seen and investigated, but not recorded in detail in a number of trenches.

#### 4.6 Negative results

- 4.6.1 Trenches 1, 4, 5, 6, 9, 10, 11, 12, 14 and 16, contained no features (Plate 8). In total, 12 trenches, including trenches 2 and 8, contained no significant archaeological features, deposits or artefacts.

### 5 ARTEFACTUAL EVIDENCE

#### 5.1 Summary

- 5.1.1 The evaluation produced no archaeological finds from features. A handful of 19th/ 20th century pottery sherds were seen scattered across the topsoil but were not retained.

### 6 ENVIRONMENTAL EVIDENCE

#### 6.1 Introduction

- 6.1.1 Five bulk samples were taken from a range of features such as pits and gullies and were processed for the recovery and assessment of charred plant remains and charcoal. The size of the samples varied between 10 and 40 l, and on average was around 24 l.

#### 6.2 Background and summary quantification

- 6.2.1 The bulk samples break down into the following phase groups:

**Table 1: Sample provenance summary**

Phase	No of samples	Volume (litres)	Feature types
Modern	1	10	Land drain
Undated	4	110	Pits and gully
<b>Totals</b>	<b>5</b>	<b>120</b>	

## 6.3 Methodology

- 6.3.1 The bulk samples were processed by standard flotation methods; the flot retained on a 0.5 mm mesh, residues fractionated into 5.6 mm, 2 mm and 1 mm fractions and dried. The coarse fractions (>5.6 mm) were sorted, weighed and discarded. A rifle box was used to split large flots into smaller flot subsamples when appropriate. The flots were scanned using a stereo incident light microscopy at magnifications of up to x40 using a Leica MS5 microscope for the identification of environmental remains. Different bioturbation indicators were considered, including the percentage of roots, the abundance of modern seeds and the presence of mycorrhizal fungi sclerotia (e.g. *Cenococcum geophilum*) and animal remains which would not be preserved unless anoxic conditions were detected, such as earthworm eggs and insects. The preservation and nature of the charred plant and wood charcoal remains, as well as the presence/absence of other environmental remains such as molluscs, animal bone and insects (if anoxic conditions for their preservation are present), is recorded in Table 2 (Appendix 2).
- 6.3.2 Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary and Hopf (2000, Tables 3, page 28 and 5, page 65), for cereals. Abundance of remains is qualitatively quantified (A\*\*\* = exceptional, A\*\* = 100+, A\* = 30-99, A = >10, B = 9-5, C = <5) as an estimation of the minimum number of individuals and not the number of remains per taxa.

## 6.4 Results

### *Charred plant remains*

- 6.4.1 The flots were generally large but there were high numbers of roots and modern seeds that may be indicative of stratigraphic movement and the possibility of contamination by later intrusive elements. Charred material was well preserved in terms of carbonisation, but eroded and incrustated with grit, hampering identification. Some of the assemblages contained non-native plant taxa which can provide with a chronological *post-quem* framework based on the introduction date.
- 6.4.2 All the assemblages with non-woody plant remains included onion couch tubers (*Arrhenatherum elatius* subsp. *bulbosum*) with possibly other tuber species also found in pit 304. The assemblage from undated pit 304 provided, in addition to tubers, a grass seed and parenchymatic tissue, a wheat (*Triticum* sp.) grain which can only indicate a post-Neolithic chronology but also a *Valerianella* sp. seed probably introduced in the Late Bronze Age (Preston *et al.* 2004). Undated gully 704 contained an assemblage of tubers and a seed from Apiaceae, probably hemlock (*Conium maculatum*), a weed also introduced in the Bronze Age (Preston *et al.* 2004).
- 6.4.3 Onion couch is a perennial grass with an edible tuber, found in a wide range of open grassland habitats, particularly persistent weed of arable fields. Since its first discovery in archaeological sites (Allison and Godwin 1949) interpretations have been diverse and have fluctuated. Suggestions include accidental presence as part of the burnt natural vegetation; intentional use as fuel (resulting from discarded waste from weeding crop-fields by up-rooting); turf exploitation (Hall 2003); selection for use in cremation pyres (Jones 1978; Robinson 1988); or even exploitation for consumption (Clapham 1988). Recent studies suggest it is not worth consuming (Mears and Hillman 2007) and there is no historical record of consumption (Fern 1992-2010). Onion couch remains are relatively ubiquitous in archaeobotanical assemblages and controversy surrounds the archaeobotanical interpretation of this species (Roehrs 2013).

#### *Wood charcoal*

- 6.4.4 Wood charcoal was noted from the flots of the bulk samples and is recorded in Table 2 (Appendix 2). The assemblages of charcoal were of variable sizes and the fragments belonged exclusively to mature wood. The sample from modern land drain 804 was rich in coal.

### **6.5 Discussion**

The charred plant remains recovered require no further analysis. Information on the local environment in the region is very rare. Full analysis of the wood charcoal would provide some information on the species composition of the local environment. The assemblages are suitable for radiocarbon dating which could help clarify the chronology of the features.

## **7 DISCUSSION**

### **7.1 Summary**

- 7.1.1 Four undated possible archaeological features were present, comprising two pits, a gully and an elongated pit or large tree throw. Environmental data demonstrates that at least some of these features cannot be older than the Bronze Age.

### **7.2 Conclusion**

- 7.2.1 The features identified likely represent low intensity land use of the Site, perhaps relating to post-medieval agricultural activity although any date (Bronze Age onwards) and purpose is possible. The presence of tree throw holes suggests that the Site was formerly wooded. Trees were likely felled in advance of agricultural exploitation sometime before the late 19th century. The absence of significant archaeology suggests that the Site formerly lay at some distance from any settlement. These conclusions support those of a previous phase of evaluation undertaken by Wessex Archaeology in 2012 immediately to the north of this Site. No trace of a medieval boundary associated with the nearby medieval Carnfield Hall estate was found.
- 7.2.2 The results of this evaluation are consistent with the positive results of the geophysical survey which located a number of natural features and ploughing trends. However, with the exception of gully 704, which correlated reasonably well with a linear geophysical anomaly, the geophysical survey did not locate the few undated archaeological features that were present.

