



making sense of heritage

Land at Barkby Thorpe, Thurmaston, Leicestershire

Archaeological Evaluation Report



Ref: 100450.01
July 2013



Land at Barkby Thorpe, Thurmaston, Leicestershire

Archaeological Evaluation

Prepared for:
CgMs Consulting Ltd
43 Temple Row
Birmingham
B2 5LS

Prepared by:
Wessex Archaeology
Unit R6
Riverside Block
Sheaf Bank Business Park
Sheffield S2 3EN

www.wessexarch.co.uk

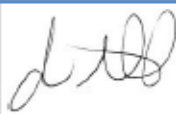
July 2013

100450.01



Quality Assurance

Project Code	100450	Accession Code		Client Ref.	N/A
Planning Application Ref.		Ordnance Survey (OS) national grid reference (NGR)	462855, 308943		

Version	Status*	Prepared by	Checked and Approved By	Approver's Signature	Date
v01	E	SF/AB	APN		25/07/13
File:					
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.



Land at Barkby Thorpe, Thurmaston, Leicestershire

Archaeological Evaluation

Contents

Summary	iv
Acknowledgements.....	v
1 INTRODUCTION.....	1
1.1 Project background	1
1.2 The Site.....	1
2 ARCHAEOLOGICAL BACKGROUND	1
2.1 Introduction	1
2.2 Recent investigations in the area.....	2
3 METHODOLOGY	2
3.1 Introduction	2
3.2 Aims and objectives	2
3.3 Fieldwork methodology	2
3.4 Recording.....	2
3.5 Finds	3
3.6 Environmental	3
4 ARCHAEOLOGICAL RESULTS.....	3
4.1 Introduction	3
4.2 General site stratigraphy	3
4.3 Trench 1.....	3
4.4 Trench 2.....	3
4.5 Trench 3.....	3
4.6 Trench 4.....	3
4.7 Trench 5.....	4
4.8 Trench 6.....	4
4.9 Trench 7.....	4
4.10 Trench 8.....	4
4.11 Trench 9.....	4
4.12 Trench 10.....	5
4.13 Trench 11.....	5
4.14 Trench 12.....	5



5	ARTEFACTUAL EVIDENCE	6
5.1	Introduction	6
5.2	Pottery.....	6
5.3	Middle/Late Iron Age	7
5.4	Romano-British	7
5.5	Ceramic building material	8
5.6	Other finds	8
5.7	Potential and recommendations	8
6	ENVIRONMENTAL EVIDENCE	9
6.1	Animal bone	9
6.2	Charred Plant Remains and Charcoal	10
7	DISCUSSION.....	13
7.1	Introduction	13
7.2	Middle to Late Iron Age	13
7.3	Romano-British	14
7.4	Undated	14
7.5	Conclusions.....	14
8	STORAGE AND CURATION	15
8.1	Archive	15
8.2	Copyright.....	15
9	REFERENCES.....	16
9.1	Bibliography	16
10	APPENDICES.....	18
Appendix 1:	Context data.....	18
Appendix 2:	Environmental data	23
Tables		
Table 1:	Finds totals by material type (number of pieces/weight in grammes)	6
Table 2:	Pottery ware types, quantified by the number/weight of sherds.....	7
Table 3:	Animal bone by context.....	10



Figures

- Figure 1: Site location
Figure 2: Trenches 1 and 2 overlain on geophysical survey
Figure 3: Trenches 1 and 2; plans and sections
Figure 4: Plan of Trenches 3, 4, 5 and 9 overlain on geophysical survey interpretation
Figure 5: Trenches 3, 4, 5 and 9; plans and sections
Figure 6: Plan of Trenches 6, 7, 8 and 12
Figure 7: Trenches 7 and 12 plans and sections
Figure 8: Plan of Trenches 10 and 11 overlain on geophysical survey interpretation
Figure 9: Trenches 10 and 11 plans and sections

Plates

- Plate 1: Trench 3; Iron Age ditches 306 and 308
Plate 2: Trench 4; Iron Age ditches 408 and 410
Plate 3: Trench 3; Iron Age cremation deposit 406
Plate 4: Trench 5; Iron Age ditch 507
Plate 5: Trench 12; Romano-British ditch 1204
Plate 6: Trench 12; Romano-British pit 1213



Land at Barkby Thorpe, Thurmaston, Leicestershire

Archaeological Evaluation

Summary

Wessex Archaeology was commissioned by CgMs Consulting Ltd to undertake an archaeological evaluation in advance of development on land at Barkby Thorpe, near Thurmaston, Leicestershire (centred on NGR 462855 308943).

Previous desk-based assessment and geophysical survey indicated that there was a moderate to high potential for prehistoric, Iron Age to Roman and Saxon/early medieval settlement activity across the Site.

Following discussions with Patrick Clay of the University of Leicester, who is advising Charnwood District Council on archaeological matters, a targeted trenched evaluation was proposed prior to development. A Written Scheme of Investigation for the evaluation of twelve trial trenches was prepared by Wessex Archaeology and approved by CgMs and Charnwood District Council (CDC) in advance of fieldwork.

The evaluation identified three spatially distinct areas of activity at the Site: The field to the north of Barkbythorpe Road, the fields to the west and south of Hamilton Lane and the field to the east of Hamilton Lane. These areas also appear to be chronologically distinct.

Middle to Late Iron Age features were revealed to the west of Hamilton Lane in Trenches 3-5, 7 and 12 (dated by pottery evidence), and included ditches, a cremation burial and discrete features possibly representing settlement activity.

Evidence of Romano-British activity was recovered from ditches in Trenches 10 and 11 to the east of Hamilton Lane. Pottery evidence was consistent with a 2nd to 4th century AD date and fragments of brick and tile suggest there was a substantial Romano-British structure in the vicinity.

The features in Trenches 2 (to the north of Barkby Thorpe Lane) and 9 (to the east of Hamilton Lane) remain undated. Trenches 1, 6 and 8 did not contain any archaeological remains.

The evaluation trenches consistently confirmed the results of the geophysical survey, but in some cases the cause of the geophysical anomalies could not be identified.

The aims and objectives of the evaluation have been fulfilled. The results demonstrate that there is potential for significant archaeological remains to survive at the Site, including artefacts and environmental remains.

No further analysis of the stratigraphic, artefactual or environmental evidence is considered to be warranted at this stage.

The project archive is currently held at the offices of Wessex Archaeology in Sheffield, under the project code 100450. It will be deposited with Leicestershire Heritage Services in due course under an accession number to be confirmed.



Land at Barkby Thorpe, Thurmaston, Leicestershire

Archaeological Evaluation

Acknowledgements

This project was commissioned by CgMs Consulting Ltd and Wessex Archaeology is grateful to Cathy Patrick in this regard. The work was monitored on behalf of CDC by Vicki Score of ULAS.

The fieldwork was directed by Sam Fairhead, assisted by Michael Keech and Richard Mason. The report was compiled by Sam Fairhead and Andrea Burgess and the illustrations were produced by Chris Swales. The finds were assessed by Rachael Seager Smith and the animal bone by Chris Harrison. Samples were processed and assessed by Ellen Simmons of the Sheffield Archaeobotanical Consultancy. The project was managed for Wessex Archaeology by Andrew Norton.



Land at Barkby Thorpe, Thurmaston, Leicestershire

Archaeological Evaluation

1 INTRODUCTION

1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by CgMs Consulting Ltd to undertake an archaeological evaluation in advance of development on land at Barkby Thorpe, near Thurmaston, Leicestershire (hereafter 'the Site').
- 1.1.2 Previous desk-based assessment and geophysical survey (CgMs 2013; Stratascan 2013) indicated that there was a moderate to high potential for prehistoric, Iron Age-Roman and Saxon/early medieval settlement activity across the Site.
- 1.1.3 Following discussions with Patrick Clay of the University of Leicester, who is advising Charnwood District Council (CDC) on archaeological matters, a targeted trenched evaluation was proposed prior to development.
- 1.1.4 A Written Scheme of Investigation (WSI) for the evaluation of twelve trial trenches was prepared by Wessex Archaeology (2013) and approved by CgMs and CDC in advance of fieldwork.

1.2 The Site

- 1.2.1 The Site lies on the north-eastern side of Thurmaston, either side of Barkbythorpe Road (centred on NGR 462855 308943). The Site straddles Hamilton Lane to the east and Barkby Thorpe Lane to the north, the Site is bounded by Melton Brook to the south and the railway and housing to the west (**Figure 1**).
- 1.2.2 The Site is currently agricultural land and lies on Blue Lias Formation mudstone, with outcrops of limestone in the east, and Branscombe Mudstone Formation in the west. The bedrock geology is overlain by Wigston Member sand and gravel in the east and overlain by Head deposits (clay, silt, sand and gravel) in the west.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

- 2.1.1 The following is summarised from the desk-based assessment (CgMs 2013).
- 2.1.2 There are no Scheduled Ancient Monuments, listed buildings, Historic Parks and Gardens, or Registered Battlefields on the Site. The Scheduled Ancient Monuments of Hamilton Deserted Medieval Village and Hamilton Roman Villa are situated approximately 280m and 600m southeast of the Site boundary.

2.1.3 The current evidence indicated that there was a moderate to high potential for prehistoric, Iron Age-Roman and Saxon/early medieval settlement activity across the Site. Increased potential was identified in areas of known archaeological activity (across the spur of high ground to the south of Barkby Thorpe and identified cropmark areas).

2.1.4 Medieval activity is limited to the historic core and shrunken medieval village of Barkby and Barkby Thorpe. A low potential was therefore identified for this period for the Site, with medieval activity limited to that of agriculture. A low potential was also considered for the post-medieval and modern periods as the Site predominantly remains an area of agricultural land.

2.2 Recent investigations in the area

2.2.1 A geophysical survey identified anomalies clearly identifiable as archaeological features forming enclosures and possible ladder settlements (Stratascan 2013; Figures 2, 4, 6 and 8).

3 METHODOLOGY

3.1 Introduction

3.1.1 The evaluation was conducted in accordance with the approved Written Scheme of Investigation (Wessex Archaeology 2013) and with professional standards and guidelines (IfA 2008a, 2010).

3.2 Aims and objectives

3.2.1 The aims of the project were:

- To record, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains observed;
- To provide sufficient information to enable an informed decision to be made about the need for additional archaeological mitigation;
- To investigate geophysical anomalies revealed by previous survey;
- To make available the results of the work.

3.3 Fieldwork methodology

3.3.1 Twelve trial trenches were located to investigate geophysical anomalies. Topsoil or overburden was removed using a mechanical excavator (JCB) fitted with a toothless ditching bucket, working under the continuous supervision of an archaeologist. Topsoil was removed in a series of level spits down to the level of the upper archaeological horizon, or the level of the natural geology, whichever was reached first.

3.3.2 Any revealed deposits were hand cleaned, excavated and recorded in accordance with Wessex Archaeology's standard guidelines and the WSI (Wessex Archaeology 2013).

3.4 Recording

3.4.1 All archaeological deposits were recorded using Wessex Archaeology's *pro forma* recording system. Each context record fully describes the location, extent, composition and relationship of the subject and is cross-referenced to all other assigned records.

- 3.4.2 A full photographic record was maintained consisting of 35mm monochrome prints and digital images.

3.5 Finds

- 3.5.1 All artefacts from excavated contexts were retained. Finds were treated in accordance with the relevant guidance (UKIC 2001; MGC 1992; English Heritage 2005; IfA 2008b).

3.6 Environmental

- 3.6.1 Environmental samples were taken and processed in accordance with current industry guidelines (English Heritage 2011, IfA 2008a).

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

- 4.1.1 Twelve trenches were excavated in accordance with the WSI (Wessex Archaeology 2013). Trench locations are shown on **Figure 1**. Significant deposits and features are summarised below and shown on **Figures 2-9**; a description of contexts in each trench is included in **Appendix 1**.

