



ARCHAEOLOGICAL
SERVICES
WYAS

Butchers Race

Spennymoor

County Durham

The Results of Archaeological Trial Trenching
and Excavation

February 2008

Report No. 1762

C L I E N T

GMI Construction Group Plc..

Butchers Race, Spennymoor

County Durham

The Results of Archaeological Trial Trenching and Excavation

Summary

Archaeological investigations at Butchers Race, Spennymoor, County Durham revealed 2nd to 3rd-century remains within the north-east corner of the proposed development site. These remains consisted mainly of ditches and gullies that had become very truncated due to medieval and later ploughing. The archaeological remains seemed to form enclosures although the limited excavation of the features made it difficult to establish a function for the excavated features. Trial trenching that was conducted over the whole development site which showed continuation of the ploughing regimes over the entirety of the area but only revealed a single double ditch feature that corresponded with an old field boundary.



ARCHAEOLOGICAL
SERVICES
WYAS

Report Information

Client: GMI Construction Group Plc.
Address: Middleton House
Westland Road
Leeds
LS11 5UH
Report Type: Full Post-excavation report
Location: Spennymoor
County: County Durham
Grid Reference: NZ 269 345
Period(s) of activity represented: Iron Age-Romano British and Post-medieval
Report Number: 1762 (Oasis reference number, archaeol11-37996)
Project Number: 3117
Site Code: BUS07
Planning Application No.: 7/2006/0477/DM
Museum Accession No.: To be arranged
Date of fieldwork: 11th June 2007 to 17th August 2007
Date of report: 18th February 2008
Project Management: Ian Roberts BSc FSA MIFA
Fieldwork supervisor: Marina Rose BSc
Report: Marina Rose
Illustrations: Jon Prudhoe
Research: Marina Rose
Specialists: Blaise Vyner (Prehistoric Pottery)
John Dore (Roman and Later Pottery)
Diane Alldritt PhD (Faunal Remains)

Produced by: Archaeological Services WYAS, PO Box 30,
Nepshaw Lane South, Morley, Leeds LS27 0UG
Telephone: 0113 383 7500
Email: admin@aswyas.com

Authorisation for
distribution: -----

ISOQAR ISO 9001:2000

Certificate No. 125/93

© Archaeological Services WYAS

Contents

Report information	ii
Contents.....	iii
List of Figures	iv
List of Plates.....	iv
List of Tables	iv
1 Introduction.....	1
Site location and topography	1
Soils, geology and land-use	1
2 Archaeological and historical background.....	1
3 Aims and objectives	2
4 Methodology	2
Trial trenching.....	2
Open Area Excavation	3
5 Results	4
Trial trenching.....	4
North-Eastern Part of The Site.....	7
Open Area Excavation	10
6 Artefact Record.....	13
Iron Age Pottery.....	13
Roman and Later Pottery	15
7 Environmental Record	16
Carbonised Plant Macrofossils and Charcoal	16
8 Discussion	20
9 Conclusions.....	20

Figures

Plates

Appendices

Appendix 1: Inventory of primary archive

Appendix 2: Concordance of contexts yielding artefacts or environmental remains

Appendix 3: Written schemes of investigation

Bibliography

List of Figures

- 1 Site location
- 2 Site plan showing Trench locations and geophysics
- 3 Plan of Trenches 1 and 2
- 4 Trench 2, 5, 12 and 13 Sections
- 5 Plan of Trenches 12 and 13
- 6 Plan of Trenches 20, 21, 22 and 23
- 7 Sections 5, 6, 8, 9, 14, 15, 17, 19, 27, 28 and 31
- 8 Plan of Open Area Features
- 9 Sections 4, 63, 65, 70, 73, 74, 76, 77, 79, 82 and 86
- 10 Sections 42, 56, 57, 75, 87, 89, 90, 93, 94 and 96
- 11 Pottery rim fragment from context 136

List of Plates

- 1 Trench 2 showing ditches 037 and 041 looking north-east
- 2 Trench 20 showing feature 044 in foreground looking south-east
- 3 Open Area looking north-west showing Ditch 1 with Ditches 3 and 4 to the right
- 4 Excavation of post-hole 125 looking north
- 5 Pit 163 looking south-west
- 6 Open area looking east with gullies 5 and 6 in foreground

List of Tables

- 1 Trial Trench dimensions and rationale
- 2 Negative Trial Trench results
- 3 Carbonised Plant Macrofossils and Charcoal Results

1 Introduction

Archaeological Services WYAS (ASWYAS) was commissioned by GMI Construction Group Plc. To conduct archaeological investigations in advance of the proposed construction of a new factory on land off Butchers Race within the Green Lane Industrial Estate, Spennymoor, County Durham. A written scheme of investigation for the initial trial trenching and subsequent watching brief and open area excavation were produced by ASWYAS and are produced in Appendices 3 and 4. The field work took place from the 11th June 2007 to the 17th August 2007. This volume is a full post-excavation report on the results of all of the fieldwork carried out.

Site Location and Topography

The proposed development site at Butchers Race occupies a 13 hectare area of open pasture at the north-eastern edge of Spennymoor (Fig. 1) and is centred on grid reference NZ 269 345. The northern edge of the site is bounded by a cemetery and modern housing; the eastern side is bounded by units of the Green Lane Industrial Estate and an area of pasture. Further housing backs onto the southern limit of the site with allotments and small holdings along its western side (Fig. 2).

The site was roughly rectangular in shape orientated north-west to south-east with the eastern half of the site sloping gradually down to the south-west. At its lowest point the site was 120m O.D. with a maximum height of 131m O.D.

Soils, Geology and Land-use

The underlying geology of the area is mapped as Wesphalian Coal Measures (British Geological Survey 2001). The overlying soils are slowly permeable seasonal waterlogged fine loamy, fine loamy over clayey and clayey soils of the Brickfield 3 association (Soil Survey of England and Wales 1983). Prior to the commencement of archaeological work, the development area was open pasture that was used for the grazing of horses and was inhabited by ground nesting birds. Numerous footpaths both marked and unmarked also crossed the site and were in constant use.

2 Archaeological and Historical Background

Within the region, excavations have taken place on Iron Age sites at Coxhoe 5km to the east (Haselgrove and Allon, 1982) and 15km to the south-east at Thorpe Thewles (Heslop, 1982) with other possible Iron Age sites identified through extensive air survey at Sunderland Bridge Ferryhill and Bishop Middleham (Still and Vyner, 1986).

Roman military activity in the area is represented by the Roman fort at Bincester (*Vinovium*) 7km to the south-west. The fort has been proven by excavation to have been occupied from the 1st through to the 4th centuries (Bidwell, 1997) and included an extensive *vicus* which

extended on both sides of the fort along Dere Street on which the fort was situated (Hoopell, 1891).

A desk-based assessment carried out by Northern Archaeological Associates (2006) identified that the site had little known archaeological potential apart from extant ridge and furrow agriculture in the southernmost area of the site and the location of a farm marked as Tudhoe Moor on Ordnance Survey mapping. Both of these identified remains however were within areas of least potential impact by the proposed development.

However, a subsequent geophysical survey undertaken by Archaeological Services University of Durham (2006) identified a concentration of anomalies in the north-eastern corner of the development area and a scatter of seven other discrete anomalies across the rest of the site (Fig. 2). The anomalies identified in the north-eastern area were typical of late prehistoric and Romano-British settlement and field patterns known elsewhere in the area (e.g. Petts and Gerrard n.d., 54, fig. 29).

3 Aims and Objectives

The aims of the archaeological investigations were to ascertain the form, character, date, depth and extent of the potential archaeological features and deposits within the development area. Specific aims were to investigate by trial trenching the identified geophysical anomalies with further sampling of area not covered by the geophysical survey. The results of the trial trenching were then used to inform on further mitigation strategies which included preservation *in situ*, further excavation and limited watching brief.