## **8 STORAGE AND CURATION**

### **8.1 Museum**

- 8.1.1 The project archive is currently held at the offices of Wessex Archaeology in Sheffield. A copy of this report will be submitted to the Derbyshire HER and the Site archive considered for deposition with the Archaeology Data Service under the advice of Steve Baker. Traditional museum deposition is not anticipated due to the lack of artefactual archive and the policies of the relevant museums. An OASIS form, wessexar1-275158, has been provisionally completed and will be finalised in due course (Appendix 3).

### **8.2 Archive**

- 8.2.1 Traditional museum deposition is not anticipated for this archive. The complete site archive, which will include paper records, photographic records, graphics, and digital data, will be prepared as appropriate following nationally recommended guidelines (SMA 1995; ClfA 2014c; Brown 2011; ADS 2013).



### **8.3 Discard policy**

- 8.3.1 Wessex Archaeology follows the guidelines set out in Selection, Retention and Dispersal (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive.
- 8.3.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; ClfA 2014c).

### **8.4 Security copy**

- 8.4.1 In line with current best practice (e.g. Brown 2011); on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.





## 9 REFERENCES

### 9.1 Bibliography

- ADS, 2013, *Caring for Digital Data in Archaeology: a Guide to Good Practice*, Archaeology Data Service & Digital Antiquity Guides to Good Practice
- Allison, J and Godwin, H, 1949 Bronze Age Plant Remains from Wiltshire, Data for the Study of Post-Glacial History. XII *The New Phytologist* 48, 253-254
- Brown, D H 2011 *Archaeological Archives; a Guide to Best Practice in Creation, Compilation, Transfer and Curation*, Archaeological Archives Forum (revised edition)
- ClfA, 2014a, *Standard and Guidance for Archaeological Excavation*, Reading, Chartered Institute for Archaeologists
- ClfA, 2014b, *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*, Reading, Chartered Institute for Archaeologists
- ClfA, 2014c, *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*, Reading, Chartered Institute for Archaeologists
- Clapham, A., 1988, *The Charred Macroscopic Plant Remains from a Neolithic Pit and Bronze Age Barrow and Ditch at Roughridge Hill, Wiltshire*. Ancient Monuments Laboratory, English Heritage
- Fern, K., 1992-2010, *Plants for A Future: Plant Species Database*. <http://www.pfaf.org> [accessed 6-2-2017].
- GK Heritage, 2016, *Written Scheme of Investigation for Evaluation Excavation (Trial Trenching): Outseats Farm, Alfreton, Derbyshire* unpublished client report
- Hall, A., 2003, *Recognition and Characterisation of Turves in Archaeological Occupation Deposits by means of Macrofossil Plant Remains*, English Heritage Centre for Archaeology
- Historic England, 2015, *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*
- Jones, M 1978, The Plant Remains, in Parrington, M. (ed): *The Excavation of an Iron Age Settlement, Bronze Age Ditches and Roman Features at Ashville Trading State, Abingdon (Oxfordshire) 1974-1976*, Oxfordshire Archaeological Unit
- Mears R., and Hillman G.C., 2007, *Wild food*, Hodder and Stoughton, London
- Preston, C. D., Pearman, D. A., and Hall, A. R., 2004, Archaeophytes in Britain, *Botanical Journal of the Linnean Society* 145, 257–294.
- Robinson, D.E., 1988, The Significance of the Tubers of *Arrhenatherum elatius* (L.) Beauv, from site 4, Cremation IS/II, in: Lambrick, G (Ed.) *The Rollright Stones:*



*Megaliths, Monuments and Settlements in the Prehistoric Landscape*, Historic buildings and monuments commission

- Roehrs, H., Klooss, S., and Kirleis, W., 2013, Evaluating Prehistoric Finds of *Arrhenatherum elatius* var. *bulbosum* in North-Western and Central Europe with an Emphasis on the First Neolithic Finds in Northern Germany, *Archaeological and Anthropological Sciences* 5, 1-15
- SMA, 1993, *Selection, Retention and Dispersal of Archaeological Collections*, Society of Museum Archaeologists
- SMA, 1995, *Towards an Accessible Archaeological Archive*, Society of Museum Archaeologists
- Stace, C., 1997, *New flora of the British Isles* (2<sup>nd</sup> edition), Cambridge: Cambridge University Press
- Wardell Armstrong, 2016, *Land at Outseats Farm, Alfreton, Derbyshire: Phase 1 Geophysical Survey Report*, unpublished client report
- Wessex Archaeology, 2012, *Outseats Farm, Alfreton, Derbyshire: Archaeological Evaluation Report*, unpublished client report 86560.01
- Zohary, D., and Hopf, M., 2000, *Domestication of plants in the Old World: the origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*, 3rd edition, Clarendon Press, Oxford

**9.2 Online sources:**

- British Geological Survey, 2017, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>
- Old Maps, 2017, <https://www.old-maps.co.uk>





## 10 APPENDICES

### Appendix 1: Trench Context Tables

<b>Trench 1</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.30 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
101	Topsoil	Topsoil. Dark brown silty loam	0–0.20
102	Subsoil	Subsoil. Mid yellow brown silty clay	0.20–0.30
103	Natural	Natural. Light grey orange silty clay	0.30+

<b>Trench 2</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.30 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
201	Topsoil	Topsoil. Dark brown silty loam	0–0.20
202	Subsoil	Subsoil. Light yellow brown silty clay	0.20–0.30
203	Natural	Natural. Light yellow orange silty clay	0.30+
204	Cut	Palaeochannel	0.30–0.47
205	Fill	Secondary fill of 204. Mid brown silty clay	0.30–0.47