4.2 General Site stratigraphy

- 4.2.1 The topsoil was typically 0-0.35m below ground level (bgl) and consisted of a mid brown silty sand. Subsoil was observed in some trenches; it was very similar to, but slightly lighter than, the topsoil with a very ephemeral horizon between the two deposits. Natural deposits were typically encountered at 0.35-0.5m bgl and consisted of light brownish orange sandy clay containing patches of coarse gravel and rounded cobbles. In Trenches 1 and 2 the natural deposits were sandier than elsewhere.

4.3 Trench 1

- 4.3.1 The two features observed in Trench 1 corresponded with faint geophysical anomalies and were revealed to be very shallow depressions, most likely caused by ploughing.

4.4 Trench 2

- 4.4.1 Trench 2 revealed a wide ditch aligned with a strong geophysical signal (**Figures 2 and 3**). The ditch (**204**) was 1.98m wide and 0.58m in depth, running northwest to southeast across the trench. The size of this feature suggests that it was a boundary ditch, but no datable material was recovered from either of its two fills (**205 and 206**).

4.5 Trench 3

- 4.5.1 Two features were observed in this trench, both corresponding with curvilinear geophysical anomalies. Ditches **304** and **306** were 1.2m and 0.95m wide and 0.35m and 0.63m in depth, respectively (**Figures 4 and 5**). Ditch **304** contained a single fill and ditch **306** contained one fill (**307**) that was re-cut by ditch **308** (**Plate 1**). A single sherd of Middle to Late Iron Age ceramic was recovered from fill **305** of ditch **304**. Ditch **308** contained two silty fills (**309 and 310**).

4.6 Trench 4

- 4.6.1 Trench 4 contained a shallow east-west aligned gully (**404**) corresponding with a geophysical anomaly at the southern end of the trench (**Figures 4 and 5**). This feature

was 1m wide and 0.15m deep and contained a single fill (403) from which a single sherd of Middle to Late Iron Age pottery was recovered.

- 4.6.2 A geophysical anomaly in the centre of the trench was found to be caused by a sequence of at least two phases of activity. The earliest of these, ditch 410, was 0.19m deep and at least 0.98m wide; part of its original width had been truncated by ditch 408. Ditch 410 was filled by 411. Ditch 410 had been cut by a shallower ditch or gully (408; **Plate 2**). This later feature was 0.76m wide and 0.26m deep. Its fill (409) also contained Middle to Late Iron Age pottery. It followed the same alignment as ditch 410 but was positioned slightly to the south.
- 4.6.3 Fill 409 had been cut by a 0.25m diameter circular pit (407), which contained the remains of a cremation burial (406; **Plate 3** – left *in situ*). The burial comprised large sherds of middle to late Iron Age pottery and fragments of burnt bone. Cut 407 was only 0.05m deep, the upper portion of the burial had been truncated and disturbed, probably by modern ploughing. A sherd of Iron Age pottery was recovered from the surface of fill 411 and patches of burnt bone were also visible on the surface approximately 1m from the burial cut. These additional finds probably derived from the disturbed cremation, but could indicate further burials.
- 4.6.4 A geophysical anomaly at the northern end of the trench, was revealed to have been caused by a northwest to southeast aligned field drain.

4.7 Trench 5

- 4.7.1 Trench 5 contained two linear features corresponding with geophysical anomalies (**Figures 4 and 5**). Ditch 503 was 0.78m wide and only 0.07m deep. It contained a single fill and no finds. Ditch 507 (**Plate 4**) was more substantial at 0.7m wide and 0.76m deep. It contained two fills (505 and 506) and the upper fill (505) contained Middle to Late Iron Age pottery.

4.8 Trench 6

- 4.8.1 Trench 6 (**Figure 6**) contained no archaeological features, deposits or artefacts. There was no indication of what may have caused the geophysical anomaly in this area.

4.9 Trench 7

- 4.9.1 Two shallow ditches and a field drain were identified in the northern and central parts of Trench 7 (**Figures 6 and 7**). Ditch 704 was 0.65m wide and 0.24m deep, with one fill. Ditch 705 was 0.6m wide and 0.18m deep. It contained a single fill (706) which yielded two sherds of Middle and Middle to Late Iron Age pottery.

4.10 Trench 8

- 4.10.1 Trench 8 (**Figure 6**) contained a field drain aligned northwest to southeast but no archaeological features, deposits or artefacts. One of the geophysical anomalies in this area may have been caused by the field drain but there was no indication of the cause of the other responses.

4.11 Trench 9

- 4.11.1 The sole feature in Trench 9 was a 0.5m wide and 0.2m deep gully (904) aligned east to west in the northern end of the trench (**Figures 4 and 5**). It contained one fill and no finds.

4.12 Trench 10

- 4.12.1 Trench 10 contained five east to west aligned linear features (**Figures 8 and 9**). The northernmost was ditch **1007**, which was 0.65m wide and 0.24m deep. It contained a single fill (**1006**), from which several fragments of Roman *tegula* were recovered.
- 4.12.2 The southernmost feature, ditch **1005**, was 0.65m wide and 0.48m deep. It contained two fills (**1003** and **1004**) and the lower fill (**1004**) contained Roman greyware pottery.
- 4.12.3 The central part of Trench 10 was crossed by three broad linear features. These were 3m wide and 0.2m deep and regularly spaced, indicating these were the remnants of furrows. Furrow **1008** contained a single fill (**1009**) which yielded Roman brick/tile fragments and Roman pottery.

4.13 Trench 11

- 4.13.1 Trench 11 contained four north to south aligned linear features (**Figures 8 and 9**). Ditch **1107** was the easternmost of these. It was 1.4m wide and 0.75m deep and contained two fills (**1105** and **1106**). The uppermost fill (**1105**) contained fragments of Roman pottery.
- 4.13.2 Ditch **1104** was only 0.37m wide and 0.16m deep. The sole fill (**1103**) contained a sherd of samian pottery.
- 4.13.3 The other linear features in this trench were both furrows and were not excavated.

4.14 Trench 12

- 4.14.1 Trench 12 contained evidence of at least two phases of activity comprising one linear feature, one possible linear feature and five discrete features (**Figures 6 and 7**).
- 4.14.2 Ditch **1204** (**Plate 5**) crossed the centre of the trench on a northeast to southwest alignment. It was 0.87m wide and 0.35m deep and contained two fills (**1205** and **1206**). Middle to Late Iron Age pottery, animal bone and worked flint were recovered from the upper fill (**1205**).
- 4.14.3 The end of a possible linear feature or an elongated pit (**1202**) and a small pit (**1216**) were identified in the southern end of the trench; these features were not excavated.
- 4.14.4 Four discrete features were grouped together in the northern part of the trench. Pit **1207** was 0.5m in diameter and 0.12m deep with a single fill containing a piece of flint.
- 4.14.5 Pit **1218** was 0.5m in diameter and was left unexcavated; it appeared to have been cut by a natural feature (a possible tree bowl).
- 4.14.6 Pit **1213** (**Plate 6**) was 0.59m in diameter and 0.19m deep. It had a single fill, **1214**, which contained animal bone and unworked flint. Fill **1214** had been cut by post-hole **1211** which was 0.3m in diameter and was not excavated.

5 ARTEFACTUAL EVIDENCE

5.1 Introduction

- 5.1.1 Just over 8kg of finds were recovered from seven of the twelve trenches excavated. After cleaning, all the artefacts were quantified (number and weight of pieces) by material type within each context (**Table 1**), and scanned on a context by context basis to assess their nature, date range and condition.
- 5.1.2 The pottery has provided the primary dating evidence for the Site, but, where appropriate, this has been combined with information from other chronologically diagnostic artefact types (e.g. the ceramic building materials), allowing broad spot-dates to be assigned to each context.

Table 1: Finds totals by material type (number of pieces/weight in grammes)

Trench	Pottery	Slag	CBM	Fired clay	Iron	Stone
3	1/7	1/103				
4	13/89					
5	2/51					
7	2/34					
10	29/453		20/5868	1/8	1/17	1/929
11	11/404					
12	3/26					
Total	61/1064	1/103	20/5868	1/8	1/17	1/929

5.2 Pottery

- 5.2.1 The assemblage was recovered from twelve contexts and survives in moderately good condition. The pieces are generally fairly large (mean sherd weight 17.4g), but only seven rims are present. For this assessment, the sherds from each context were sub-divided into broad ware groups (e.g. sandy wares) or known fabric types (e.g. Nene Valley colour-coated ware) and quantified by the number and weight of pieces present. The number and range of any rims was also noted. Spot-dates, used to inform the stratigraphic phasing, were assigned to each ware type and to the context as a whole.
- 5.2.2 Chronologically, the assemblage divides into two groups, with Middle/Late Iron Age sherds being recovered from Trenches 3, 4, 5, 7 and 12, while all the pieces from Trenches 10 and 11 are of Romano-British date. A breakdown of the assemblage by period and ware type is shown in **Table 2**.

Table 2: Pottery ware types, quantified by the number/weight of sherds

Ware	No.	Wt. (g)
Middle/Late Iron Age:		
granite tempered ware (Leics fabric RQ1)	17	114
sand and soft, white, non-calcareous particles	2	52
sandy ware (Leics fabric Q1)	1	35
sand and mudstone tempered ware	1	7
<i>subtotal:</i>	<i>21</i>	<i>208</i>
Romano-British:		
Greyware	23	551
shell-tempered ware	12	217
Nene Valley colour-coated ware	3	17
Central Gaulish samian	1	62
Whiteware	1	10
<i>subtotal:</i>	<i>40</i>	<i>857</i>

5.3 Middle/Late Iron Age

- 5.3.1 Where possible, the fabrics belonging within this period have been equated with the types previously defined for other Iron Age assemblages from Leicestershire (e.g. Marsden 1998). Most are of local origin, dominated by wares containing acid igneous rocks, probably Mountsorrel granite/granodiorites, from the Charnwood Forest area to the east of Leicester, while sand and mudstone are available in the immediate vicinity of the Site. Overall, the sherds fall within the East Midlands scored ware tradition (Elsdon 1992), corresponding to Knight's Group 2 (Knight 1984, 40), which typifies the ceramics of the area for much of the last four centuries of the 1st millennium BC (Knight 2002, 133-135). Only two rims are present, comprising a granite-tempered jar with a short neck, a simple rounded rim and a thickened, externally scored shoulder (ditch 705), similar to vessels from Coventry Road, Hinckley (Jackson 2004, fig. 18, 3) and Wanlip (Marsden 1998, fig. 25, 4 and fig. 26, 17) and a flat-topped, externally expanded rim in a sand and mudstone-tempered fabric, from ditch 304. The only other featured sherd is an externally-expanded jar base fragment, with a lightly scored exterior surface, made in a sandy fabric and found in gully 404.

5.4 Romano-British

- 5.4.1 The Romano-British sherds were mostly found residually in the accumulated fill of plough furrow 1008 (28 sherds, 396g), with the remainder from ditch 1005, ditch 1104 and ditch 1107. The small assemblage is dominated by hard, wheelmade, fine- to medium- grained sandy greyware fabrics probably of local origin. The four rims were all from closed forms, one a narrow-necked jar/flask, a large upright-necked jar and two jar rim fragments too small to be more closely identified to type. Nine of the shell-tempered sherds, all plain bodies, derive from a single, thick-walled vessel, found in ditch 1107; the other three came from furrow 1008. Although common in the East Midlands, kilns at Harrold in Bedfordshire (Brown 1994) are currently the only known source for these wares, although their frequency and wide distribution suggests that other, as yet unlocated, centres may have

been involved in their manufacture. Amphora and mortaria are entirely absent, probably as a result of the small assemblage size, but a large sherd from a Central Gaulish samian cup (form 33) came from ditch 1104 in Trench 11. Three sherds of Nene Valley colour-coated ware, two from the shoulder of a jar and one from an indented beaker were found in furrow 1008. The whiteware body sherd could also be from this industry. All the sherds date from the mid/late 2nd – 4th century AD; no evidence for re-use or repair was noted in this small assemblage.