4 Methodology

In the first instance a total of 28 trial trenches were excavated across the site, this represented a 2% sample of the total development area (Fig. 2). Within the area identified as containing the majority of the geophysical anomalies in the north-eastern corner of the site the trenches measured 4m by 25m, except one which measured 50m in length. Across the rest of the site the trenches measured 2m by 50m except for one which measured 100m in length. The dimensions and rationale for each trench is produced in the table below (Table 1).

The results of the trial trenching were used to inform a further mitigation strategy for the site which resulted in a limited open area excavation within part of the north-eastern area of the site the remainder being preserved *in situ*. A further mitigation plan involving a watching brief was implemented in the north-western margin of the site where a linear feature was identified.

The area of each archaeological investigation was aided by the use of a 360° mechanical digger fitted with a toothless ditching bucket. This was used to remove top and sub soil horizons in level spits, under direct archaeological supervision, until the first archaeological horizon or undisturbed natural was reached. The resultant surface of each excavation was

then inspected for the presence of archaeological remains with further cleaning being conducted by hand.

Linear features were subject to 10% sampling of their exposed length with each excavated section being no less than 1m in length. Where possible one section was excavated adjacent to the trench edge to provide a full record of the accumulated strata. Particular attention was paid to terminals, corners and intersections with intersections being subject to an L-shaped section in the first instance to determine the relationships between the intersecting features.

Table 1. Trial trench rationale (Fig. 2)

Trench	Dimensions	Rationale
1	50m x 2m	Investigate linear geophysical anomalies
2	50m x 2m	Investigate apparently blank area
3	50m x 2m	Investigate discrete and linear geophysical anomalies
4	50m x 2m	Investigate apparently blank area
5	50m x 2m	Investigate apparently blank area
6	50m x 2m	Investigate apparently blank area
7	50m x 2m	Investigate linear geophysical anomalies
8	50m x 2m	Investigate apparently blank area
9	50m x 2m	Investigate discrete geophysical anomaly
10	50m x 2m	Investigate apparently blank area
11	50m x 2m	Investigate apparently blank area
12	50m x 2m	Investigate apparently blank area
13	50m x 2m	Investigate apparently blank area
14	50m x 2m	Investigate apparently blank area
15	50m x 2m	Investigate discrete and linear geophysical anomalies
16	50m x 2m	Investigate discrete and linear geophysical anomalies
17	50m x 2m	Investigate discrete geophysical anomaly
18	100m x 2m	Investigate apparently blank area
19	50m x 2m	Investigate apparently blank area
20	25m x 4m	Establish westward continuation of pit alignment
21	50m x 4m	Investigate pit alignments and curvilinear feature
22	25m x 4m	Investigate large geophysical anomaly and linear feature
23	25m x 4m	Investigate two discrete anomalies
24	25m x 4m	Investigate apparently blank area
25	25m x 4m	Investigate apparently blank area
26	25m x 4m	Investigate curvilinear and linear anomalies
27	25m x 4m	Investigate apparently blank area
28	25m x 4m	Investigate apparently blank area
Total	300m²	

Discrete features, such as pits and post-holes, were subject to 50% excavation in the first instance and total excavation where it was deemed necessary understand the feature.

A full written and drawn record was made of each excavated deposit in accordance with ASWYAS methodologies (ASWYAS 2007) with all section drawing being produced at a scale of 1:10 and plans produced at 1:50. All plans and sections include spot-heights related to Ordnance Datum in meters correct to two decimal places.

A photographic record was made of each excavated feature in both monochrome negatives and colour transparency films as well as digital.

A soil sampling programme was undertaken where there was clear potential for environmental analysis. This resulted in the sampling of the ditches and more substantial features as well as contexts in which carbonised remains were evident during excavation. Many of the shallower features however were too far disturbed by modern activity and roots to provide reliable data for environmental investigation. Where practicable a 30-40 litre sample was taken from each sampled context.

The location of all trial trenches were set out using a differential GPS. Subsequent surveying was carried out using a Total Station theodolite with locations fixed in relation to local landmarks and the National Grid.

5 Results

The results of the archaeological works at Butchers Race, Spennymoor confirmed the results of the geophysical survey with the majority of the site, as investigated through trial trenching, being devoid of any significant archaeological remains other than the remnants of ridge and furrow agriculture and some structural remains in the vicinity of Tudhoe Moor.

Investigations centred in the north-eastern area of the site revealed a concentration of features of Late prehistoric and Romano-British origin the extent of which was greater than that suggested by the survey results and was subject to an open area excavation.

Trial Trenching (Fig. 2)

Only eleven of the 28 excavated trial trenches revealed any archaeological remains. The remaining 17 were found to either be devoid of any archaeological features or to contain the shallow remains of plough furrows. The results of these negative trenches are produced in Table 2 below.

In addition trenches 25-27 were later incorporated into the mitigation strategy for the north-eastern corner of the site, therefore the results of these will be discussed in conjunction with the open area results.

Trench 2 (Figs 3, 4 and Plate 1)

Trench 2 was excavated on a north-east to south-west alignment in the north-western corner of the development site to investigate a blank area in the geophysical data. The trench measured 50m in length and 2m in width. This trench was excavated at the base of a south-west facing slope with the trench falling 1.3m in height long its excavated length. At the

western end of the trench two linear features were identified on a parallel north-south alignment. Due to the location of these features a mitigation strategy was implemented whereby a watching brief was conducted during topsoil stripping within the north-western corner of the site. This revealed the continuation of the two features to the north for a maximum 60m until they were no longer visible. The edge of the development site was immediately adjacent to the western end of Trench 2, therefore it was not possible to trace the continuation of these features to the south.

Table 2. Negative Trial trench results

Trench	Trench Depth	Topsoil Depth	Subsoil Depth	Comments
1	0.4m	0.25m	0.10m	The remains of five furrows were investigated on a NE-SW orientation. No other archaeological remains present.
3	0.35m	0.2m	0.12m	Four NE-SW aligned furrows, one land drain. No archaeology present.
4	0.4m	0.13m	0.3m	No archaeological remains present.
6	0.5m	0.3m	0.2m	No archaeological remains present.
7	0.45m	0.25m	0.2m	No archaeological remains present.
8	0.4m	0.3m	0.1m	No archaeological remains present.
9	0.35m	0.2m	0.05m	No archaeological remains present.
10	0.3m	0.2m	0.1m	Ridge and furrow on NE-SW alignment. No archaeological remains present.
11	0.3m	0.25m	0.05m	Large shale filled modern feature giving geophysical response. No the archaeological remains present.
14	0.4m	0.3m	0.1m	Ridge and furrow on NE-SW alignment. No archaeological remains present.
15	0.4m	0.3m	0.1m	No archaeological remains present.
16	0.28m	0.28m	N/A	Large feature excavated to a depth of 2m below ground surface contained modern artefacts. Thought to be mine workings. A small gully thought to be result of bioturbation.
17	0.3m	0.3m	N/A	No archaeological remains present.
18	0.38m	0.38m	N/A	Ridge and furrow on NE-SW alignment. No archaeological features present.
19	0.3m	0.2m	0.1m	Ridge and furrow on NE-SW alignment. No Archaeological features present.
24	0.34m	0.34m	N/A	One irregular feature interpreted as a tree bole.
28	0.53m	0.2m	0.17m	Modern disturbance with additional deposit of clay overlying subsoil. No archaeological features present.

The larger of the two linear features (037) was seen to continue for the full extent of the identified 60m length. It measured 2.2m in width and 0.5m in depth and contained a single fill (038) of loose mid greyish brown sandy clay (Fig. 4, S.16). The second linear feature (041) lay 1.9m to the west of ditch 037 and was only visible for a length of 10m. This feature was much smaller in size, measuring only 1.25m maximum width and 0.22m in depth (Fig. 4, S.18). The single fill of this linear feature was similar to that of 038 and both fills included

sub-angular sandstone inclusions and large amounts of roots followed their course. It was very difficult to distinguish the fills of these features from the subsoil as they were so similar with the loose nature of the fill also suggesting a modern date. Referring to the first edition Ordnance Survey, a field boundary is marked in the same position and alignment as the identified features. No finds were recovered from either these two features.