<b>Trench 3</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.55 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
301	Topsoil	Topsoil. Dark brown silty loam	0–0.35
302	Subsoil	Subsoil. Mid orange brown silty clay	0.35–0.55
303	Natural	Natural. Light yellow orange silty clay	0.55+
304	Cut	Elongated Pit/ Tree-throw hole	0.55–1.03
305	Fill	Secondary fill of 304. Mid orange brown silty clay	0.55–1.03
306	Cut	Palaeochannel	0.55–0.77
307	Fill	Secondary fill of 306. Dark brown to grey-yellow mottled loamy clay	0.55–0.77

<b>Trench 4</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.50 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
401	Topsoil	Topsoil. Dark brown silty loam	0–0.40
402	Subsoil	Subsoil. Mid yellow brown silty clay	0.40–0.50
403	Natural	Natural. Light yellow orange silty clay	0.50+



<b>Trench 5</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.46 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
501	Topsoil	Topsoil. Dark brown silty loam	0–0.25
502	Subsoil	Subsoil. Mid yellow brown silty clay	0.25–0.46
503	Natural	Natural. Light yellow orange silty clay	0.46+

<b>Trench 6</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.44 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
601	Topsoil	Topsoil. Dark brown silty loam	0–0.24
602	Subsoil	Subsoil. Mid yellow brown silty clay	0.24–0.44
603	Natural	Natural. Light yellow orange silty clay	0.44+

<b>Trench 7</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.34 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
701	Topsoil	Topsoil. Dark brown silty loam	0–0.24
702	Subsoil	Subsoil. Mid yellow brown silty clay	0.24–0.34
703	Natural	Natural. Light yellow orange silty clay	0.34+
704	Cut	Gully	0.34–0.51
705	Fill	Secondary fill of 704. Mid orange brown	0.34–0.51
706	Cut	Pit	0.34–1.94
707	Fill	Deliberate backfill of 706. Dark grey yellow black	0.34–1.94

<b>Trench 8</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.34 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
801	Topsoil	Topsoil. Dark brown silty loam	0–0.18
802	Subsoil	Subsoil. Mid yellow brown silty clay	0.18–0.34
803	Natural	Natural. Light yellow orange silty clay	0.34+
804	Cut	Land drain	0.34–0.54
805	Fill	Deliberate backfill of 804. Blackfilled with coal	0.34–0.54

<b>Trench 9</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.35 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
901	Topsoil	Topsoil. Dark brown silty loam	0–0.20
902	Subsoil	Subsoil. Mid yellow brown silty clay	0.20–0.35
903	Natural	Natural. Light yellow orange silty clay	0.35+



<b>Trench 10</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.30 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
1001	Topsoil	Topsoil. Dark brown silty loam	0–0.18
1002	Subsoil	Subsoil. Mid yellow brown silty clay	0.18–0.30
1003	Natural	Natural. Light yellow orange silty clay	0.30+

<b>Trench 11</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.42 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
1101	Topsoil	Topsoil. Dark brown silty loam	0–0.27
1102	Subsoil	Subsoil. Mid orange brown silty clay	0.27–0.42
1103	Natural	Natural. Light yellow brown silty clay	0.42+

<b>Trench 12</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.48 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
1201	Topsoil	Topsoil. Dark brown silty loam	0–0.30
1202	Subsoil	Subsoil. Mid orange brown silty clay	0.30–0.48
1203	Natural	Natural. Light yellow brown silty clay	0.48+

<b>Trench 13</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.42 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
1301	Topsoil	Topsoil. Dark brown silty loam	0–0.26
1302	Subsoil	Subsoil. Mid orange brown silty clay	0.26–0.42
1303	Natural	Natural. Light yellow brown silty clay	0.42+
1304	Cut	Posthole	0.42–0.67
1305	Fill	Secondary fill of 1306. Mid brown silty clay	0.42–0.67
1306	Cut	Pit	0.42–0.60
1307	Fill	Secondary fill of 1304. Red brown silty clay	0.42–0.60

<b>Trench 14</b>	<b>Trench dimensions: L: 20 m, W: 1.8 m, D: 0.40 m</b>		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
1401	Topsoil	Topsoil. Dark brown silty loam	0–0.26
1402	Subsoil	Subsoil. Mid orange brown silty clay	0.26–0.40
1403	Natural	Natural. Light yellow brown silty clay	0.40+



<b>Trench 15</b>	<b>Trench dimensions:</b> L: 20 m, W: 1.8 m, D: 0.50 m		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
1501	Topsoil	Topsoil. Dark brown silty loam	0–0.30
1502	Subsoil	Subsoil. Mid orange brown silty clay	0.30–0.50
1503	Natural	Natural. Light yellow brown silty clay	0.50+
1504	Cut	Pit	0.50–0.70
1505	Fill	Deliberate backfill of 1504. Red pale brown silty clay	0.50–0.70

<b>Trench 16</b>	<b>Trench dimensions:</b> L: 20 m, W: 1.8 m, D: 0.50 m		
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth (m)</b>
1601	Topsoil	Topsoil. Dark brown silty loam	0–0.40
1602	Subsoil	Subsoil. Mid orange brown silty clay	0.40–0.50
1603	Natural	Natural. Light yellow orange silty clay	0.50+