5.5 Ceramic building material

- 5.5.1 The fragments of ceramic building material are all of Romano-British date and from Trench 10, two pieces (912g) being found in ditch 1007, the remainder from furrow 1008. All but two of the pieces are identifiable to type, and comprise fragments of *tegulae* roof tile (at least ten separate tiles being represented) as well as three pieces (2186g) from the smaller, thinner types of Roman brick (e.g. *bessales*, *pedalis*, *lydion*; Brodrigg 1987, fig. 1). All are made in oxidised, sandy fabrics, fired to various shades of orange. No *imbrex* roof tiles were present.

5.6 Other finds

- 5.6.1 A single piece of highly vesicular smithing slag came from ditch 304 where it was associated with a sherd of Middle/Late Iron Age pottery. Two of the other finds, a flat, round-headed iron nail with a square-sectioned, tapering shank, from furrow 1008 and an amorphous fragment of fired clay, probably from oven/hearth lining (ditch 1005) are likely to be of Romano-British date. A flat, rectangular block of mudstone (furrow 1008) could have been used as a brick, tile or building stone but carries no obvious signs of working or utilisation and may just be a natural fragment, broken along the bedding planes of this locally-available rock.

5.7 Potential and recommendations

- 5.7.1 No items of particular intrinsic interest were included in this small finds assemblage. The pottery indicates two phases of activity, in the Middle/Late Iron Age and mid/late 2nd – 4th centuries AD, separated both spatially and chronologically, with no evidence for continuity between them. The pottery also provides some evidence for the sources of supply during both periods.
- 5.7.2 The smithing slag indicates that small-scale metalworking occurred in the area during the latter part of the Iron Age, while the ceramic building material suggests that there may have been a substantial Romano-British structure in the vicinity, but the quantities of all material types are too small to provide any further details about the exact nature of the activities carried out here.
- 5.7.3 The finds have all been recorded to fairly detailed level (e.g. pottery ware types; tile types) and the assemblage is too small to warrant any further analysis at this stage.
- 5.7.4 The comments made in this report are already suitable for publication, with minor modification and augmentation as required. If, however, any further archaeological investigations at the Site provide a larger and more informative assemblage, these recommendations and, indeed, the artefacts themselves, should be considered again in the light of this greater body of evidence.

6 ENVIRONMENTAL EVIDENCE

6.1 Animal bone

Introduction

- 6.1.1 A total of 32 animal bone fragments were retrieved from 7 contexts. Of these 32 elements, 10 were recordable to species. The assemblage was generally in good condition. The following constitutes an assessment of the material considering the assemblage's potential for future analysis. Methodologies followed standard Wessex Archaeology practice.

Taphonomy

- 6.1.2 Preservation of the assemblage was on the whole fair to good (noted as 5=Poor to 1=Good) although all collections of bones did exhibit some level of gnawing. Bone recovered from Trenches 6 and 10 were poor in quality suggesting they had been subjected to surface weathering.

Ageing, Measurements, Pathology, and Butchery.

- 6.1.3 Complete mandibles were recovered and ageing can be attempted from the dataset. In addition, neonatal or foetal bones were recovered suggesting onsite rearing of animals.

Trench 3

- 6.1.4 A total of 15 fragments of animal bone were recovered from the fill (305) of a Middle to Late Iron Age ditch (304). Out of the 15 fragments a total of 8 identifiable bones were present. These included four cattle bones, a single pig mandible, one large mammal rib and two medium mammal ribs. The bone was generally in a good condition.

Trench 7

- 6.1.5 A total of 5 fragments of unidentifiable animal bone were recovered from the fill (706) of a Middle to Late Iron Age ditch (705). The bone was in a poor condition and exhibited surface ware and cracking, suggesting it had been exposed to the elements before deposition. It is possible that the fragments are from the a clavicle of a medium mammal.

Trench 10

- 6.1.6 A total of three fragments of bone were recovered from Trench 10, one unidentifiable weathered fragment from a furrow (1009), and a well preserved mandible and scapula from a neonatal or foetal cow.

Trench 12

- 6.1.7 A total of 16 fragments of bone were recovered: nine fragments of bone in good condition from 1205 and one unidentifiable bone 1206 from the fills of a Middle to Late Iron Age ditch 1204; and six fragments of unidentifiable weathered bone 1213 from an undated pit 1214. The bone from 1205 presented the only identifiable specimens, which were an adult pig ulna and a loose cattle tooth. A possible neonatal or foetal pig humerus was also present, although the articular ends had been gnawed off.

Conclusion

- 6.1.8 The bone recovered is all from domesticates specifically cattle and pig. Of interest are the neonatal and foetal bones recovered, which suggest local animal rearing. The lack of sheep/goat bones is also of interest, although some of the medium mammal bones may be from sheep. Although the assemblage is small, any future work may add to the understanding of the economic regimes undertaking in the farming of animals on Site.

- 6.1.9 Any future work should look at ageing the animal bones to aid the formation of mortality profiles.

Table 3: Animal bone by context

CONTEXT	Cattle	Pig	Large Mammal	Medium Mammal	Unidentified	Weight
305	4	1	1	2		364g
706					5	12g
1004	2				1	20g
1009					1	4g
1205	1	2			6	66g
1206					1	1g
1214					5	16g

6.2 Charred Plant Remains and Charcoal

Introduction

- 6.2.1 Three bulk samples, each of ten litres in volume, were taken from the upper fill of ditch **1005**, the primary fill of ditch **308** and the primary fill of ditch **204** in order to evaluate the presence and preservation of palaeo-environmental remains. The samples were processed for the recovery and assessment of charred plant remains and wood charcoal.
- 6.2.2 The bulk samples were processed by standard flotation methods using a water separation machine. Floating material was collected in a 300µm mesh, and the remaining heavy residue retained in a 1mm mesh. The flots and heavy residue were air dried. The residues were scanned for metallurgical debris such as hammer scale, using a large magnet and the >2mm fraction of the heavy residue was fully sorted for organic remains and artefacts and then discarded. Where no potential for the recovery of <2mm artefacts, such as fish bone or beads was noted, the <2mm fraction of the heavy residue was also discarded.
- 6.2.3 The samples were assessed in accordance with English Heritage guidelines (2011) for environmental archaeology assessments. The main aim of this assessment was to determine the concentration, diversity, state of preservation and suitability for use in radiocarbon dating, of any archaeobotanical material present within the samples. A further aim was to evaluate the potential of this material to provide evidence for the function of the contexts, the economy of the Site or for the nature of the local environment.
- 6.2.4 A preliminary assessment of the samples was made by scanning under a low power binocular microscope (x7-x45) and recording the abundance of the main classes of material present. Preliminary identification of plant material was carried out by comparison with material in the reference collections at the Department of Archaeology, University of Sheffield and various reference works (e.g. Berggren 1969, 1981; Anderberg 1994; Cappers *et al* 2006). Cereal identifications and nomenclature follow Jacomet (2006). Other plant nomenclature follows Stace (2010). This data is recorded in **Appendix 2**.
- 6.2.5 Charred plant remains in the form of cereal grain and wild/weed plant seeds were present in all three samples, with sample 3 from ditch fill **206** containing a relatively high density, and a low density present in samples 1 from ditch fill **1003** and sample 2 from ditch fill **309**. Intrusive roots were also present in all three samples with the greatest density being in sample 3. Preservation of cereal grains was generally somewhat poor, with many

grains being puffed, distorted and lacking epidermis. Occasional grains exhibited good preservation, however, with minimal distortion and epidermis intact.

- 6.2.6 Wood charcoal fragments were present in all three samples with a moderately high density present in samples 1 and 3 and a low density present in sample 2. Preservation of wood charcoal fragments was relatively good with no vitrified fragments being noted as present. Some mineralisation of charcoal fragments was however observed, whereby mineral deposits penetrate into the vessels of the wood charcoal fragments, obscuring morphological characteristics and possibly hampering identification.

Charred plant remains

- 6.2.7 Sample 1 from upper ditch fill **1003** contained less than ten items of charred crop material including two barley type grains (*Hordeum* sp.), two free threshing wheat type grains (*Triticum aestivum* s.l./*turgidum* s.l. type), one indeterminate wheat type grain (*Triticum* sp.) and one oat type grain (*Avena* sp.). Also present in sample 1 were less than five wild/weed plant seeds including knotgrass (*Polygonum arenastrum/aviculare*), stinking chamomile (*Anthemis cotula* L.) and small grasses (<2m *Poaceae*).
- 6.2.8 Sample 2 from primary ditch fill **309** contained a single poorly preserved grain that could only be identified as wheat or barley (*Triticum* sp./*Hordeum* sp.). Also present in sample 2 were less than five wild/weed plant seeds including vetch/pea (*Vicia/Lathyrus*), brome grass/rye-grass (*Bromus* sp./*Lolium* sp.) and an unidentified wild/weed seed.
- 6.2.9 Sample 3 from primary ditch fill **206** contained over one hundred items of crop material including just over fifty free-threshing wheat-type grains. Due to the potential unreliability of wheat species identification based on grain morphology (Hillman et al 1995; G. Jones 1998), as well as to the poor preservation of the majority of the grains, it could not be ascertained whether the hexaploid or tetraploid varieties of free threshing wheat were present. A single free-threshing wheat rachis node was present but was too poorly preserved for the species to be determined. Between ten and thirty barley-type grains were also present with a small number being well enough preserved to identify the presence of a hulled variety of barley. Between five and ten oat-type grains were present but, as no oat chaff was recovered, it could not be ascertained whether the oat was of the wild or cultivated varieties. A single rye-type grain (*Secale cereale* type) was also present.
- 6.2.10 Just over thirty wild/weed plant seeds were also present in sample 3, including between five and ten seeds of vetch/pea, less than five seeds of medick/clover (*Medicago/Trifolium*), more than ten seeds of stinking chamomile, one seed of sedge (*Carex* sp.) trigonous, less than five seeds of brome grass or rye-grass and between five and ten grass seeds (*Poaceae*).
- 6.2.11 Free threshing wheat first became widely cultivated as a crop during the late Iron Age and Roman periods in the East Midlands, and replaced spelt as the most common wheat type cultivated during the Anglo Saxon period (Monckton, 2006: 273-279). It is likely that the charred plant material in sample 3 from ditch fill **206** represents material of Roman or post Roman date, although it is possible that the material may be Iron Age. The appearance of the seeds of stinking mayweed in the archaeobotanical record also first occurs however in the Roman period in Leicestershire (Monckton 2006: 274), which would also be consistent with a Roman or post-Roman date for ditch fill **206**. The presence of stinking mayweed has been interpreted as an indication of the expansion of agriculture onto heavier clay soils. Rye has been recorded in large quantities at some Roman sites but does not appear as a widespread crop until the Saxon period. Oats are also present in archaeobotanical assemblages generally dating to the late Iron Age onwards, although

where present in low densities as here, they are assumed to represent a weed (Monckton 2006: 274).

- 6.2.12 It is likely that the charred cereal grains present in the samples represent crops that were accidentally charred during parching or food preparation. Free threshing wheat does not generally require parching in order to assist in the removal of chaff from the grain as with hulled wheat and hulled barley (Hillman 1981, 153-154). Parching however greatly assists in the efficiency of milling (Monk 1981, 223) and may also have been carried out to prevent spoilage or to prepare grain for storage (Hillman 1982, 137-138).
- 6.2.13 The wild/weed plant seeds present are likely to have been harvested along with the crops but may also derive from other sources such as kindling, waste roofing or flooring material and animal fodder. The presence of small seeds from typical crop weeds, along with the presence of free threshing wheat chaff, suggests that waste from the earlier stages of crop processing may be represented, possibly having been used as fuel. The presence of brome or rye grass seeds, which are similar in size to prime grain, may represent wild seeds charred accidentally alongside the grain during parching, or that waste from the final stages of crop processing is also represented, possibly as fuel.