Trench 5 (Figs 2 and 4)

Trench 5 measured 50m in length and 2m in width and was located towards the south-western corner of the site on a north-east to south-west alignment. The western end of this trench was positioned to investigate a blank area in the geophysical data with the rest of the trench positioned within an un-surveyed area. This trench was also situated on the south-west facing slope but the variation in height along the trench was less pronounced than in Trench 2.

A large irregular feature was revealed approximately mid way along the length of Trench 5. Upon excavation this was shown to consist of a shallow feature formed from a series of irregular hollows, the excavated section showed two of the hollows (073 and 075) in profile (Fig. 4, S.38). No artefacts were recovered from this feature which measured 2.8m in length, 2.1m in width and 0.42m in depth.

Trench 12 (Figs 4 and 5)

Trench 12 was excavated close to the southern edge of the development site. Originally positioned to investigate a blank area within the geophysical survey, this trench was moved further to the south due to the presence of ground nesting birds at the time of excavation. Its revised position shifted its southern limit to within the area of the buildings marked as Tudhoe Moor.

Trench 12 measured 50m in length and 2m in width with a depth of 0.5m and was excavated on a north-west to south-east alignment. The repositioning of this trench placed it across an extant boundary marked by the remains of post and barbed wire fencing. On the northern side of this boundary very little was apparent, with top and sub soils being removed on to natural silty clay. On the southern side of the fence, however, topsoil overlaid an ash and clinker deposit (060) which in turn buried the subsoil, below which one curvilinear feature (059) was identified.

The exposed portion of feature (059) measured approximately 4m in length and seemed to represent the western half of a circular feature. Surviving to a maximum of 0.5m in width and 0.1m in depth. Its single fill (058), a mid grey silty clay (Fig. 4, S.34), contained pieces of modern timber.

Trench 13 (Figs 4 and 5)

Trench 13 was excavated on a north-west to south-east alignment in the southern area of the development site close to the position of the buildings marked as Tudhoe Moor on the 1st edition Ordnance Survey (1857). The trench measured 50m by 2m although not all of this

length was excavated to full depth due to the location of service pipes at the western end of the trench. Trench 13 revealed the remains of two possible surfaces one of which was visible within the excavated trench (061), the other was only partially exposed within the south-facing section (066). Surface 061 was constructed from roughly laid sandstone cobbles and measured 4.05m in length, and was exposed for 2.15m in width. There seemed to be no specific bedding material associated with this surface which lay directly above natural.

Surface 066 was observed at the same level as 061 and therefore may have been contemporary although there was no direct relationship between them. Floor 066 was exposed for 4.35m in length and measured 0.07m in depth (Fig. 4, S.33). It was constructed from yellow bricks one course in depth on a bed of yellowish white sandy mortar. A deposit of dumped industrial waste was observed below 066 that consisted of a black sandy gravel with abundant charcoal inclusions.

Above floor 066 further dumps of industrial waste were noted totalling three layers of material which included burnt sandstone, gravel and charcoal the uppermost layer of which was directly below topsoil. Rubble material relating to the presence of other structural remains were included within the excavated deposits but no building forms could be interpreted.

The North-Eastern Part of The Site

Trench 20 (Figs 4 and 6)

Trench 20 was excavated on the western side of the area containing the geophysical anomalies and was positioned to investigate the continuation of a possible pit alignment. Trench 20 measured 25m in length and 4m in width and was excavated on a north-west to south-east alignment. Topsoil of 0.25m in depth was removed straight onto broken sandstone natural. Only one possible feature was partially exposed against the eastern edge of this trench (057). The exposed portion of this feature measured 0.53m in length, 0.83m in width and 0.18m in depth (Fig. 4, S.46). It contained a single mid grey silty clay fill that included occasional angular sandstone fragments. The location of this feature fell within the alignment of the possible pit alignment excavated within Trench 21. However, as it was only partially exposed within the trench it is impossible to confirm this.

Trench 21 (Figs 6 and 7, Plate 2)

Trench 21 was excavated to the east of Trench 20 on a north-west to south-east alignment and measured 50m in length and 4m in width. It was positioned to investigate a series of geophysical anomalies that were positioned on different alignments. Four separate anomalies were highlighted by the geophysical survey and corresponding features were identified in each of their locations.

At the northern end of the trench a very shallow and truncated curvilinear feature was identified (044). This feature measured 3m in length, 0.54m in width and 0.08m in depth and contained a single mid greyish brown silt fill (043) (Fig. 7, S.19). That this feature was highly

truncated was revealed by its shallow nature and the fact that each end just faded out rather than finishing in abrupt terminals. No artefacts were recovered from this feature.

To the south-east of 044 the remains of a ditch (036) was identified crossing the trench on a north-south alignment. This feature was exposed for a total length of 6.7m, was 1.5m in width and a maximum of 0.25m in depth. Ditch 036 had an asymmetric profile that had a gradual slope on its western side and a steep slope on the eastern side with an uneven base (Fig. 7, S.15). Three sherds of pottery were recovered from the single greyish brown silt fill.

Immediately adjacent to the southern edge of this ditch was the terminal end of another linear feature (031) also on a north-south alignment. This was exposed within the trench for a maximum length of 2.3m and measured 0.8m in width and 0.19m in depth (Fig. 7, S.10). The single fill (030) of this feature was very different to others as it was a dark orangey brown sandy silt. Feature 031 seemed to respect the line of 036, however both features were so truncated it was not clear whether any relationship had been removed by later agricultural activity.

To the south-east of linear 031 a small oval pit (040) which measured 0.9m in length, 0.7m on width and 0.17m in depth and exhibited a rounded profile (Fig. 7, S.17). The single fill (039) consisted of a soft dark brown silt that included abundant amounts of angular sandstone fragments and other sub-rounded stones. No finds were recovered from the fill and there was no evidence of its function.

There were two features within Trench 21 that corresponded with a set of geophysical anomalies interpreted as a pit alignment. The features as exposed within the trench formed two opposing terminals separated by a 0.6m gap. As only a small portion of these features were visible within the trench it was not possible to determine their true form and function although their excavated sections hinted at a segmented ditch rather than a series of pits. The easternmost of these two features (034) was exposed for a length of 0.8m and measured 1.12m in width and 0.47m in depth. It exhibited a V-shaped profile and contained two fills (Fig. 7, S.14). The upper fill (032) consisted of a loose dark brown sandy silt and measured 0.22m in depth. The lower fill (033) was very similar but with larger fragments of sub-angular sandstone inclusions.

The opposing side was created by feature 048 which was exposed for 1.5m within the trench and measured 0.88m in width and 0.38m in depth. Cut 048 only contained one fill (047) of mid brown silt with angular and sub-rounded sandstone inclusions. One section of this feature was excavated against the trench edge which revealed that it had been cut through the top of the fill by a shallow feature (053) (Fig. 7, S.28). No artefacts were recovered from any of the excavated fills. Feature 053 was only identified during the excavation of feature 048 and consisted of a very shallow scoop that was partially visible along the western edge of Trench 21. It was exposed for 3.4m in length, 1.3m in width and measured 0.18m in depth.

This single fill of this feature (052) consisted a loose brown loam suggesting that it may be more modern in origin.

The final two features within Trench 21 were parallel narrow linear features running on an east-west alignment, one of which may have been the cause of an identified geophysical anomaly. Both of these gully features were rather shallow in their profiles with the northernmost (051) measuring 0.07m in depth and the southernmost (055) 0.09m in depth. Gully 051 was 0.46m in width and was exposed within the trench for 6m in length. The excavated section showed a gentle rounded profile (Fig. 7, S.27) with a single brown silt fill (050) which contained sub-angular sandstone fragments and occasional charcoal flecks. Gully 055 was 0.57m in width and was exposed within the trench for 6m in length and had a steep sided but irregular profile (Fig. 7, S.31). Excavation of this feature revealed it to have a single fill (054) of dark brown sandy silt that contained angular and rounded sandstone fragments. The edges seemed partially lined with sandstone pieces forming a drainage gully.