## Appendix 2: Environmental data

**Table 2: Assessment of the charred plant remains and charcoal**

Feature	Context	Sample	Vol (L)	Flot (ml)	Bioturbation proxies	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal > 4/2mm	Charcoal	Other	Preservation
Undated														
Pits														
304	305	301	34	50	80%, A*, E, F, I	C	-	<i>Triticum</i> sp.	B	<i>Arrhenatherum elatius</i> subsp. <i>bulbosum</i> tubers, parenchymatic tissue, <i>Valerianella</i> sp. and Poaceae seeds	20ml/2ml	Mature		Good
1306	1307	1301	10	50	90%, A, E, I, F	-	-	-	-	-	<1ml	Mature		-
1504	1505	1501	20	120	80%, A, E, F, I	-	-	-	C	<i>Arrhenatherum elatius</i> subsp. <i>bulbosum</i> tuber	60ml/1ml	Mature		Poor
Gully														
704	705	701	40	60	90%, A*, E, F, I	-	-	-	B	<i>Arrhenatherum elatius</i> subsp. <i>bulbosum</i> tubers, Apiaceae tp. <i>Conium maculatum</i> seed, indet seed	<1ml/<1ml	Mature		Good
Modern - land drain														
804	805	801	6	50	80%, A, E, I	-	-	-	-	-	<1ml/<1ml	Mature	Coal	-

Key: A\*\*\* = exceptional, A\*\* = 100+, A\* = 30-99, A = >10, B = 9-5, C = <5; Bioturbation proxies: Roots (%), Uncharred seeds (scale of abundance), F = mycorrhizal fungi sclerotia, E = earthworm eggs, I = insects; Sab/f = small animal/fish bones/charred faecal pellets, Moll-t = terrestrial molluscs, Moll-f = aquatic molluscs; Analysis: C = charcoal, P = plant, M = molluscs, C14 = radiocarbon



## Appendix 3: OASIS Form

OASIS ID: wessexar1-275158

### Project details

Project name	Outseats Farm, Alfreton, Derbyshire
Short description of the project	Wessex Archaeology was commissioned by GK Heritage Ltd. on behalf of The Wheeldon Group, to undertake an archaeological evaluation ahead of a planning application for housing at Outseats Farm, Alfreton, Derbyshire (NGR SK 442414 355540; hereafter the 'Site'). Four undated possible archaeological features were present on Site, comprising two pits, a gully and a possible elongated pit or tree throw. These features likely represent low intensity land use of the Site, perhaps relating to post-medieval agricultural activity although any date and purpose is possible. The presence of tree throw holes suggests that the Site was formerly wooded. Trees were likely felled for agricultural exploitation although it is not possible to ascribe a date to this. The absence of significant archaeology suggests that the Site formerly lay at some distance from any settlement. These conclusions support those of a previous phase of evaluation undertaken by Wessex Archaeology in 2012 immediately to the north of this Site. The results of this evaluation are consistent with the positive results of the previous geophysical survey which located a number of natural features and ploughing trends. However, the geophysical survey did not locate the few undated archaeological features that were present.
Project dates	Start: 09-01-2017 End: 16-01-2017
Previous/future work	Yes / Not known
Any associated project reference codes	86561 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Grassland Heathland 2 - Undisturbed Grassland
Monument type	PITS Uncertain
Monument type	LINEAR FEATURE Uncertain
Significant Finds	NONE None
Methods & techniques	"Sample Trenches", "Targeted Trenches"
Development type	Housing estate
Prompt	Planning condition
Position in the planning process	Not known / Not recorded

### Project location

Country	England
Site location	DERBYSHIRE AMBER VALLEY ALFRETON Outseats Farm, Alfreton, Derbyshire
Postcode	DE55 4QH
Study area	14.9 Hectares



Site coordinates	SK 4236 5559 53.095534889384 -1.367339228439 53 05 43 N 001 22 02 W Point
Height OD / Depth	Min: 123m Max: 129m

### Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	G.K. Heritage
Project design originator	GK Heritage
Project director/manager	R. O'Neill
Project supervisor	Andy Swann
Type of sponsor/funding body	Developer
Name of sponsor/funding body	The Wheeldon Group

### Project archives

Physical Archive Exists?	No
Digital Archive recipient	Derby Museum and Art Gallery
Digital Contents	"none"
Digital Media available	"Images raster / digital photography", "Text"
Paper Archive recipient	Derby Museum and Art Gallery
Paper Contents	"none"
Paper Media available	"Context sheet"