Wood charcoal

- 6.2.14 Sample 1 from upper ditch fill **1003** contained just over fifty fragments of wood charcoal greater than 2mm in size. The majority of fragments were of a ring porous species, likely to be oak (*Quercus* sp.).
- 6.2.15 Sample 2 from primary ditch fill **309** contained between ten and thirty fragments of wood charcoal greater than 2mm in size. The majority of fragments were of a ring porous species, likely to be oak (*Quercus* sp.).
- 6.2.16 Sample 3 from primary ditch fill **206** contained over fifty fragments of wood charcoal greater than 2mm in size. The majority of fragments were of a ring porous species, likely to be oak (*Quercus* sp.).
- 6.2.17 Fragments of diffuse porous species were also present in all samples, but it was not possible to identify these with the use of low power magnification and due to mineral deposits obscuring the surface of the fragments.

Potential and recommendations

- 6.2.18 No further analysis of the charred plant material in samples 1 and 2 would be recommended due to the paucity of remains present. Full identification and analysis of the charred plant remains in sample 3 from ditch fill **206** is recommended as part of any future work.
- 6.2.19 No further analysis of the wood charcoal present in sample 2 is recommended due to the paucity of material present. As part of any future work identification and analysis of the wood charcoal assemblage in samples 1 from ditch fill **1003** and 3 from ditch fill **206**, would be recommended due to the presence of sufficient wood charcoal fragments to provide a representative list of species utilised as fuel (Stuijts 2006, 28).
- 6.2.20 The charred cereal grain present in sample 3 from ditch fill **206** would provide the most suitable material for use in radiocarbon dating due to the short life of the cereal grain prior to charring. The presence of a high density of charred material in sample 3 also minimises the potential for charred material to be intrusive.

7 DISCUSSION

7.1 Introduction

7.1.1 The evaluation identified three spatially distinct areas of activity at the Site comprising the evaluated field to the north of Barkbythorpe Road (Trench 1-2), the fields to the west and south of Hamilton Lane (Trenches 3-8 and 12) and the field to the east of Hamilton Lane (Trenches 10 and 11).

7.1.2 These areas also appear to be chronologically distinct. Trenches 10 and 11 contained evidence of only Romano-British activity (2nd to 4th century AD) whilst Trenches 3-5, 7 and 12 contained evidence of only Middle to Late Iron Age activity (400BC to AD43). The features in Trenches 2 and 9 remain undated. Trenches 1, 6 and 8 did not contain any archaeological remains.

7.2 Middle to Late Iron Age

7.2.1 The identified Iron Age features included ditches, a possible cremation burial and discrete features. In addition to the linear features anticipated by the geophysical survey, Trenches 4 and 12 contained evidence of a cremation burial and possible settlement activity, respectively.

7.2.2 The linear features in Trenches 3, 4, 5, 7 and 12 confirmed the survival of a series of small ditch defined enclosures, and a large enclosure with smaller corner enclosure as identified by the geophysical survey. These were consistently dated to the Middle to Late Iron Age by pottery evidence. A cremation in a vessel from the same period had been cut into an upper ditch fill in Trench 4, establishing that these enclosures were both used and filled during the prehistoric period.

7.2.3 These trenches were spaced across a large area encompassing three modern fields but the absence of archaeological remains in Trenches 6 and 8 indicates that Iron Age activity is dispersed across the area to the west of Hamilton Lane, rather than being intensive activity across the whole of the evaluated area. Trench 12, where the greatest density of features and the evidence for possible settlement was found, lies some distance from the main area of enclosures identified by the geophysical survey.

7.2.4 The environmental evidence recovered from Trench 3 was not well-preserved and only a single wheat or barley grain, less than five wild/weed plant seeds and fragments of probable oak charcoal were present. This supports the archaeological and artefactual evidence, which suggests that the evaluation trenches to the west of Hamilton Lane did not correspond with an area of prehistoric settlement. Rather, from the available evidence, these enclosures appear to relate to agricultural (stock control) activities, although a single fragment of smithing slag from Trench 3 could also indicate industrial activity in the vicinity. The presence of re-cuts in the ditches demonstrates that the enclosures were maintained or perhaps re-established seasonally.

7.2.5 Use of these enclosures appears to have ceased during the Iron Age and the ditches infilled sufficient to allow a cremation to be buried within the upper surviving fill. In order to avoid compromising evidence better recovered through more detailed excavation, the burnt bone was left *in situ* and only the already disturbed vessel sherds were retrieved for dating. The bone has not been confirmed as human, but its deliberate interment in a vessel strongly suggests this. The cremation may have been buried in a disused enclosure whilst other agricultural activity in the vicinity continued, or may represent the final phase of prehistoric occupation.

- 7.2.6 The putative settlement evidence in Trench 12 included at least two phases of activity involving one linear feature, one possible linear feature and five discrete features. Dating evidence was recovered only from the linear features and the pits are assumed to be Middle to Late Iron Age by association.

7.3 Romano-British

- 7.3.1 Evidence of Romano-British activity was recovered from Trenches 10 and 11 and there was no evidence of earlier activity from this part of the Site. Again the evaluated features corresponded with linear geophysical anomalies and confirmed the presence of a large rectangular enclosure with internal sub-divisions.
- 7.3.2 Four ditches were evaluated and Romano-British pottery and/or ceramic building materials were recovered from each of them. The pottery is consistent with a 2nd to 4th century AD date indicating that there was no continuity of occupation at the Site.
- 7.3.3 The fragments of brick and tile suggests at there was a substantial Romano-British structure in the vicinity but no evidence of the site of this building was identified. It was clear that the Romano-British features had been disturbed during the medieval or post-medieval periods, as artefacts of this date were also recovered from furrow fills in this area.
- 7.3.4 The environmental evidence from Romano-British features appears to be better preserved than that from the earlier period; six grains, five wild/weed plant seeds and a significant quantity of probable oak charcoal were identified from a ditch fill.
- 7.3.5 Although the artefacts provide clear dating for the features in this part of the Site it has not been possible to establish the type(s) of activity that were carried out.

7.4 Undated

- 7.4.1 Undated features were identified in Trenches 1, 2 and 9. Whilst those in Trenches 1 and 9 were only shallow and were possibly caused by ploughing, the feature in Trench 2 appeared to be more significant. It contained a substantial ditch corresponding with a geophysical anomaly indicative of an enclosure appended to a large field. No dating evidence was recovered from either of the two fills but the environmental evidence was significant. The primary ditch fill sample contained over one hundred items of crop material including free-threshing wheat-type, barley-type, oat-type and rye-type grains. A variety of wild/weed plant seeds were also present, as was probable oak charcoal. These were the best-preserved and most plentiful environmental remains from the Site; either this differential preservation relates to different ground conditions in this area (to the north of Barkby Thorpe Lane), to more intense activity, or possibly to a different period of activity.

7.5 Conclusions

- 7.5.1 The evaluation trenches consistently confirmed the results of the geophysical survey, also in some areas, the cause of geophysical anomalies could not be identified. However, interpretation of the evidence is limited by the number of trial trenches excavated and it is difficult to extrapolate across the whole of the proposed development Site.
- 7.5.2 It is clear that the Site was utilised during at least two separate periods. This included Middle to Late Iron Age stock management, industrial and funerary activity, and Romano-British settlement possibly including a substantial building. No evidence of continuity between these two periods was recovered.

- 7.5.3 The aims and objectives of the evaluation have been fulfilled. The results demonstrate that there is potential for significant archaeological remains to survive at the Site, including artefacts and environmental remains.
- 7.5.4 An absence of archaeological features corresponding with geophysical anomalies in some of the evaluation trenches may be due to truncation by medieval to modern agriculture. Therefore, archaeological remains may only survive in discrete zones that do not accurately reflect their original extents and it may not be possible to compile a narrative for the development Site as a whole.

8 STORAGE AND CURATION

8.1 Archive

- 8.1.1 The project archive has been compiled into a stable, fully cross-referenced and indexed archive in accordance with current guidelines (English Heritage 1991; Brown 2007). The archive is currently held at the offices of Wessex Archaeology in Sheffield, under the project code **100450**.
- 8.1.2 The archive will be deposited with Leicestershire Heritage Services in due course under an accession number to be confirmed.

8.2 Copyright

- 8.2.1 This report, and the archive generally, may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which we are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferrable by Wessex Archaeology. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

9 REFERENCES

9.1 Bibliography

- Anderberg, A.L., 1994, *Atlas of Seeds and Small Fruits of Northwest-European Plant Species with Morphological Descriptions, Part 4: Resedaceae-Umberliferae*.
- Berggren, G., 1969, *Atlas of Seeds and Small Fruits of Northwest-European Plant Species, with Morphological Descriptions, Part 3: Cyperaceae*.
- Berggren, G., 1981, *Atlas of Seeds and Small Fruits of Northwest-European Plant Species, with Morphological Descriptions, Part 3: Salicaceae-Crucifera*.
- Brodrigg, G., 1987, *Roman Brick and Tile*.
- Brown, A., 1994, A Romano-British shell-gritted pottery and tile manufacturing site at Harrold, Bedfordshire, *Bedfordshire Archaeol.* 21: 19-107.
- Brown, D.H., 2007, *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*. IfA Archaeological Archives Forum.
- Cappers, R.T.J., Bekker, R.M. and Jans, J.E.A., 2006, *Digital Seed Atlas of the Netherlands*.
- CgMs Consulting Ltd, 2013, *Thurmaston, Leicestershire, Archaeological Desk-Based Assessment*, unpublished client report CP/HS/9886.
- Elsdon, S.M., 1992, East Midlands Scored Ware, *Trans. Leics. Archaeol. Hist. Soc.* 66: 83-91.
- English Heritage, 1991, *The Management of Archaeological Projects*. 2nd Edition (MAP2).
- English Heritage, 2005, *A Strategy for the Care and Investigation of Finds*.
- English Heritage, 2011, *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*. 2nd edition.
- Hillman, G., 1981, Reconstructing crop husbandry practices from charred remains of crops. In R. Mercer (ed.) *Farming Practice in British Prehistory*: 123-162.
- Hillman, G.C., Mason, S., de Moulins, D. and Nesbitt, M., 1995, Identification of the archaeological remains of wheat: the 1992 London workshop. *Circaea* 12(2): 195-210.
- Institute for Archaeologists (IfA), 2008a, *Standard and Guidance for Archaeological Evaluation*.
- Institute for Archaeologists (IfA), 2008b, *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*.
- Institute for Archaeologists (IfA), 2010, *Codes of Conduct*.
- Jacomet, S., 2006, *Identification of Cereal Remains from Archaeological Sites*. 2nd edition.

- Jackson, D., 2004, Pottery in P. Chapman, Iron Age Settlement and Romano-British Enclosures at Coventry Road, Hinckley, Leicestershire, *Trans. Leics. Archaeol. Hist. Soc.* 7: 61-64.
- Jones, G., 1998, Wheat grain identification – why bother? *Environmental Archaeology* 2: 29-34.
- Knight, D., 1984, *Late Bronze Age and Iron Age settlement in the Nene and Great Ouse Basins*, *Brit. Archaeol. Rep.*, (Brit. Ser.) 130.
- Knight, D., 2002, A regional ceramic sequence: Pottery of the First Millennium BC between the Humber and the Nene, in A. Woodward and J.D. Hill (eds) *Prehistoric Britain: The Ceramic Basis*: 119–42.
- Marsden, P., 1998, The prehistoric pottery, in M. Beamish, A Middle Iron Age Site at Wanlip, Leicestershire, *Trans. Leics. Archaeol. Hist. Soc.* 7:, 44-62.
- Monckton, A., 2006, Environmental archaeology in the East Midlands. In N.J. Cooper (ed.) *The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda*. *Leicester Archaeology Monographs* 13.
- Monk, M.A., 1981, Post-Roman drying kilns and the problem of function: a preliminary statement. In D Ó Corráin (ed.) *Irish Antiquity: Essays and Studies Presented to Professor M.J. O'Kelly*.
- Museum and Galleries Commission (MGC), 1991, Standards in the museum care of archaeological collections.
- Stace, C., 2010, *New Flora of the British Isles* (3rd edition).
- Stratascan 2013, *Geophysical Survey Report, Thurmaston, Leicestershire*, unpublished client report J3316.
- Stuijts, I., 2006, Charcoal sampling sites and procedures: practical themes from Ireland in A. Dufraisse (ed.) *Charcoal Analysis: New Analytical Tools and Methods for Archaeology*. *BAR International Series* 1483: 25-33.
- United Kingdom Institute of Conservation (UKIC), 1990, *Guidelines for the Preparation of Excavation Archives for Long Term Storage*.
- Wessex Archaeology, 2013, *Land at Barkby Thorpe, Thurmaston, Leicestershire. Written Scheme of Investigation for Archaeological Evaluation*, unpublished client report T17372.02.