Trench 22 (Figs 6 and 7)

Trench 22 measured 29.5m in length, and 4m in width, was excavated to the east of Trench 21 on a north-east to south-west alignment and was targeted over two geophysical anomalies. A large indistinct geophysical anomaly was identified at the southern end of the trench, excavation however showed that this anomaly was caused by a change in the natural strata.

Trench 22 was extended by 4.5m to the north as it did not include the second identified geophysical anomaly within the initial excavated area. Within the extended area a linear ditch (027) was identified that corresponded to a strong geophysical response. The ditch was exposed for 4m of its length and the excavated section revealed a V-shaped profile measuring 1.6m in width and 0.57m in depth (Fig. 7, S.9). The ditch contained two fills, the primary of which (028) consisted of a light greyish brown sandy clay with abundant angular sandstone inclusions, 0.12m deep, and a second fill (029) which was darker, again with a high quantity of angular sandstone fragments within its matrix, which was 0.45m deep. Neither of the fills of this feature, which is interpreted as a boundary ditch, contained any finds.

Approximately 18.5m from the northern end of Trench 22, a narrow linear (002) was exposed for 4m of its length on a roughly east-west alignment. The excavated section of this feature showed it to be a very irregular in nature and only measured 0.3m in width and 0.04m in depth. Two sherds of green glaze pottery were recovered from this feature which is interpreted as the shallow remains of a plough furrow.

Trench 23 (Figs 6 and 7)

Trench 23 measured 25m by 4m and was excavated to the east of Trench 22 on a north-south alignment. It was positioned to investigate a single discrete geophysical anomaly. Although three discrete features were revealed within the excavated trench, all located at the northern end away from the position of the anomaly.

An ovoid pit (006) was located against the western trench edge. It measured 1.25m in length, 0.58m in width and a maximum of 0.24m in depth (Fig. 7, S.6). Pit 006 contained a single fill (005) of dark brown sandy silt. There was no evidence to suggest a function for this feature.

Pit 003 measured 1.32m in length, 1.08m in width and 0.18m in depth. The excavated profile of this feature revealed it to possess a wide U-shaped profile (Fig. 7, S.5) with an uneven base containing a single fill (003) which was very similar to the topsoil. An additional feature (012) was seen below 004. It had a small irregular V-shaped profile and measured 0.45m in width and 0.18m in depth, having a single fill (011) of mid greyish brown sand. It is probable that 012 was formed by natural processes such as root disturbance or water action. Neither of the above features contained any artefacts or evidence for their function.

The final feature within Trench 23 was another pit (023) which was partially exposed against the eastern trench edge. The exposed portion of this feature measured 0.98m in length, 0.57m in width and 0.42m in depth (Fig. 7, S.8). The single fill (024) of this pit was a dark sandy silt that contained charcoal and rounded sandstone fragments and was interpreted as a rubbish pit.

Open Area Excavation (Figs 8 and 9)

Following the results of the Trial Trenching mitigation strategies were agreed with GMI Construction Group and the Durham County Council Assistant Archaeology Officer. These mitigation strategies included the excavation of an open area within an identified zone of archaeological sensitivity in the north-eastern corner of the development site. This area was investigated to evaluate the location of a proposed perimeter road around the development and included Trenches 25-27 within its limits. This excavation did not investigate the entirety of the known archaeology zone as further mitigation to preserve the remainder *in situ* beneath a grassed area was agreed. Consequently, a much smaller area was demarcated for open area excavation. Apart from the identified features around Trench 27, no archaeological features had been identified from the geophysical survey within the chosen area.

The majority of the features found within the open area were shallow linear features with seven discrete features also being identified. Cutting across the north-eastern corner of the excavation was a 40m length of ditch (Ditch 1) that was partially identified in the geophysical interpretation. Although not identified as such during excavation due to its very shallow nature, the eastern end of Ditch 1 was excavated within Trench 27 (see Fig. 2). Ditch 1 measured between 0.85m and 1.5m wide and 0.22 and 0.25m deep and contained a single fill of greyish brown silt (Fig. 9, S. 76). Four sherds of pottery were recovered from its fill.

Within the area of Trench 27, the traces of four very shallow curvilinear features and one small discrete features were identified. Due to the extremely slight nature of these features it was very difficult to interpret their function and they may have been caused by the action of roots or animal burrows. It is possible however to suggest that one of these features (016) (Fig. 9, S. 4) may have continued to the south and formed part of another linear feature

(Ditch 2) which was seen to continue beyond the southern excavation limit. The excavated northern end of Ditch 2 was very shallow with no discernable end symptomatic of later truncation rather than deliberate formation. Where Ditch 2 could be identified as a single feature, it measured 9.7m in length, 1.13m in width and 0.29m in depth. Its excavated section exhibited a concave U-shaped profile with a single light brownish grey sand fill (Fig. 9, S. 73).

Two further linear features were seen to intersect Ditch 1. Ditch 3 measured 21m in length and between 0.7m and 0.9m in width and between 0.06m and 0.17m in depth (Fig. 9, S.65) and lay on a north-east to south-west alignment. Ditch 3 contained a single fill of mid brown silt, from which was recovered a single sherd of Samian, and was seen to continue to the south of Ditch 1 curving slightly to the south. Although the intersection between Ditches 1 and 3 was investigated a relative relationship could not be demonstrated due to the similarity of the respective fills.

The northern limit of Ditch 4 was identified at approximately the same distance from Ditch 1 as Ditch 3. It measured 15m in length and was between 0.61 and 0.65m in width and between 0.16m and 0.24m in depth. The alignment of this feature was also north-east to south-west although it was not parallel to Ditch 3 and is therefore unlikely to be contemporary. The excavated sections of this ditch revealed it to have a shallow V-shaped profile (Fig. 9, S.64) containing a single fill of mid brown silt. A single sherd of Samian pottery was recovered from its northern terminus. The intersection between this and Ditch 1 showed that Ditch 1 was the later of the two features (Fig. 9, S.66).

On the eastern side of Ditch 3, two roughly circular features were identified. The first of these (125) measured 1.02m in length, 0.92m in width, 0.23m in depth and contained a single fill (126) (Fig. 9, S.70). Contained within the fill were a number of large flat stones including seven that were arranged in a circle on the base of the feature (Fig. 8, inset). Four sherds of Roman pottery from different vessels were recovered from the fill.

The second of these features (129) lay 0.3m to the north-west of the first and was more oval in plan. It measured 1.13m in length, 0.77m in width, 0.2m in depth and contained two fills (Fig. 9, S.74). The primary fill (130) of grey clayey silt, located against the southern edge of the cut, was 0.12m in deep. Above this the secondary fill (131), a greyish brown sandy silt, was up to 0.2m in depth. Both fills contained stone fragments but not to the same size or frequency as feature 125, neither were they deliberately arranged. Three sherds of Roman grey ware were recovered from the secondary fill (131). These two features seemed to have had a specific use especially with the observed deliberate placement of flat stones within pit 125. It was not possible to determine however the nature of their use from the excavation data.

On the southern side of Ditch 1 a small discrete feature (137) was identified. This was very shallow in nature at only 0.07m in depth (Fig. 9, S.77) and measured 1m in length and 0.61m

in width, containing a single fill (136) of mid brown silt. Within this fill were contained large amounts of angular sandstone fragments and occasional fire-cracked stone. The deposits were also heavily disturbed by roots and worms, however several sherds of Iron Age pottery were recovered from the fill which were probably all from the same vessel.

Further to the west lay a complex of curvilinear features arranged in a 'W shape' but perhaps representing a succession of right angled corners of sub-enclosures lying mainly to the north of the excavated area. All seemed highly truncated, leaving only very shallow deposits. The easternmost of these features (Gully 5) formed a right-angled section that measured 12.8m in length and was between 0.69m and 0.75m in width and 0.14m and 0.27m in depth and contained a single fill (141) (Fig. 9, S.79). Part way along its length Gully 5 was cut by a large shallow oval pit (144) whose function was undetermined. This pit measured 2.13m in length, 1.6m in width and 0.2m in depth (Fig. 9, S.82). It contained a single fill (145) of dark brown silt, that was probably derived from wind blown material, from which was recovered a single sherd of Roman pottery.