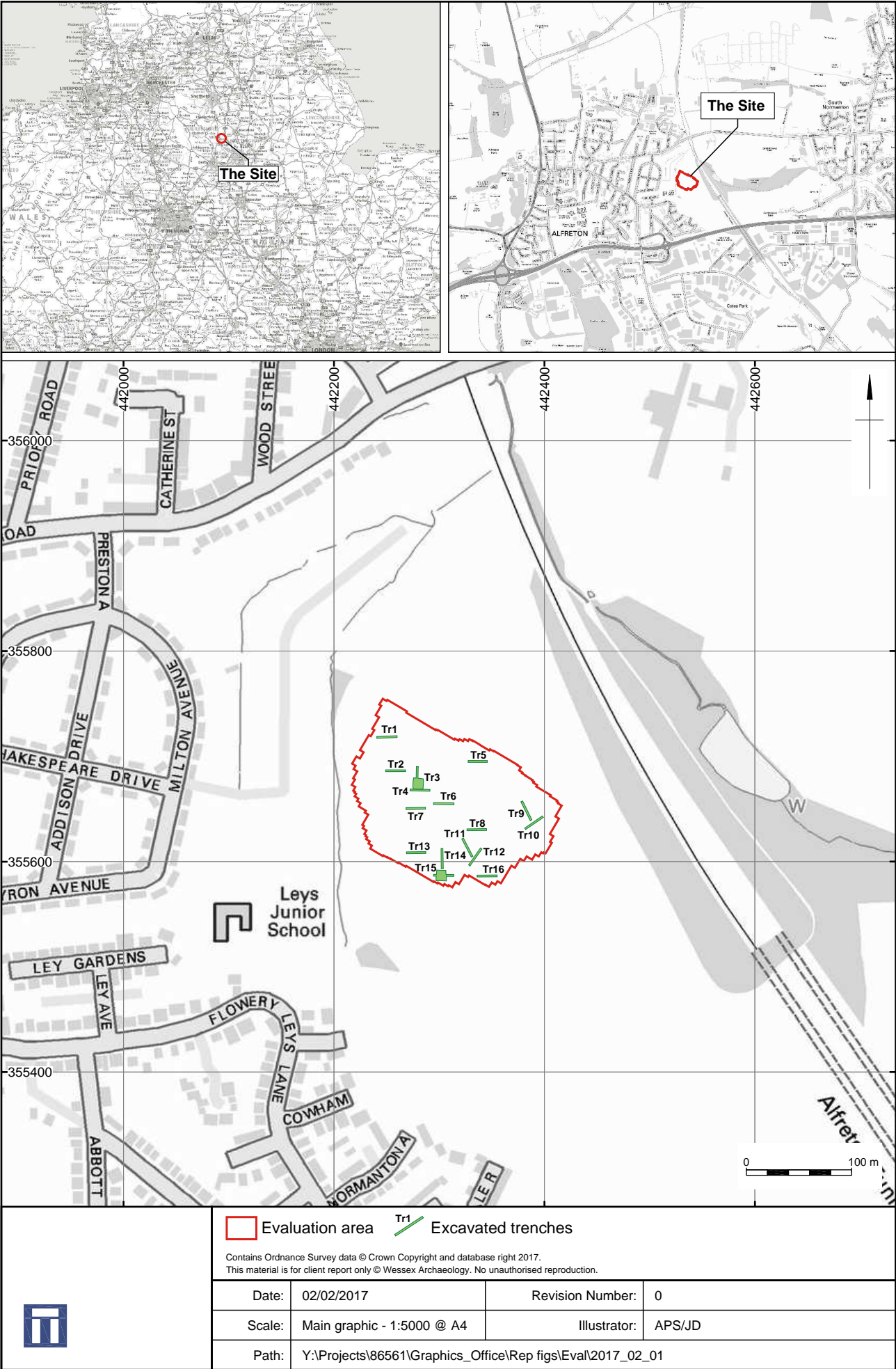
### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Outseats Farm, Alfreton, Derbyshire: Archaeological Trial Trench Evaluation
Author(s)/Editor(s)	Pierson, S.
Author(s)/Editor(s)	Tuck, A.
Other bibliographic details	86561.02
Date	2017
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield



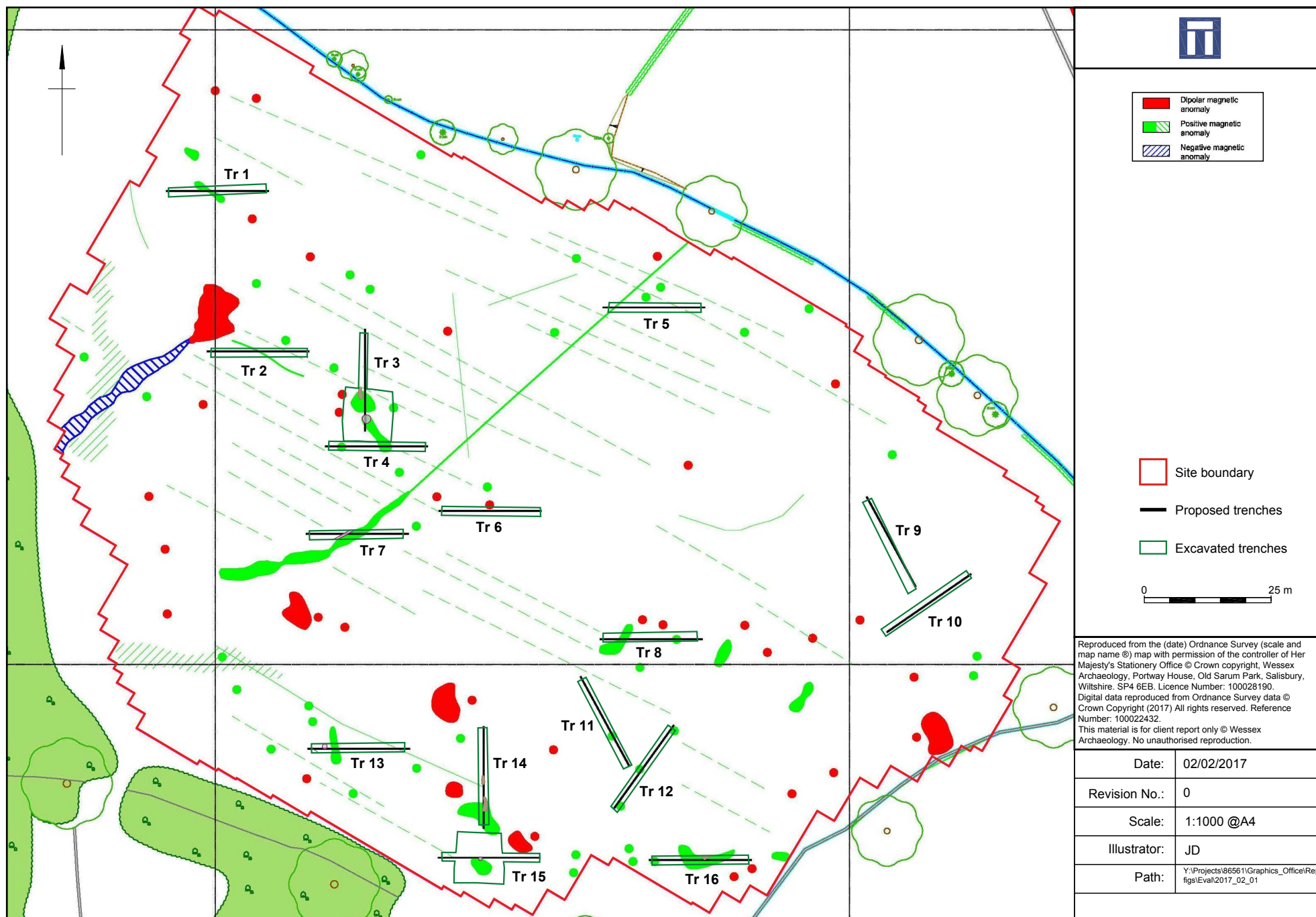
Description	A4 laser printed report
Entered by	Ashley Tuck (a.tuck@wessexarch.co.uk)
Entered on	3 February 2017