10 APPENDICES

Appendix 1: Context data

	Trench 1	Max depth: 0.5m
Context	Description	Depth (m)
101	Topsoil: Rich dark brown sandy silt with round stone inclusions 5cm-10cm	0-0.4
102	Subsoil Orangey brown silty sand	0.4-0.5
103	Natural: .Orange sand with reddish prnk clay patches	0.5+
104	Cut: Cut of a small linear plough furrow. See drwg 109. Frequent charcoal fragment inclusions.	0.5-0.6
105	Fill: light brown sandy silt fill of plough furrow (104). Frequent charcoal inclusions. Infrequent river cobble inclusions 5cm-10cm. No finds.	0.5-0.6
106	Fill: fill of 107. Mid grey brown compact silty sand with frequent sub angular small stones and charcoal.	0.5-0.6
107	Cut: cut of plough furrow 106.	0.5-0.6

	Trench 2	Max depth: 1.08m
Context	Description	Depth (m)
201	Topsoil: Medium brown silty sand – round stone inclusions 5-10cm	0-0.4
202	Subsoil Medium brown sandy clay rounded stone inclusions 5-10cm	0.4-0.6
203	Natural: Medium brown sand concentrated with river cobbles 0-5cm	0.6+
204	Cut: for prehistoric ditch	0.5-1.08
205	Fill: Secondary fill of 204. Blackish brown gritty silt sand with frequent charcoal 3-4cm	0.5-1.08
206	Fill: Primary fill of 204. Yellowy medium brown compact gritty silty sand.	0.5-1.08

	Trench 3	Max depth: 1.23m
Context	Description	Depth (m)
301	Topsoil: light brown silty sand with common well rounded pebble inclusions	0-0.4
302	Subsoil light orangey brown silty sand, common well rounded pebbles	0.4-0.6
303	Natural: light orange sandy clay, very common rounded pebbles, small cobbles	0.6+
304	Cut: Prehistoric ditch.	0.6-0.85
305	Fill: Fill of 304. Dark brown compact silty clay. With animal bone, slag and ceramic.	0.6-0.85
306	Cut: Original cut of second prehistoric ditch.	0.6-1.23



Context	Description	Depth (m)
307	Fill: Fill of 306. Light mottled brown compact sandy clay. With infrequent round stones, infrequent charcoal fragments and thin bluish lens in base of cut – primary silting. Deliberate backfill.	0.6-1.23
308	Cut: Recut of second prehistoric ditch.	0.6-1
309	Fill: Primary fill of 308. Mottled grey brown and dirty orange compact sandy clay. With animal bone and burnt clay. Infrequent charcoal.	0.7-1
310	Fill: Secondary fill of 308. Blackish brown compact friable sandy clay. Infrequent charcoal, very few stones.	0.6-0.7

Trench 4		Max depth: 1.23m
Context	Description	Depth (m)
400	Topsoil: friable mid brownish grey sandy silt with occasional well rounded medium pebbles <50mm	0-0.4
401	Subsoil Mid orange brown moderately compact sandy silt with sparse sub angular stones	0.4-0.53
402	Natural: light yellow brown silty clay, very common with patches of pebbles and gravel and sand and gravel	0.53+
403	Fill: Fill of 404. Dark brownish grey compact sandy silt with occasional well rounded pebbles <0.3m.	0.53-0.66
404	Cut: E-W gully. Prehistoric.	0.53-0.66
405	Fill: Fill of 407. Fill of possible cremation. Yellowy brown compact clay (slightly silty). Hard to distinguish from 411.	0.53-0.58
406	Cremation: cremation in cut 407. Heavily truncated. A cluster of bright white bone frags and large fragments of iron age ceramic.	0.6-1.23
407	Cut: Cut for cremation 406. Extremely difficult to excavate.	0.6-1.23
408	Cut: E-W ditch/gully. Prehistoric.	0.6-1
409	Fill: Fill of 408. Pale greyish brown compact friable slightly silty clay with infrequent river cobbles 0-5cm. Ceramics and frequent charcoal fragments.	0.7-1
410	Cut: E-W ditch/gully. Prehistoric.	0.6-0.7
411	Fill: Fill of 410. Yellowy brown compact clay with one sherd of prehistoric ceramic. Frequent charcoal.	0.6-0.7

Trench 5		Max depth: 1.24m
Context	Description	Depth (m)
501	Topsoil: dark chocolate brown silty clay soil. Currently planted with potatoes.	0-0.5
502	Natural: Orangey red clay concentrated with river cobbles.	0.5+
503	Cut: Possible gully or plough furrow. Shallow cut.	0.5-0.57
504	Fill: Fill of 503. Light brown compacted friable sandy clay with frequent charcoal lumps. Infrequent 1-5cm river cobbles.	0.5-0.57
505	Fill: Fill of 507. Dark grey brown moderately compact silty clay with occasional medium well rounded pebbles <50mm and possible late iron age pot.	0.5-1.24
506	Fill: Fill of 507. Mid orange brown compact stiff silty clay with sparse sub angular stones <40mm. Slump deposit at south side of ditch.	0.5-1.24

Context	Description	Depth (m)
507	Cut: Roman boundary ditch.	0.5-1.24

	Trench 6	Max depth: 0.4m
Context	Description	Depth (m)
601	Topsoil: Light brown sandy silt cropped topsoil.	0-0.4
602	Natural: Light tan clay with river cobbles.	0.4+

	Trench 7	Max depth: 0.46m
Context	Description	Depth (m)
700	Topsoil: Mid brownish grey sandy silt with sparse well rounded pebbles and dense rooting.	0-0.3
701	Subsoil Dark orange brown silty sand.	0.3-0.43
702	Natural: compact mid orange red clay with shattered limestone.	0.43+
703	Fill: Fill of 704. Mid brownish orange moderately compact silty clay (30/70) frequent large well rounded cobbles, small sub angular pebbles, occasional rooting and sparse small stones.	0.43-0.6
704	Cut: E-W gully. Shallow curvilinear gully, possibly prehistoric.	0.43-0.6
705	Cut: E-W gully. Shallow gully, possibly pehistoric.	0.43-0.61
706	Fill: Fill of 705. Pinkish greyish brown malleable compact clay – small amount of silt – infrequent quantity of river cobbles, infrequent quantity of charcoal.	0.43-0.61

	Trench 8	Max depth: 0.5m
Context	Description	Depth (m)
800	Topsoil: Dark brown silty clay.	0-0.4
801	Modern field drain.	0.4
802	Natural: greyish brown clay.	0.4+

	Trench 9	Max depth: 0.58m
Context	Description	Depth (m)
900	Topsoil: Light brownish grey friable silty sand (60/40) with occasional sub angular medium stones and dense rooting through the layer.	0-0.3
901	Subsoil: Compact mid orange brown sandy silt with occasional small sub rounded pebbles.	0.3-0.38
902	Natural: very compact yellowish orange silty sand (20/80) with patches of yellow brown compact clay.	0.38+
903	Fill: fill of 904. Light brownish grey moderately compact sandy silt. Sparse very small well rounded pebbles.	0.38-0.58



Context	Description	Depth (m)
904	Cut: E-W linear. Shallow gully.	0.38-0.58

	Trench 10	Max depth: 0.98m
Context	Description	Depth (m)
1000	Topsoil: Mid brownish grey sandy silt with occasional small well rounded pebbles and dense rooting.	0-0.3
1001	Subsoil Mid reddish brown silty clay with sparse chalk flecks.	0.3-0.55
1002	Natural: Compact mid brownish yellow silty clay (10/90) with occasional chalk flecks.	0.55+
1003	Fill: Fill of 1005. Upper fill. Dark brown grey compact silty clay (20/80). Sparse chalk flecking with RB pot.	0.55-0.84
1004	Fill: Fill of 1005. Lower fill. Dark yellowish grey compact silty clay with sparse sub angular pebbles.	0.75-0.98
1005	Cut: Cut of possible Roman enclosure ditch.	0.55-0.98
1006	Fill: fill of 1007. Dark yellowish grey compact silty clay with CBM.	0.55-0.8
1007	Cut: Shallow E-W gully. Possibly Roman.	0.55-0.8
1008	Cut: Plough furrow. Recorded as an example.	0.55-0.75
1009	Fill: Fill of furrow 1008. Mid greyish brown with orange flecks. Clay. Frequent well rounded medium to large cobbles, plus rare gravel. CBM, RB pot, IA pot – rubbish accumulating in furrows.	0.55-0.75

	Trench 11	Max depth: 0.55m
Context	Description	Depth (m)
1100	Topsoil: Mid brown grey friable sandy silt with occasional well rounded pebbles and dense rooting to upper area.	0-0.35
1101	Subsoil Mid reddish brown silty clay with sparse chalk flecks. Compact.	0.35-0.55
1102	Natural: Compact reddish orange silty clay (10/90) with occasional well rounded medium size pebbles.	0.55+
1103	Fill: Fill of 1104. Mid orange brown compact silty clay (30/70) with sparse small well rounded pebbles and one sherd of samian.	0.55-0.71
1104	Cut: shallow gully. Roman drain.	0.55-0.71
1105	Fill: Fill of 1107. Upper fill. Dark orange brown sandy clay (20/80) with sparse small chalk flecks <5mm and occasional pot.	0.55-1
1106	Fill: Fill of 1107. Lower fill.	0.65-1.05
1107	Cut: U shaped ditch.	0.55-1.05



	Trench 12	Max depth: m
Context	Description	Depth (m)
1200	Topsoil: Light brown sandy silt natural.	0-0.4
1201	Subsoil Reddish brown sandy silt.	0.4-0.6
1202	Cut: Pit. Unexcavated.	0.6+
1203	Fill: Fill of 1202. Dark reddish brown clay with a bit of silt. Unexcavated.	0.6+
1204	Cut: Ditch running through centre of trench. Shallow V-shaped.	0.6-1.1
1205	Fill: Fill of 1204. Upper fill. Brownish grey malleable clay with ceramic bone and flint. Infrequent charcoal fragments and large lumps of chalk.	0.6-0.92
1206	Fill: Fill of 1204. Lower fill. Orange-yellow brown sticky, gritty sandy clay with bone and worked flint. Frequent charcoal fragments. Primary fill.	0.95-1.1
1207	Cut: small circular pit.	0.6-0.77
1208	Fill: Fill of 1207. Grey brown compact silty clay with unworked broken flint and a fossil.	0.6-0.77
1209	Tree throw. Unexcavated.	0.6+
1210	Fill: Fill of 1209. Orangey brown malleable sandy clay. Unexcavated.	0.6+
1211	Cut: Post hole. Cuts earlier pit 1213.	0.6-0.83
1212	Fill: Fill of 1211. Blackish brown malleable sandy clay. Charcoal pieces in upper part.	0.6-0.83
1213	Cut: Pit cut by post hole. Shallow bowl shaped pit.	0.6-0.79
1214	Fill: Fill of 1213. Dark chocolate brown malleable silty clay with bones, flint and a fossil infrequent charcoal fragments.	0.6-0.79
1215	Natural.	0.6+
1216	Cut: Pit/post-hole. Unexcavated.	0.6+
1217	Fill: Fill of 1216. Light brown friable sandy silt. Unexcavated/	0.6+
1218	Cut: Circular pit/post-hole.	0.6+
1219	Fill: Fill of 1218. Light greyish brown friable silty clay. Unexcavated.	0.6+