At its western end Gully 5 was seen to cut Gully 6 (Fig. 9, S.86) which again was a right-angled section beginning on a north-south alignment turning to the west approximately half way along its length. Gully 6 measured approximately 15.5m in length, 0.67m in width, 0.16m in depth and contained a single stony fill (149) (Fig. 11, S.89)

Within the angle of Gully 6 was a short curvilinear gully (169). Upon excavation this was shown to be irregular and extremely shallow to the point that it was very difficult to determine if it was archaeological or formed by natural processes (Fig. 11, S.96). Gully 169 measured 5.5m in length, 0.35m in width, 0.07m in depth and contained a single fill (168) of mid brown silt with abundant angular sandstone inclusions.

To the south of gullies 5 and 6 lay a further slightly curving short linear feature (151), measuring 5.3m in length. This feature was aligned roughly north-west to south-east and was between 0.51 and 1m in width and 0.02 and 0.12m in depth. The excavated sections of this feature (Fig. 11, S.87) showed a rather irregular profile with a single dark brown silt fill (150). There was no evidence as to the function of this feature.

To the west of gully 151 a discrete pit was identified (161) that measured 0.87m in length, 0.79m in width and 0.15m in depth (Fig. 11 S.93). Roughly circular in shape, the excavated section revealed a U-shaped profile with a single dark brown silt fill (160).

At the south-western part of the open area three sections of linear features were identified that formed two intersecting features (Ditches 7 and 8). The exposed portion of Ditch 7 measured 20m in length and was 0.55m in width and 0.06m in depth (Fig. 11, S.90). The remains of this ditch were extremely slight having been completely truncated in some parts. Where Ditch 7 met the southern limit of excavation, the northern edge of Ditch 8 was visible. The relationship between these two features was tested at this point but the similarity of the fills of both ditches was such that a relationship could not be determined.

The line of Ditch 8 was identified within the limits of Trenches 25 and 26. It ran on an east-west alignment and was between 0.65m and 1.06m in width and between 0.12m and 0.24m in depth with a total exposed length of 33m. Ditch 8 had a shallow U-shaped profile and contained a single mid brown clayey silt fill (082) (Fig. 11, S.42).

Just inside the corner created by Ditches 7 and 8 was a sub-rectangular pit (163) measuring 1.7m in length and 1m in width. The excavated section of this feature revealed a well formed U-shaped profile (Fig. 11, S.94 Plate 5), with a flat base, containing a single dark brown silt fill from which was recovered a single sherd of mortaria.

Two of the three remaining features identified within the limits of the Open Area excavation were located within the area of Trial Trench 26. Features 097 and 099 were two small roughly circular forms positioned to the north of Ditch 8. Feature 097 measured 0.57m in length, 0.4m in width and 0.25m in depth. It had an oval shape in plan with a U-shaped profile (Fig. 11, S.56) and contained a single dark brown silt fill (096).

Feature 099 measured 0.45m in length, 0.43m in width and 0.19m in depth. Again with a U-shaped profile (Fig. 11, S.57) and a single dark brown silty clay fill (098). Neither of these features yielded any finds or any evidence as to their function.

The final feature within the Open Area was located immediately to the east of Trench 26. It was an elongated sub-rectangular pit (133) orientated north-east to south-west and measured 3m in length, 0.63m in width and 0.06m in depth (Fig. 11, S.75). Feature 133 was too shallow for any meaningful profile with a single fill of mid brown silt (132).

6 Artefact Record

Only a small artefact assemblage was recovered from the archaeological investigations at Butchers Race. This consisted entirely of pottery from the Late Iron Age through to the mid 3rd Century AD, although two later medieval and post-medieval sherds were recovered from the topsoil and an excavated plough furrow. As the entire assemblage of pottery only totalled 35 sherds the full assemblage was analysed by the respective specialists.

Iron Age Pottery by Blaise Vyner

Introduction

This is a small assemblage of 17 sherds which may derive from two later pre-Roman Iron Age or, more probably, early Roman period native-style vessels.

Treatment

In the fabric description hyphenated colours indicate the variation in colour expected from poorly controlled firing conditions, the first colour being that most in evidence. Grit sizes are expressed as small (<3 mm), medium (3-6 mm), and large (6-9 mm), while distinctive particles smaller than 0.02 mm are described as dust. As a general guide, grit quantities have been described in relation to the estimated average number of pieces visible per 100 mm

square: occasional (1 or less), few (2), many (3 to 4) and numerous (5 or more). Sherd weight has been rounded to the nearest 5 g. No thin section analysis has been done and identification has been made using a 25× microscope lens. Quantification excludes fragments with a total surface area of less than around 100² mm.

Distribution of ceramics on site

The group of 16 sherds from context 136 assemblage was recovered from the fill of pit 137, while an individual sherd from context 032 was found in feature 034.

Ceramic range and chronology

The assemblage comprises potsherds of pre-Roman Iron Age or native Roman type. The recovery of a number of ceramic assemblages from settlement sites in the lower Tees valley and the Vale of Mowbray in recent years continues to support the conclusions reached from the examination of the major assemblage from Thorpe Thewles, over twenty years ago (Swain 1987, 65). These suggested that Iron Age potting traditions remained conservative over a long period, and that take-up of Romano-British pottery appears to have remained limited away from sites associated with military activity, while the range of styles in native potting traditions became extended (Heslop 1982, 111). The homogeneity and long-lived nature of these potting traditions therefore makes it difficult to establish their chronology. The presence on this site of Roman pottery of the second and third century AD suggests that this material, from only two contexts, is likely to be contemporary or perhaps more likely, reflect an early but probably still late Iron Age or earlier Roman period phase of activity at the site.

Vessel types present

Both vessels present are medium-sized jars which are likely to have been barrel-shaped, the commonest vessel form for domestic vessels from Iron Age and Romano-British settlement sites in the area.

Fabric type

Sedimentary quartz gritted fabric is the most common later pre-Roman Iron Age fabric type found in northern North Yorkshire and the Tees Valley.

Catalogue

032

Single body sherd, grey-brown exterior surface, dark grey interior surface and fabric, many small, medium-sized and large quartzitic grits, quartz dust in the clay matrix, wt 10 g, wall thickness 10 mm.

136

Sherds (16) and fragments, total weight 135 g. Exterior surface brown-grey, interior surface brown, fabric dark grey, many small angular quartz and quartzitic grits, with quartz dust in the clay matrix, typical wall thickness 9 mm. The rim has a flat upper surface and external rib, carbonised accretions on the rim outer surface.

Accretions

Thin carbonised accretions are present on the rim outer surface and on the interior of several body sherds of the vessel from 136. The accretions would probably be sufficient to provide a radiocarbon date, but this would be unlikely to produce a more accurate date than that suggested on the basis of ceramic association. Carbonised accretions are commonly found on jars of this period, usually on the shoulder or rim exterior, and are assumed to be residues from cooking.

Regional context

Enclosed farmsteads remain the apparent dominant site type for the Iron Age in lowland County Durham and a large number are now known as a result of sustained programmed air photography over the past thirty years (Still and Vyner 1986; Still, Vyner and Bewley 1989). Thorpe Thewles remains the most extensively excavated of these, with smaller scale work having taken place only at West House, Coxhoe (Haslegrove and Allon 1982). Other enclosures of probable Iron Age date are known from Sunderland Bridge, to the north of Spennymoor, and Ferryhill and Bishop Middleham to the south-east. In recent years excavation on development sites in County Durham and elsewhere in the region has identified less substantially enclosed settlement sites of pre-Roman Iron Age and Romano-British date which are less susceptible to identification through air photography, although it remains unclear whether these are contemporary with the enclosed farmsteads or represent later phases of settlement. Limited ceramic assemblages have been obtained from sites at Pittington, to the north, and Faverdale, Darlington, to the south-west and the sherds from Spennymoor are consistent with these other excavated assemblages.