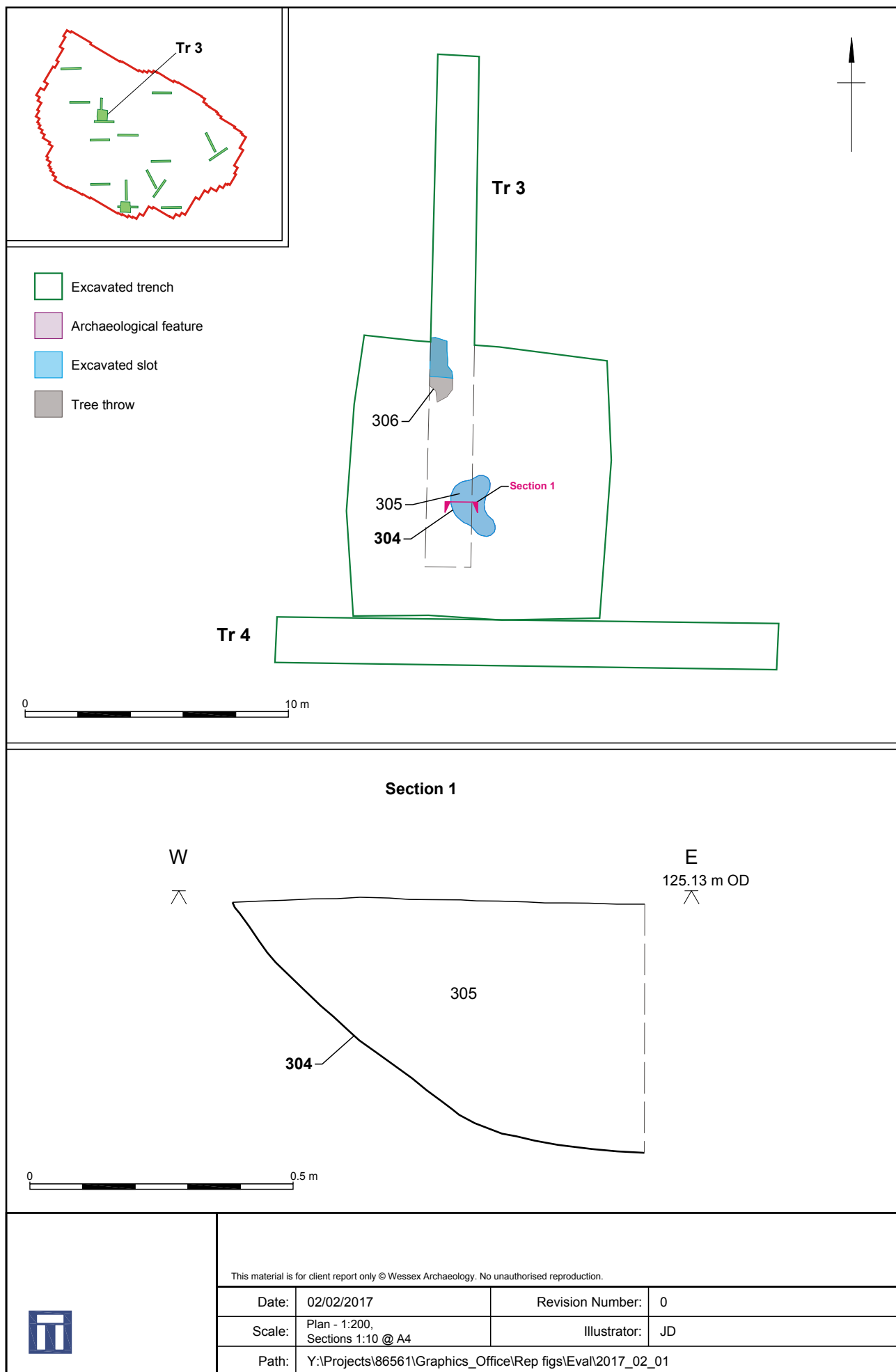
Site location

Figure 1



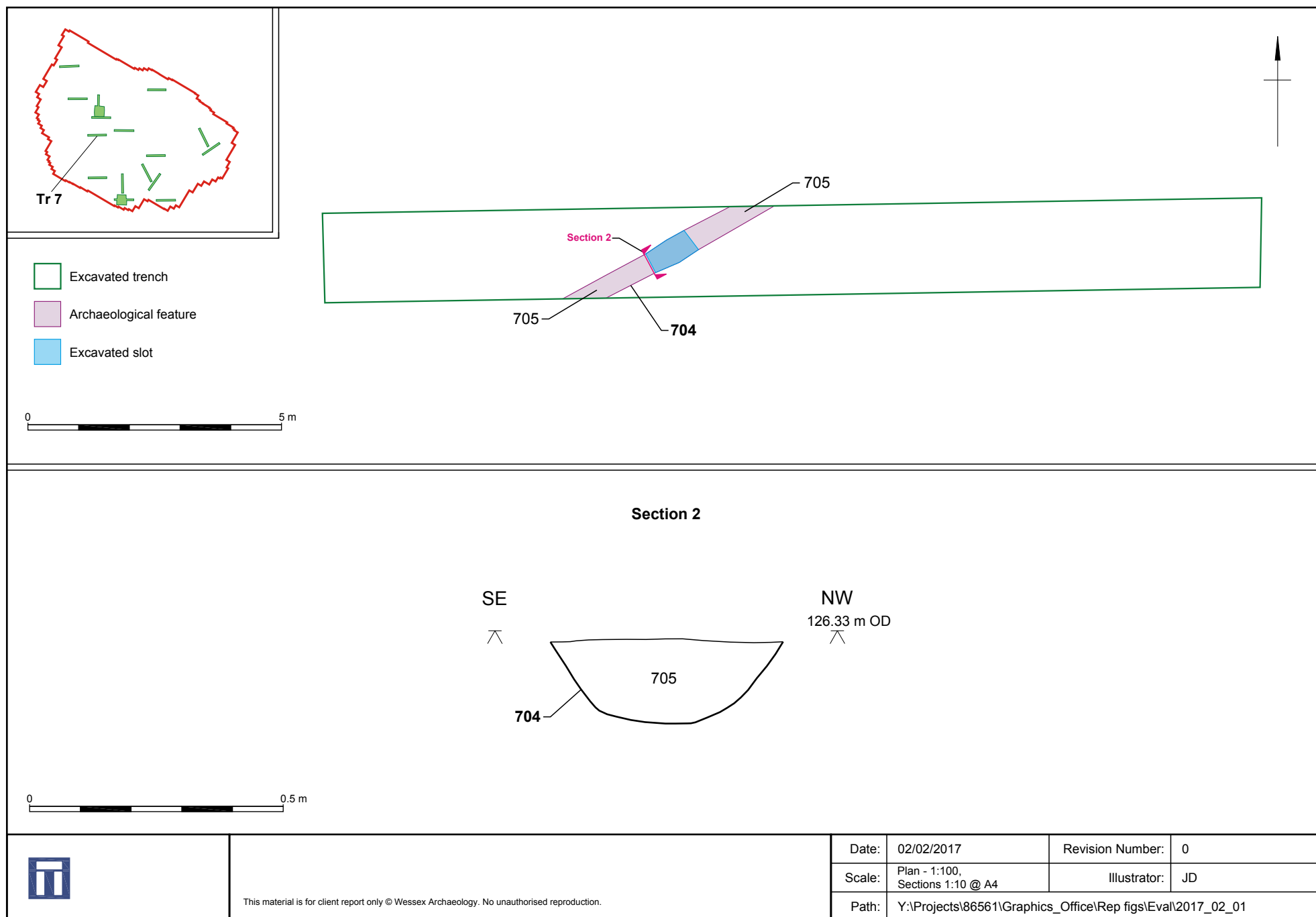
Trench locations overlain onto geophysics results