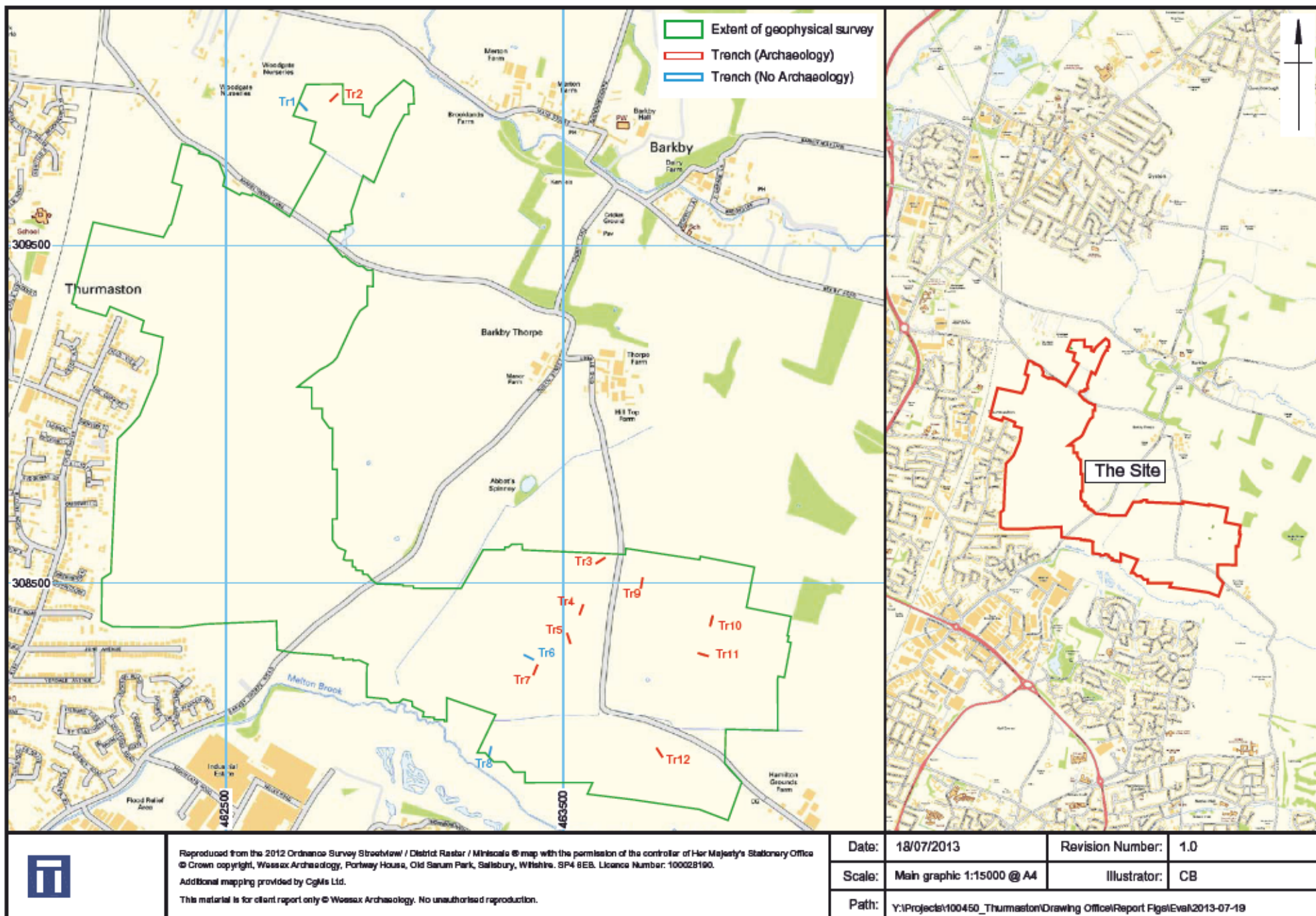


Appendix 2: Environmental data

Archaeobotanical Sample Scanning Sheet			
SITE: Barkby Thorpe, Thurmaston, Leicestershire 100450			
National Grid Ref: SK 62855 08943			
CONTEXT NUMBER	1003	309	206
FLOTATION SAMPLE NUMBER	001	002	003
FEATURE NUMBER	1005	308	204
CONTEXT TYPE	Upper ditch fill	Primary ditch fill	Primary ditch fill
PROVISIONAL DATE	Roman	mid-late Iron Age	undated
SAMPLE VOLUME (litres)	10	10	10
Charred plant material (*key - = < 5 items, + = > 5 items, ++ = > 10 items, +++ = > 30 items, ++++ = > 50 items, +++++ = > 100 items.)			
CROP MATERIAL*			
Free threshing wheat type grain (<i>Triticum aestivum</i> s.l. / <i>turgidum</i> s.l. type)	-		++++
Free threshing wheat rachis node (<i>Triticum aestivum</i> s.l. / <i>turgidum</i> s.l. type)			-
Free threshing wheat type grain or spelt wheat type grain (<i>Triticum aestivum</i> s.l. / <i>turgidum</i> s.l. type / <i>Triticum spelta</i> type)			-
Free threshing wheat type grain or emmer wheat type grain (<i>Triticum aestivum</i> s.l. / <i>turgidum</i> s.l. type / <i>Triticum dicoccum</i> type)			-
Wheat grain (<i>Triticum</i> sp.)	-		+
Barley grain (<i>Hordeum</i> sp.)	-		++
Wheat / barley grain (<i>Triticum</i> sp. / <i>Hordeum</i> sp.)		-	+
Oat type grain (<i>Avena</i> sp.)	-		+
Rye type grain (<i>Secale cereale</i> type)			-
Cereal grain			+
Total identifiable crop material	+	-	+++++
WILD / WEED PLANT MATERIAL*			
Goosefoot (<i>Chenopodium</i> spp.)	-		
Knotgrass (<i>Polygonum arenastrum</i> / <i>aviculare</i>)	-		
Vetch / Pea (<i>Vicia</i> / <i>Lathyrus</i>)		-	+
Medick / Clover (<i>Medicago</i> / <i>Trifolium</i>)			-
Stinking chamomile (<i>Anthemis cotula</i> L.)	-		++
Sedge (<i>Carex</i> sp.) trigonous			-

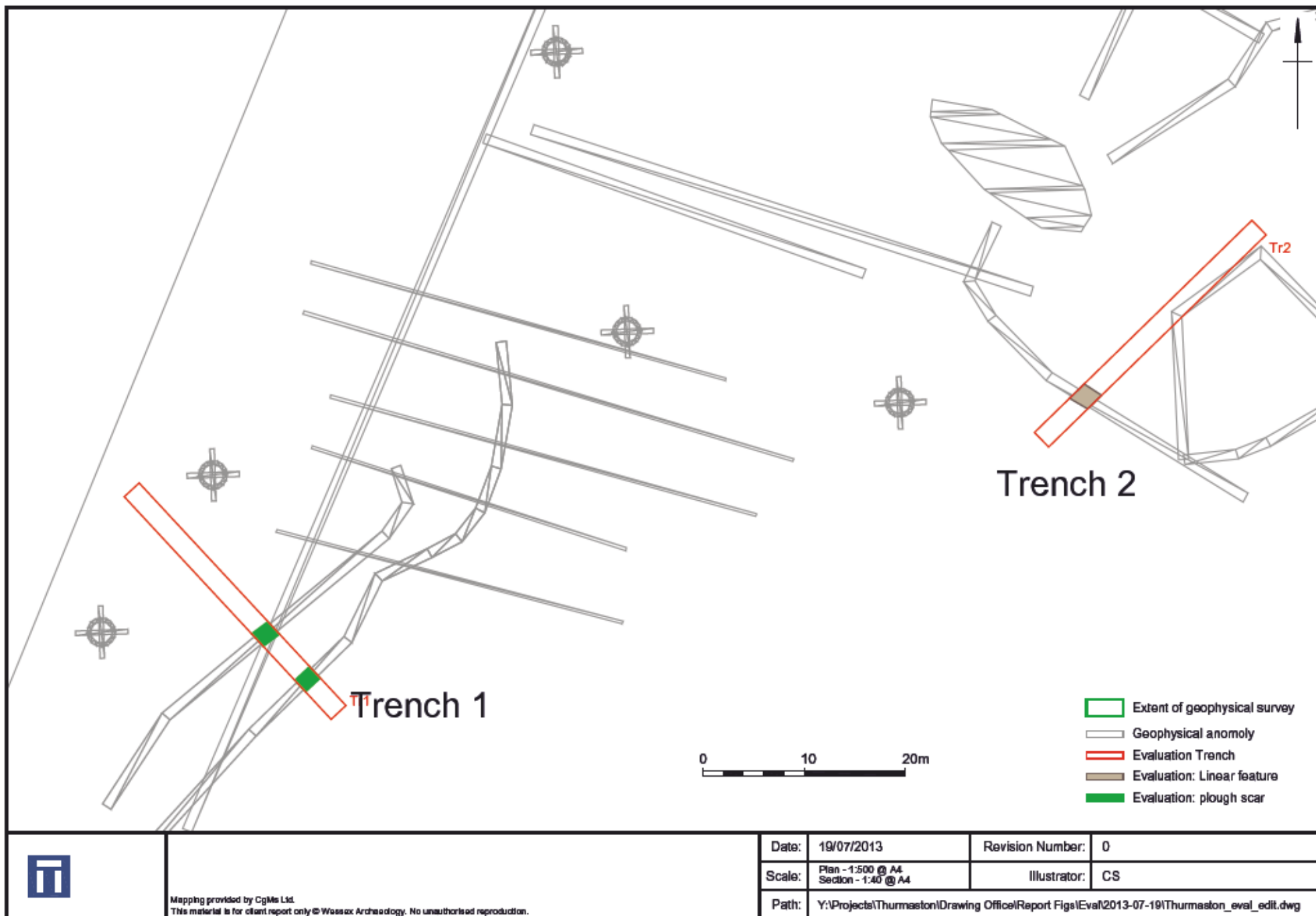


Archaeobotanical Sample Scanning Sheet			
SITE: Barkby Thorpe, Thurmaston, Leicestershire 100450			
National Grid Ref: SK 62855 08943			
CONTEXT NUMBER	1003	309	206
FLOTATION SAMPLE NUMBER	001	002	003
FEATURE NUMBER	1005	308	204
CONTEXT TYPE	Upper ditch fill	Primary ditch fill	Primary ditch fill
PROVISIONAL DATE	Roman	mid-late Iron Age	undated
SAMPLE VOLUME (litres)	10	10	10
Brome grass / Rye-grass / (<i>Bromus</i> sp. / <i>Lolium</i> sp.)		-	-
> 2mm grass (Poaceae)			+
< 2mm grass (Poaceae)	-		+
Unidentified wild seed		-	
Total identifiable wild / weed plant material	+	-	+++
NON SEED PLANT MATERIAL*			
Hazel nutshell (<i>Corylus avellana</i> L.)			-
> 2mm wood charcoal fragments	++++	++	++++
> 2mm round wood charcoal			-
Intrusive plant material / non-plant material (- = < 5 items, += > 5 items, ++ = > 10 items, +++ = > 30 items, ++++ = > 50 items, +++++ = > 100 items.)			
Intrusive roots	++++	++++	+++++
Non – charred wild plant seeds	-	+	+
Metallurgical debris			-
Sample summary information			
Further analysis of charred plant material	no	no	yes
Further analysis of wood charcoal	yes	no	yes
Charred material suitable for C14 dating	no	no	yes
Retain flots	yes	yes	yes