Recommendations for further analysis

There are no recommendations for further analysis of this assemblage of Iron Age pottery except that one rim fragment from a plain jar from context 136 be illustrated (see Fig. 11).

Roman and Later Pottery by John Dore

Nineteen sherds of Roman and later pottery were recovered from the excavations and submitted for analysis. Where datable, they could be assigned to the second or third centuries AD. All the material was derived from archaeological features excavated in the north-eastern corner of the site, mainly dug in the open area excavation phase of the investigation.

Catalogue

Trench 22 Context 1

Two wall sherds pale orange ware with green-glaze outer surface; 13/14th Century A.D.

Trench 21 Context 13

A single base sherd BB2; c. AD 140-250

Trench 21 Context 35

A single fragment of handle of amphora, form Dr 20

A single very small fragment rim sherd jar in BB2; c. AD 140-250.

Open Area Context 103

A single wall sherd Samian, probably Central Gaulish; 2nd Century A.D.

Open Area Context 105

A single base sherd Samian, Central Gaulish, form Dr 18/31; c. A.D. 100-160

Open Area Context 126

A single wall sherd mortarium; slag trituration grits; Catterick/Cantley tradition; mid 3rd Century A.D.

A single wall sherd from bowl in Crambeck Reduced ware (CRA RE, see Tomber & Dore 1998); mid 3rd Century A.D.

A single wall sherd grey ware jar;

A single wall sherd; possibly Roman.

Open Area Context 131

Three wall sherds gritty grey ware; 2nd Century A.D.

Open Area Context 135

A single wall sherd, Roman

Open Area Context 145

A single wall sherd in BB1; 2nd-3rd Century A.D.

Open Area Context 162

A single wall sherd mortarium; orange ware with small quartz trituration grits; mid 2nd Century A.D.

Trench 28 Topsoil

A single wall sherd stoneware with brown glaze; Post Medieval

Trench 21 U/S

A single rim sherd bowl in BB2; c. AD 140-220.

Recommendations for further analysis

There are no recommendations for further analysis of this assemblage.

7 Environmental Record

Carbonised Plant Macrofossils and Charcoal by Diane Alldritt

Introduction

A total of fifteen bulk samples were taken during the fieldwork. The flots from all of these samples were examined for carbonised plant macrofossils including charcoal. Six bags of sorted retent material were also received for analysis.

Methodology

Bulk environmental samples were processed by ASWYAS using an Ankara style water flotation system (French 1971). Flots were dried and forwarded to the author for sorting and analysis. Charred material was generally quite rare with <2.5ml to 5ml of cereal grain, charcoal fragments and tea-leaf size detritus present. Modern roots and seeds were present throughout in amounts varying from <2.5ml to up to 25ml. Identified carbonised plant material and charcoal was removed and bagged separately by type.

All charcoal suitable for identification was examined using a high powered Vickers M10 metallurgical microscope. The reference photographs of Schweingruber (1990) were consulted for charcoal identification. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

Results

All results are presented in Table 3 and discussed below.

Discussion

The fifteen samples examined from Butchers Race, Spennymoor produced small amounts of generally well preserved cereal grain and weed seeds, together with a small quantity of mostly degraded and poorly preserved charcoal. Occasional samples produced no charred material, but modern roots and sometimes seeds were present in all of the samples.

Carbonised cereal grain was recovered from six of the samples, with identifiable specimens present in two of these only. Sample 3 (024) contained nicely preserved examples of *Hordeum vulgare* var. *vulgare* (six row hulled barley) and a little degraded *Hordeum vulgare* sl. (barley), whilst sample 10 (097) produced a single *Avena* sp. (oat). Indeterminate grain in a highly degraded state was found in samples 2 (013), 3 (024), 4 (035), 13 (136) and 15 (162). Interestingly, sample 14 (139) contained a nice example of cereal chaff in the form of a *Hordeum vulgare* sl. (barley) internode, but no actual grain was found in this context.

Carbonised weed seeds were confined to sample 1 (003) and all are agricultural or disturbed ground indicators. In general the cereal grain and weeds could be considered to be present in trace amounts and reflect activities occurring around the site, indeed some of the grain could be wind blown material becoming accidentally incorporated in ditches, post-holes and so forth. The presence of earthworm egg capsules and modern seeds throughout the samples indicated movement of material and bioturbation, from possibly quite shallow excavated features.

Charcoal fragments were recovered from samples 2 (013), 3 (024), 5 (047), 8 (032), 9 (029), 10 (097) and 15 (162), from both flot and retent portions. The charcoal was overall poor in preservation, surprisingly, as from external examination it appeared to be un-abraded and in good condition. However, many pieces were stained internally by iron-panning probably originating from local soil conditions, whilst other pieces lacked diagnostic features. Despite

this it was possible to distinguish three different woodland types, with *Corylus* (hazel) in sample 3 (024), cf. Prunoideae (cf. cherry types) in 9 (029) and *Quercus* (oak) in 10 (097) and 15 (162). This combination of types suggested woodland with open lighter areas and small trees or shrubs being used as a source of fuel. A single charred rhizome in sample 8 (032) provided a tentative indication of the cutting of peat or heath as an alternative source of fuel, but this evidence should be considered trace.

Conclusion

Overall the samples from Butchers Race produced very little environmental material, but the identifiable charred remains recovered did provide a trace indication of cereal grain agriculture and the use of woodland resources for fuel. Both barley and oat were under cultivation and traces of cereal chaff were present in the samples. Oak and hazel were exploited for fuel, and it is apparent that other shrubby types were in use around the site. Peat and heath land may also have been used as a source of fuel. In a general comparison of charred material from all samples, 3 (024) produced the best-preserved specimens and the most informative range of plant material. No further work is work is recommended.

Radiocarbon Dating Assessment

Although there is a clear directive to routinely obtain radiocarbon dates for sites within the region, the samples showed a low potential for both radiocarbon dating and archaeobotanical recovery. This is principally due to the high levels of modern contamination found, a problem exacerbated moreover by the very shallow nature of the features, whose fills were very humic in their content due to topsoil penetration. Therefore, even without a lack of identifiable charcoal pieces, any radiocarbon dates achieved could not be regarded as very reliable and would be unlikely to further the chronological understanding of the site beyond the typological dating provided by the pottery.

Table 3 Carbonised Plant Macrofossils and Charcoal Results

	Sample	1	2	3	4	5	6	7	8	9
	Context	3	13	24	35	47	58	74	32	29
	Total CV	<2.5ml	2.5ml	7.5ml	<2.5ml	2.5ml	<2.5ml	0	<2.5ml	2.5ml
	Modern	5ml	15ml	5ml	25ml	<2.5ml	15ml	5ml	20ml	20ml
Carbonised Cereal Grain and Chaff	Common Name									
<i>Avena</i> sp.	oat									
<i>Hordeum vulgare</i> var. <i>vulgare</i>	six row hulled barley			6						
<i>Hordeum vulgare</i> sl.	barley			6						
<i>Hordeum vulgare</i> sl. internode	barley chaff									
Indeterminate cereal grain (+embryo)			1	2	2					
Carbonised Weeds										
<i>Persicaria maculosa</i>	redshank	1								
<i>Rumex</i> sp.	docks	1								
Charcoal										
<i>Quercus</i>	oak									
<i>Corylus</i>	hazel			1 (0.10g)						
cf. Prunoideae	cf. cherry type									1 (0.11g)
Indeterminate			5 (0.21g)	4 (0.25g)		2 (0.08g)			1 (0.03g)	
Other Carbonised Remains										
Rhizomes									1 (<0.01g)	
Indeterminate stem / root		1 (0.03g)								
Non-Carbonised Remains										
Earthworm egg capsules					7	1	2			
Modern seeds			2		3	1	10+			
Wood fragment							1			