Figure 2



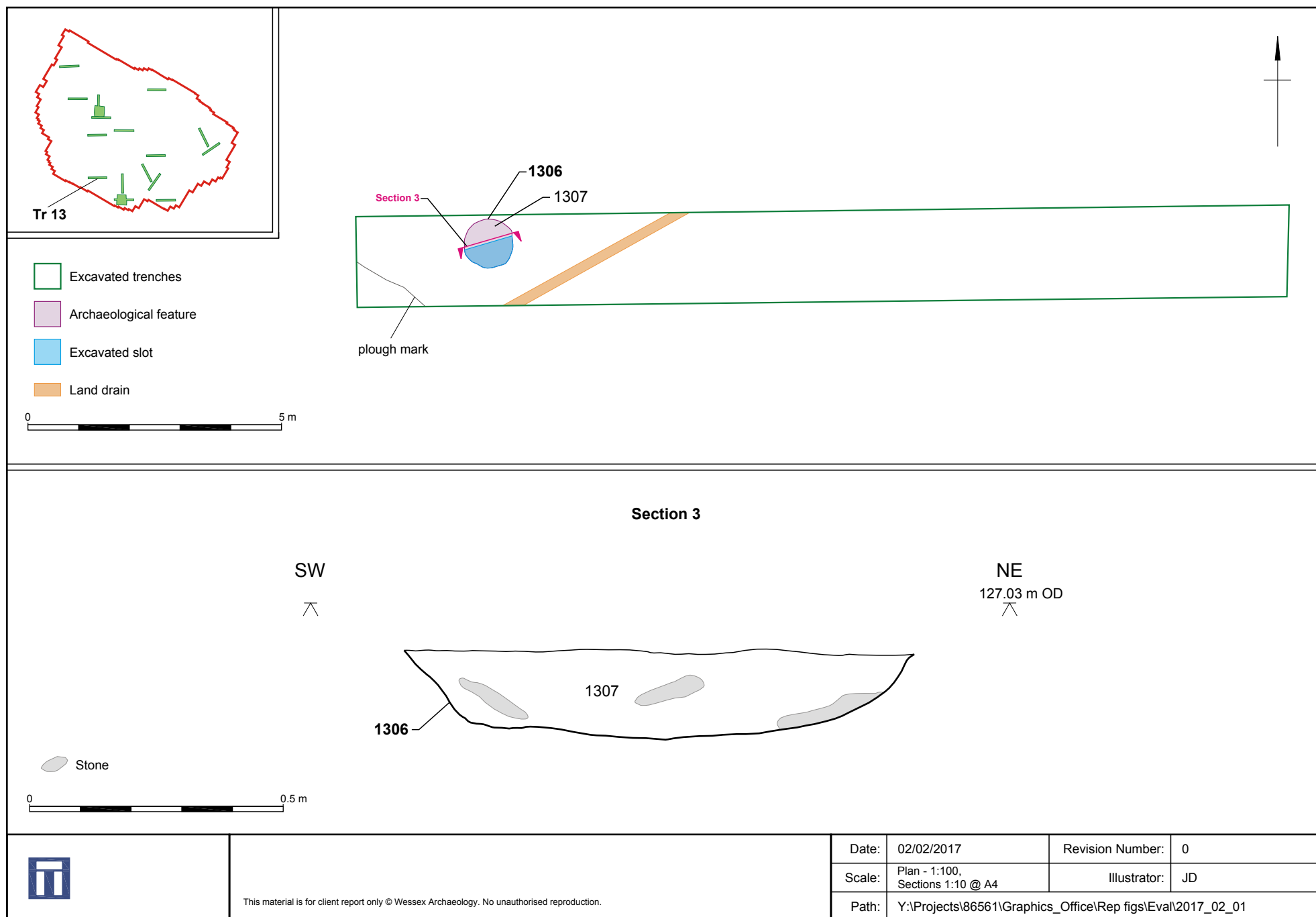
Plan and section of trench 3

Figure 3



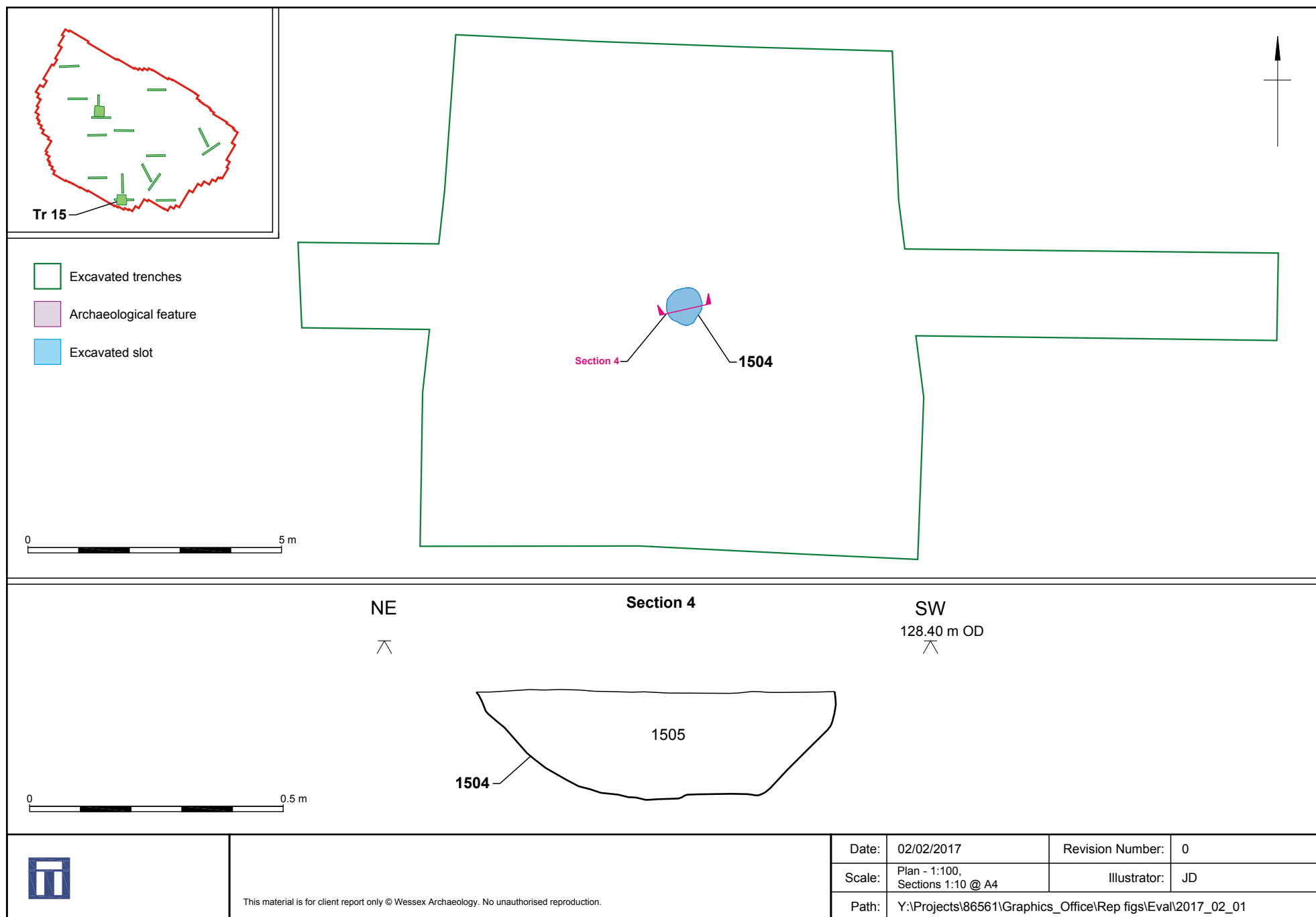
Plan and section of Trench 7

Figure 4



Plan and section of Trench 13

Figure 5



Plan and section of Trench 15

Figure 6





Plate 1: Trench 3, undated pit 304 from south



Plate 2: Trench 3, pit 304 in extended area


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	01/02/2017	Revision Number: 0
	Scale:	N/A	Illustrator: APS
	Path:	Y:\Projects\86561\Graphics_Office\Rep figs\Eval\2017_02_01	



Plate 3: Trench 7, undated gully 704 from north east



Plate 4: Trench 13, undated pit 1306 from south


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	01/02/2017	Revision Number: 0
	Scale:	N/A	Illustrator: APS
	Path:	Y:\Projects\86561\Graphics_Office\Rep figs\Eval\2017_02_01	





Plate 5: Trench 15, undated pit 1504 from north



Plate 6: Trench 2, natural feature 204 from north


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	01/02/2017	Revision Number: 0
	Scale:	N/A	Illustrator: APS
	Path:	Y:\Projects\86561\Graphics_Office\Rep figs\Eval\2017_02_01	






Plate 7: Trench 3, tree throw hole 306 from north



Plate 8: Trench 1, blank trench from west

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	01/02/2017	Revision Number: 0
	Scale:	N/A	Illustrator: APS
	Path:	Y:\Projects\86561\Graphics_Office\Rep figs\Eval\2017_02_01	



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