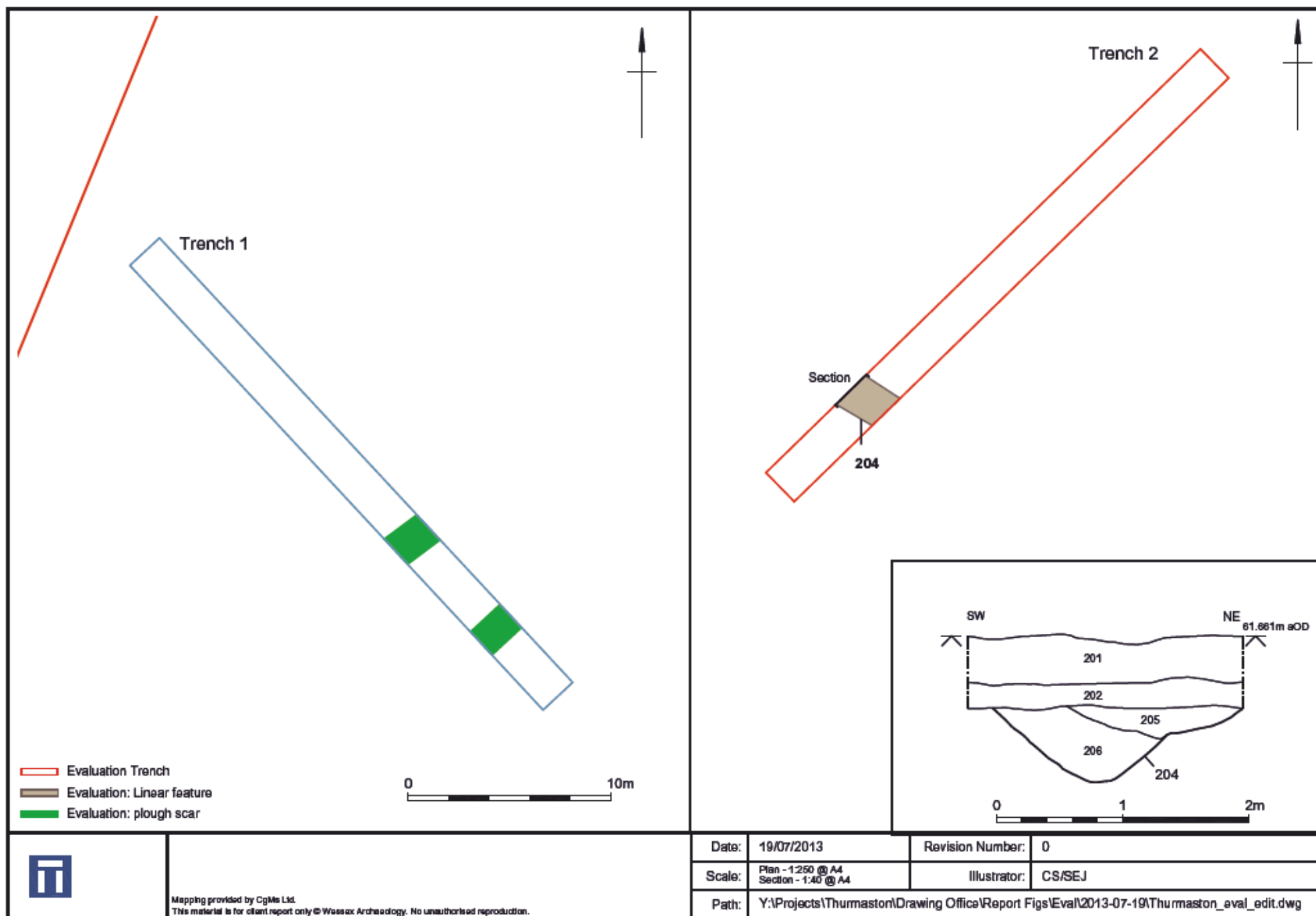
Site location

Figure 1

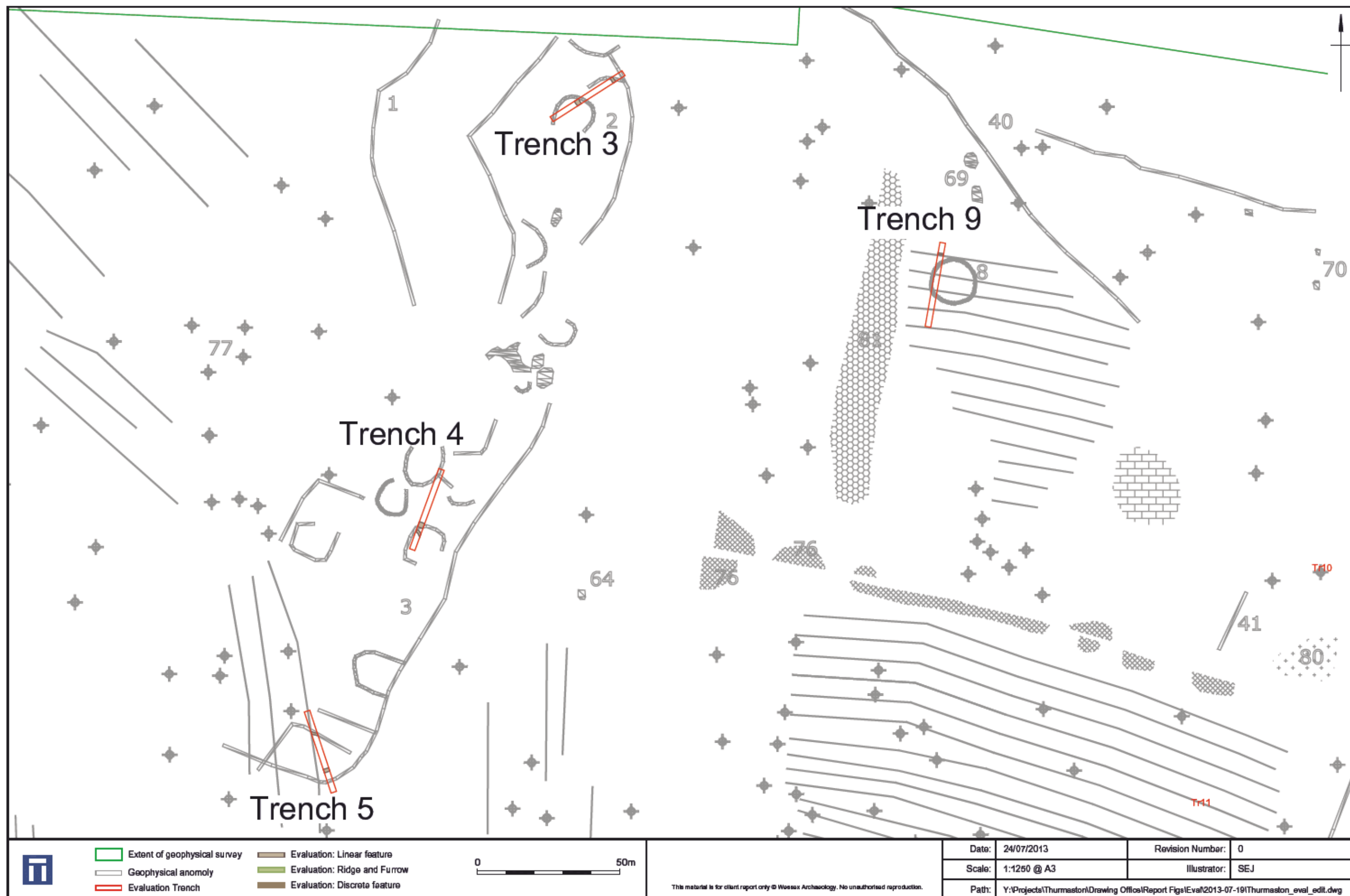


Trenches 1 and 2 overlain on geophysical survey

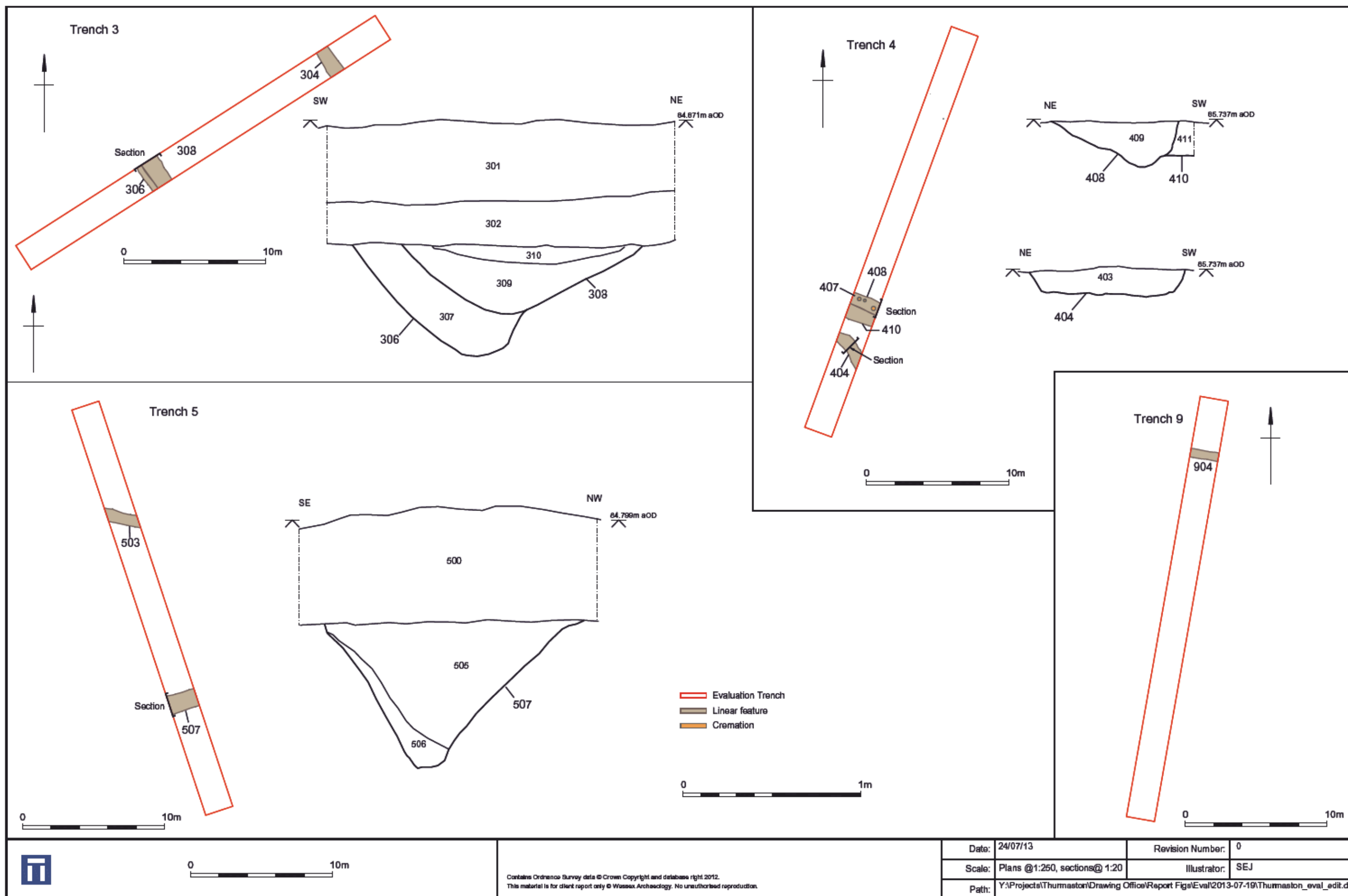
Figure 2



Trenches 1 and 2; plans and section

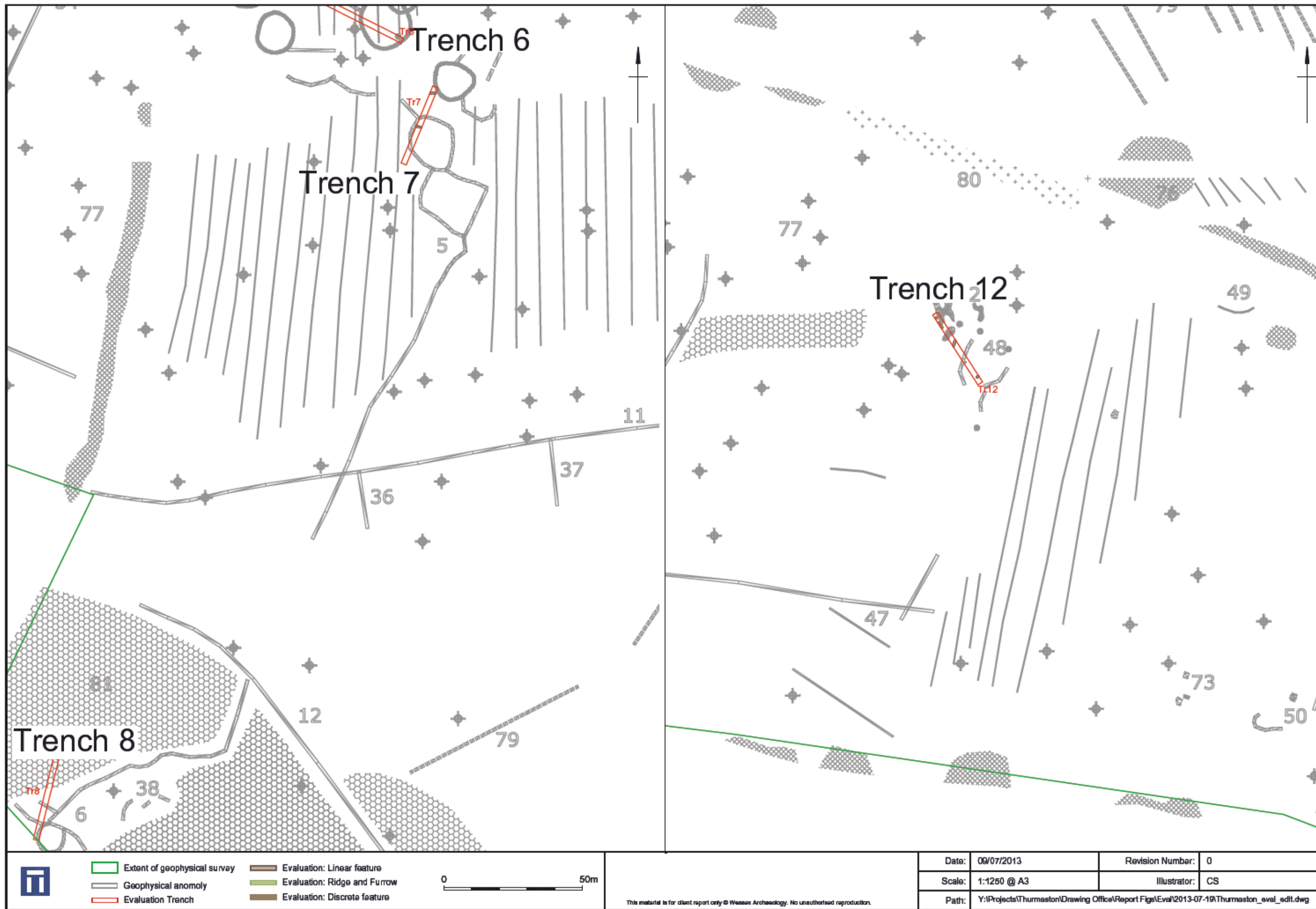


Plan of Trenches 3, 4, 5 and 9 overlain on geophysical interpretation



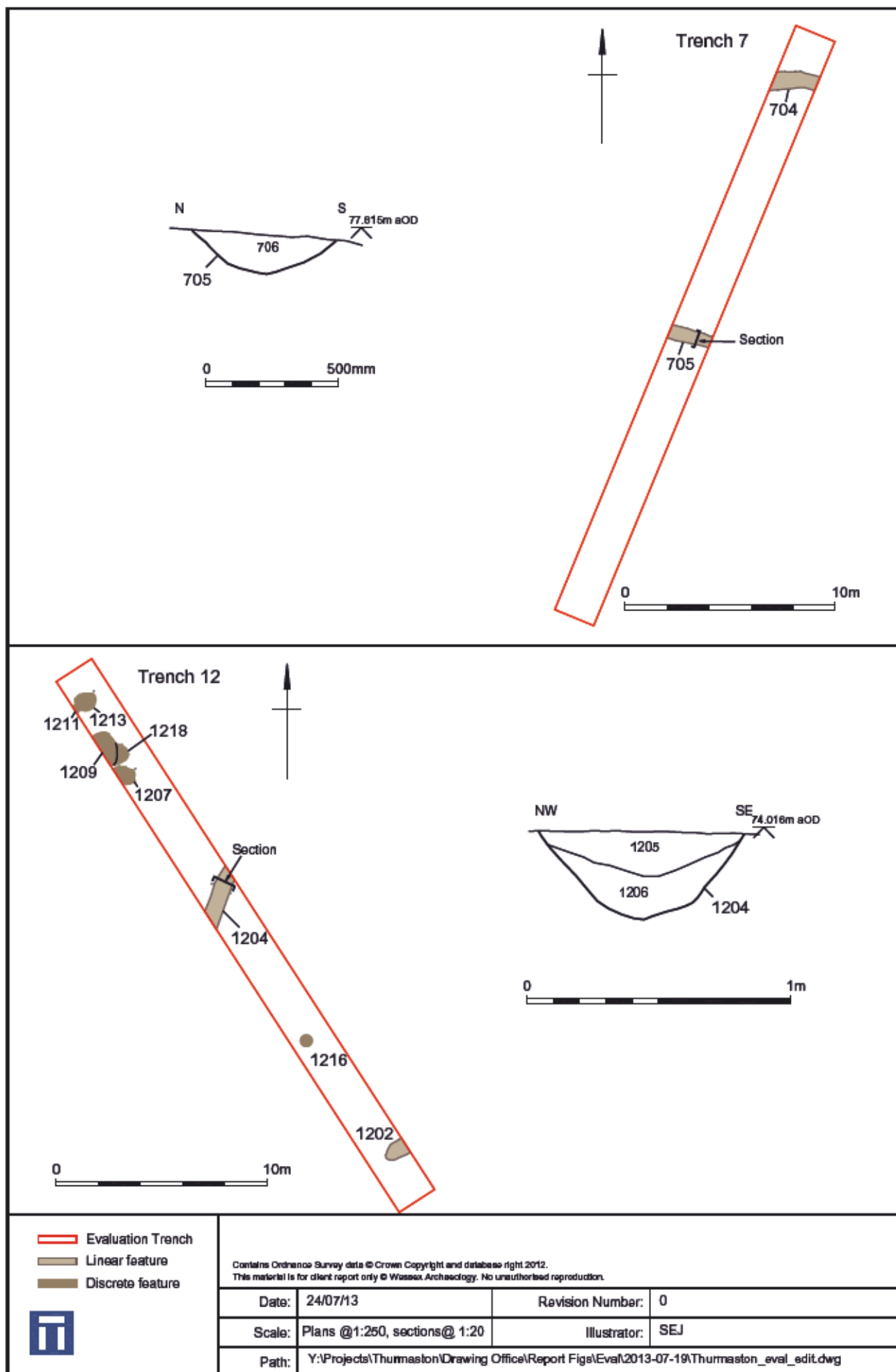
Trenches 3, 4, 5 and 9; plans and sections

Figure 5



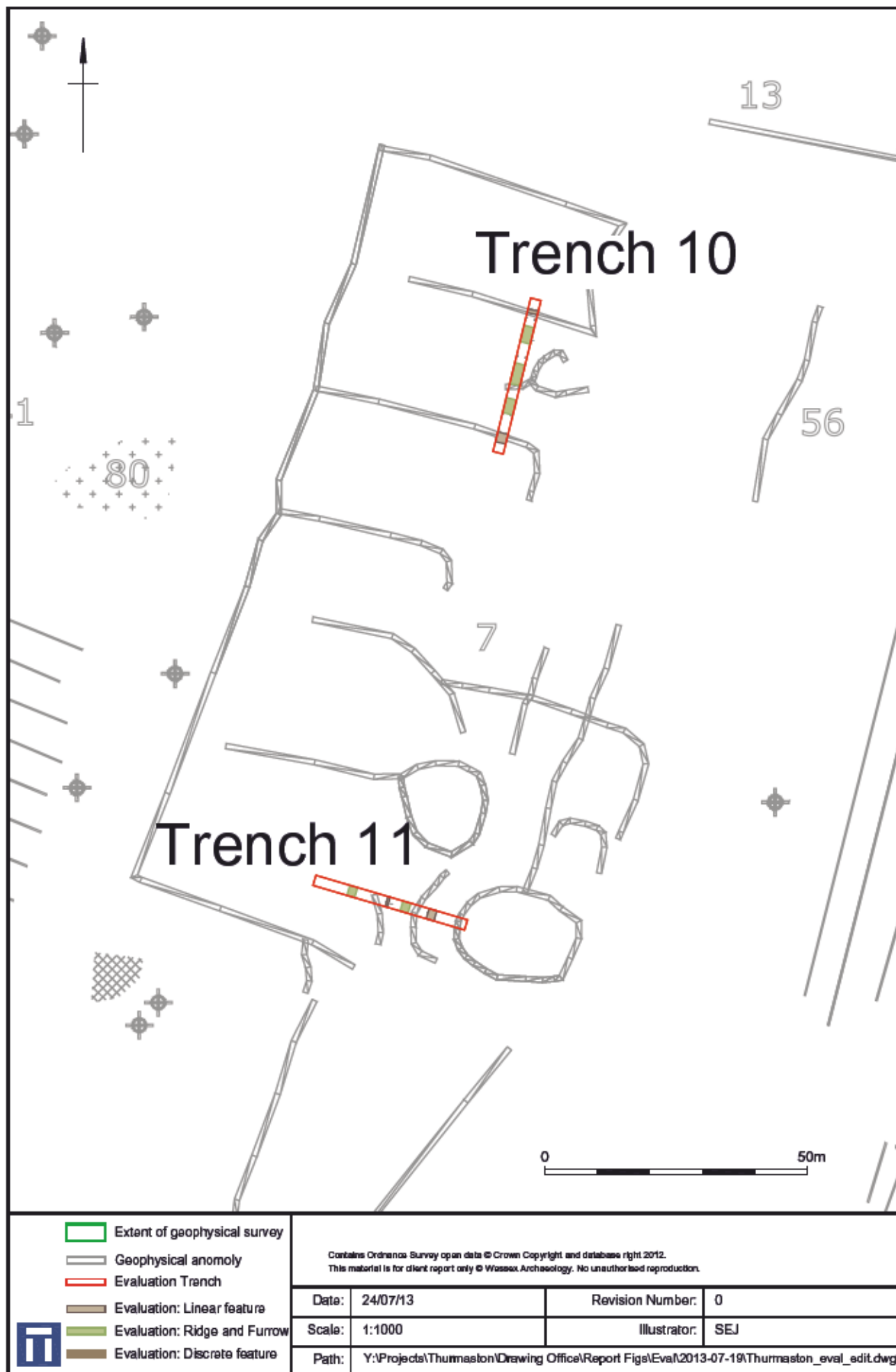
Plan of Trenches 6, 7, 8 and 12

Figure 6



Trenches 7 and 12 plans and sections

Figure 7



Plan of Trenches 10 and 11 overlain on geophysical interpretation

Figure 8



Plate 1: Trench 3; Iron Age ditches 306 and 308



Plate 2: Trench 4; Iron Age ditches 408 and 410


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	24/07/13	Revision Number: 0
	Scale:	N/A	Illustrator: SEJ
	Path:	X:\PROJECTS\100450\Drawing Office\Report Figs\Eval\13_07_19\Plates.cdr	



Plate 3: Trench 4; Iron Age cremation deposit 406



Plate 4: Trench 5; Iron Age ditch 507



	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	24/07/13	Revision Number: 0
	Scale:	N/A	Illustrator: SEJ
	Path:	X:\PROJECTS\100450\Drawing Office\Report Figs\Eval\13_07_19\Plates.cdr	



Plate 5: Trench 12; Romano-British ditch 1204



Plate 6: Trench 12; Romano-British pit 1213

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	24/07/13	Revision Number: 0
	Scale:	N/A	Illustrator: SEJ
	Path:	X:\PROJECTS\100450\Drawing Office\Report Figs\Eval\13_07_19\Plates.cdr	



salisbury rochester sheffield edinburgh



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



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.