Table 3 Carbonised Plant Macrofossils and Charcoal Results continued

	Sample	10	11	12	13	14	15
	Context	97	107	126	136	139	162
	Total CV	2.5ml	<2.5ml	<2.5ml	<2.5ml	<2.5ml	5ml
	Modern	10ml	<2.5ml	5ml	5ml	5ml	25ml
Carbonised Cereal Grain and Chaff	Common Name						
<i>Avena</i> sp.	oat	1					
<i>Hordeum vulgare</i> var. <i>vulgare</i>	six row hulled barley						
<i>Hordeum vulgare</i> sl.	barley						
<i>Hordeum vulgare</i> sl. internode	barley chaff					1	
Indeterminate cereal grain (+embryo)					1		1
Carbonised Weeds							
<i>Persicaria maculosa</i>	redshank						
<i>Rumex</i> sp.	docks						
Charcoal							
<i>Quercus</i>	oak	2 (0.09g)					1 (0.08g)
<i>Corylus</i>	hazel						
cf. Prunoideae	cf. cherry type						
Indeterminate							
Other Carbonised Remains							
Rhizomes							
Indeterminate stem / root							
Non-Carbonised Remains							
Earthworm egg capsules							
Modern seeds					1	10+	
Wood fragment							

8 Discussion

The geophysical survey conducted by Archaeological Services University of Durham identified a concentration of linear features in the north-eastern corner of the site. However, subsequent excavations have been able to establish that the shallow features within this area were more extensive than geophysical results suggested. Moreover, they have ascertained that they formed part of a Late Iron Age/Romano-British enclosure complex.

The northernmost archaeological anomalies in the north-eastern part of the site were only investigated by trial trenches leaving it was difficult to interpret their form and function beyond the excavated areas. Although these features were not investigated further within the scope of the work, they fell within the area of preservation *in situ*, which formed part of the agreed mitigation strategy for the site. As a result any archaeological data which they may contain is protected for future investigation. The features exposed within the open area, however, may have formed parts of a series of incremental enclosures, the large rectangular enclosure represented by Ditches 1, 2, 7 and 8 conceivably being appended to a pre-existing complex represented by Gullies 5 and 6. Whether these enclosures formed around a possible settlement is not clear, but no obvious evidence of structural features was recorded.

The only artefact type recovered from the excavations was pottery. Even with such a limited resource, however, the dating and typology of the pottery fits with other known rural settlements of the period within County Durham with a mix of traditional and Roman wares. This mix could reflect an earlier Iron Age phase to the site. Although other sites within the area have shown that established pottery traditions continued into the Roman period, especially away from military occupation (see Vyner this report). The Roman pottery, however, does suggest that the site was in use up to the late second to mid third centuries AD.

The analysis of the plant material provided evidence of agriculture and the exploitation of local resources for fuel and may indicate a small farmstead type site.

Finally the location of the identified archaeological remains could be counted as a factor both to their identification by survey and their initial setting. The north-eastern corner of the development site was broken solid sandstone geology and on one of the highest points of the site so providing natural free drainage keeping the enclosures and any areas of occupation relatively dry. The rest of the development site contained silty and clayey soils which would become waterlogged quite quickly.

9 Conclusions

The Archaeological investigations at Butchers Race, Spennymoor identified a concentration of features within the north-eastern corner of the development site. This concentration was initially highlighted by the geophysical survey of Durham University although more features than they initially identified were present within the excavated area.

The remainder of the development site was sampled via the trial trenching programme and was shown to be largely devoid of archaeological features except for the location of an old field boundary whose location may be traced on the first edition Ordnance Survey mapping of 1857. Evidence for later agricultural activity on the site was observed through the remains of plough furrows within many of the trial trenches and were seen to roughly follow the same north-east to south-west alignment wherever they were encountered.

The archaeological remains within the north-east corner may represent series of agricultural enclosures or perhaps a small rural settlement that was occupied during the 2nd and 3rd centuries AD, relatively few of which have been investigated in the region (Petts and Gerrard n.d., 36, 52-3).

Appendix 1: Inventory of primary archive

Phase	File/Box No	Description	Quantity
	1	Context register sheet	7
	1	Drawing register sheet	5
	1	Drawing sheet number record sheet	2
	1	Sample register sheet	1
	1	Environmental laboratory sheet	15
	1	Levels data	32
	1	Trench record sheet	29
	2	Context cards (001-169)	169
	3	Small permatrace sheets	28
	4	Photo register sheets (Film nos 8015, 8016, 8031, 8038, 8040, 8041, 8042, 8043, 8081, 8082, 8117, 8118, 8125, 8126)	14
	4	Black and white negatives (Film nos 8015, 8031, 8040, 8041, 8082, 8118, 8125)	7
	4	Black and white contact sheet (Film nos 8015, 8031, 8040, 8041, 8082, 8118, 8125)	7
	4	Colour transparencies (Film nos 8016, 8038, 8042, 8043, 8081, 8117, 8126)	7
	Loose	Large permatrace sheets	13

Appendix 2: Concordance of contexts

Context	Trench	Group	Description	Artefacts and environmental samples
001	22		Single fill of 002	2 sherds of medieval green glaze pottery
002	22		Cut of plough furrow	
003	23		Single fill of 004	GBA 1
004	23		Cut of pit	
005	23		Single fill of 006	
006	23		Cut of circular pit	
007	27		Upper plough soil	
008	27		Lower plough soil	
009	27		Cut of ditch/gully	
010	27		Single fill of 009	
011	23		Sandy deposit below 005	
012	23		Possible cut for 011	
013	27	1	Single fill of 014	GBA 2, Base sherd BB1
014	27	1	Cut of shallow gully	
015	27		Single fill of 016	
016	27		Cut of possible gully	
017	27		Single fill of 018	
018	27		Cut of possible gully	
019	27		Cut of curved gully	
020	27		Single fill of 019	
021	27		Cut of gully	
022	27		Single fill of 021	
023	23		Cut of circular pit	
024	23		Single fill of 023	GBA 3
025	27		Cut of post-hole	
026	27		Single fill of 025	
027	22		Cut of E-W ditch	
028	22		Fill of 027	
029	22		Fill of 027	GBA 9
030	21		Single fill of 031	
031	21		Cut of shallow ditch	
032	21		Primary fill of 034	GBA 8
033	21		Fill of 034	
034	21		Cut of pit	
035	21		Single fill of 036	GBA 4, 1x Amphora handle, 1x BB1 rim sherd
036	21		Cut of N-S ditch	
037	2		Cut of ditch	
038	2		Single fill of 037	
039	21		Single fill of 040	
040	21		Cut of small pit	
041	2		Cut of shallow gully	
042	2		Single fill of 041	
043	21		Single fill of 044	

Context	Trench	Group	Description	Artefacts and environmental samples
044	21		Cut of shallow gully	
045	21		Single fill of 046	
046	21		Cut of N-S ditch	
047	21		Single fill of 048	GBA 5
048	21		Cut of V-Shape linear	
049	6		Ridge and furrow	
050	21		Single fill of 051	
051	21		Cut of shallow gully	
052	21		Single fill of 053	
053	21		Cut of irregular feature	
054	21		Single fill of 055	
055	21		Cut of linear feature	
056	20		Single fill of 058	
057	20		Cut of circular feature	
058	12		Single fill of 059	GBA 6
059	12		Curvilinear gully cut	
060	12		Ash/clinker layer	
061	13		Cobble spread	
062	13		Black clinker above 061	
			Black clinker underlying	
063	13		topsoil	
064	13		Burnt orange sandstone layer	
			Black clinker between 064 &	
065	13		066	
066	13		Brick surface	
067	13		Black clinker below 066	
068	13		Fe gas pipe	
069	12		Single fill of 070	
070	12		Cut of 'spur' of gully 059	
071	5		Upper fill of 073	
072	5		Primary fill of 073	
073	5		Cut of pit	
074	5		Single fill of 075	GBA 7
075	5		Cut of gully	
076	19		Single fill of 079	
077	19		Cut of plough furrow	
078	18		Single fill of 079	
079	18		Cut of plough furrow	
080	18		Single fill of 081	
081	18		Cut of plough furrow	
082	25		Single fill of 083	
083	25		Cut of shallow ditch	
084	24		Cut of tree bole	
085	24		Single fill of 084	
086	16		Single fill of 087	
087	16		Cut of short narrow gully	

Context	Trench	Group	Description	Artefacts and environmental samples
088	16		Single fill of 089	
089	16		Cut of large modern feature	
090	15		Single fill of 091	
091	15		Cut of plough furrow	
092	10		Single fill of 093	
093	10		Cut of plough furrow	
094	26		Fill of 095	
095	26		Cut of linear	
096	26		Single fill of 097	GBA 10
097	26		Cut of possible post-hole	
098	26		Single fill of 099	
099	26		Cut of possible post-hole	
100			Fill of 101/102	
101			Cut of linear/hedge	
102			Cut of linear/ hedge	
103	O/A	3	Single fill of 104	Sherd of Samian
104	O/A	3	Cut of butt end of gully	
105	O/A	4	Single fill of 106	Base sherd of Samian
106	O/A	4	Cut of butt end of gully	
107	O/A	4	Single fill of 108, same as 105	GBA 11
108	O/A	4	Cut of gully, same as 106	
109	O/A	3	Single fill of 110, same as 103	
110	O/A	3	Cut of gully, same as 104	
111	O/A	4	Cut of gully, same as 108	
112	O/A	4	Single fill of 111, same as 107	
113	O/A	1	Cut of gully	
114	O/A	1	Single fill of 113	
115	O/A	1	Single fill of 116	
116	O/A	1	Cut of gully	
117	O/A	3	Single fill of 118	
118	O/A	3	Cut of gully, same as 110	
119	O/A	3	Single fill of 120	
120	O/A	3	Cut of gully	
121	O/A		Single fill of 122	
122	O/A		Cut of a very shallow feature	
123	O/A	2	Single fill of 124	
124	O/A	2	Cut of northern end of linear	
125	O/A		Cut of post-hole	
126	O/A		Single fill of post-hole	GBA 12, 4 sherds of Roman including mortaria
127	O/A	2	Single fill of 128	
128	O/A	2	Cut of ditch	
129	O/A		Cut of post-hole adjacent to 125	
130	O/A		Primary fill of 129	
131	O/A		Secondary fill of 129	Roman grey ware

Context	Trench	Group	Description	Artefacts and environmental samples
132	O/A		Single fill of 133	
133	O/A		Cut of shallow rectilinear	
134	O/A	1	Cut of gully, same as 113	
135	O/A	1	Single fill of 134	Roman pot sherd
136	O/A		Single fill of 137	GBA 13, Pre-Roman Iron Age pottery 42+
137	O/A		Cut of 'rubbish pit'	
138	O/A	1	Cut of gully, same as 134	
139	O/A	1	Single fill of 138	GBA 14
140	O/A		Cut of curvilinear terminus	
141	O/A		Single fill of 140	
142	O/A		Cut of gully, same as 140	
143	O/A		Single fill of 143	
144	O/A		Cut of pit	
145	O/A		Single fill of 144	Sherd of BB1
146	O/A		Cut of gully, same as 142	
147	O/A		Single fill of 146	
148	O/A		Cut of curvilinear terminus	
149	O/A		Single fill of 148	
150	O/A		Single fill of 151	
151	O/A		Cut of curvilinear	
152	O/A		Cut of curvilinear terminus, same as 148	
153	O/A		Single fill of 153	
154	O/A		Cut of gully	
155	O/A		Single fill of 154	
156	O/A		Cut of gully, same as 154	
157	O/A		Single fill of 156, same as 155	
158	O/A		Cut of post-hole	
159	O/A		Single fill of 158	
160	O/A		Single fill of 161	
161	O/A		Cut of pit	
162	O/A		Single fill of 163	GBA 15, Sherd of mortaria
163	O/A		Cut of pit	
164	O/A		Single fill of 165, same as 157	
165	O/A		Cut of gully, same as 156	
166	O/A		Single fill of 167	
167	O/A		Cut of gully	
168	O/A		Single fill of 169	
169	O/A		Cut of possible gully	
TS	28		Top soil	Post medieval stoneware
U/S	21		U/S	BB2 bowl rim sherd

Appendix 3

Written schemes of investigation

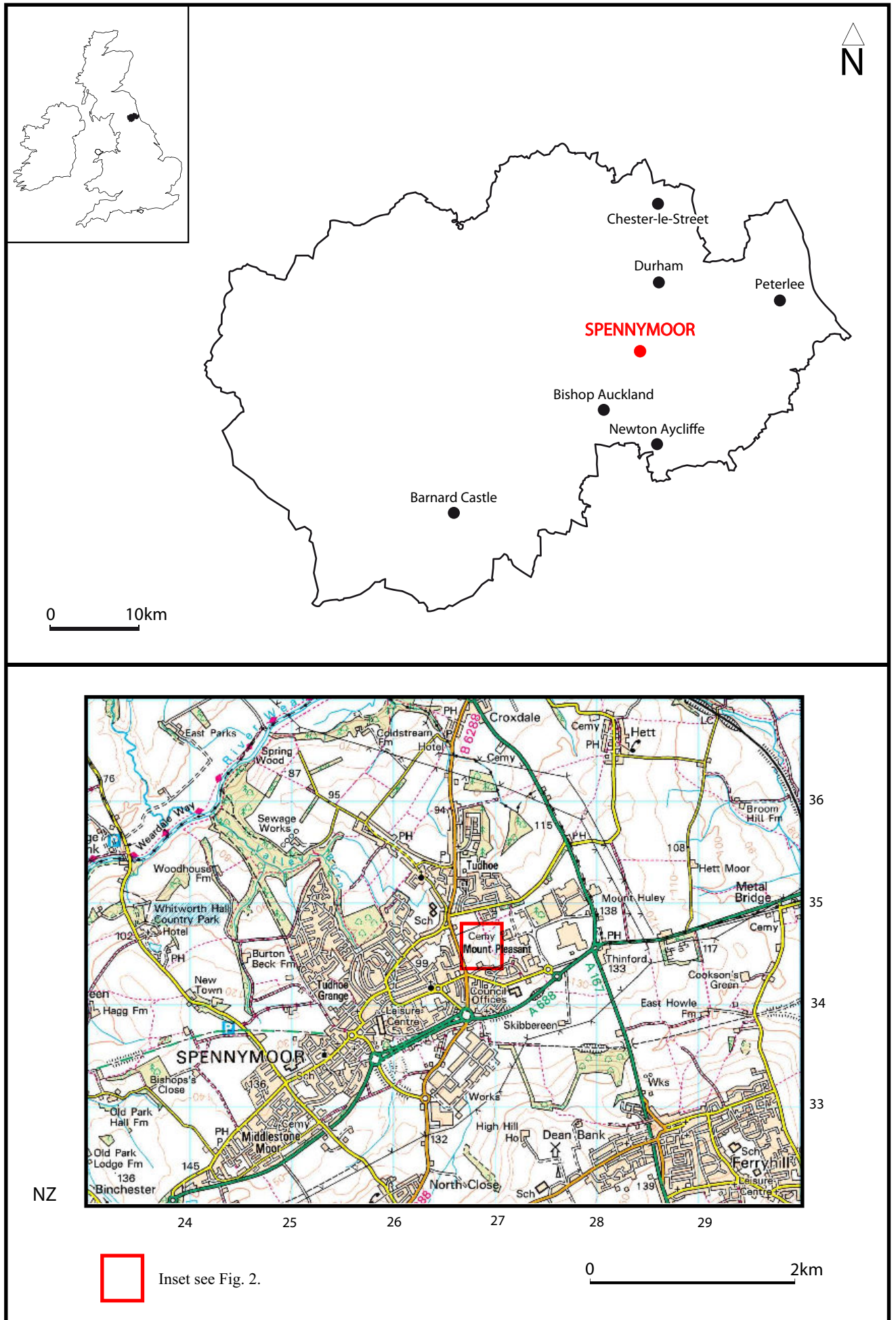


Fig. 1. Site location

Reproduced with the permission of the controller of Her Majesty's Stationery Office © Crown Copyright. Archaeological Services WYAS: licence LA076406, 2008.

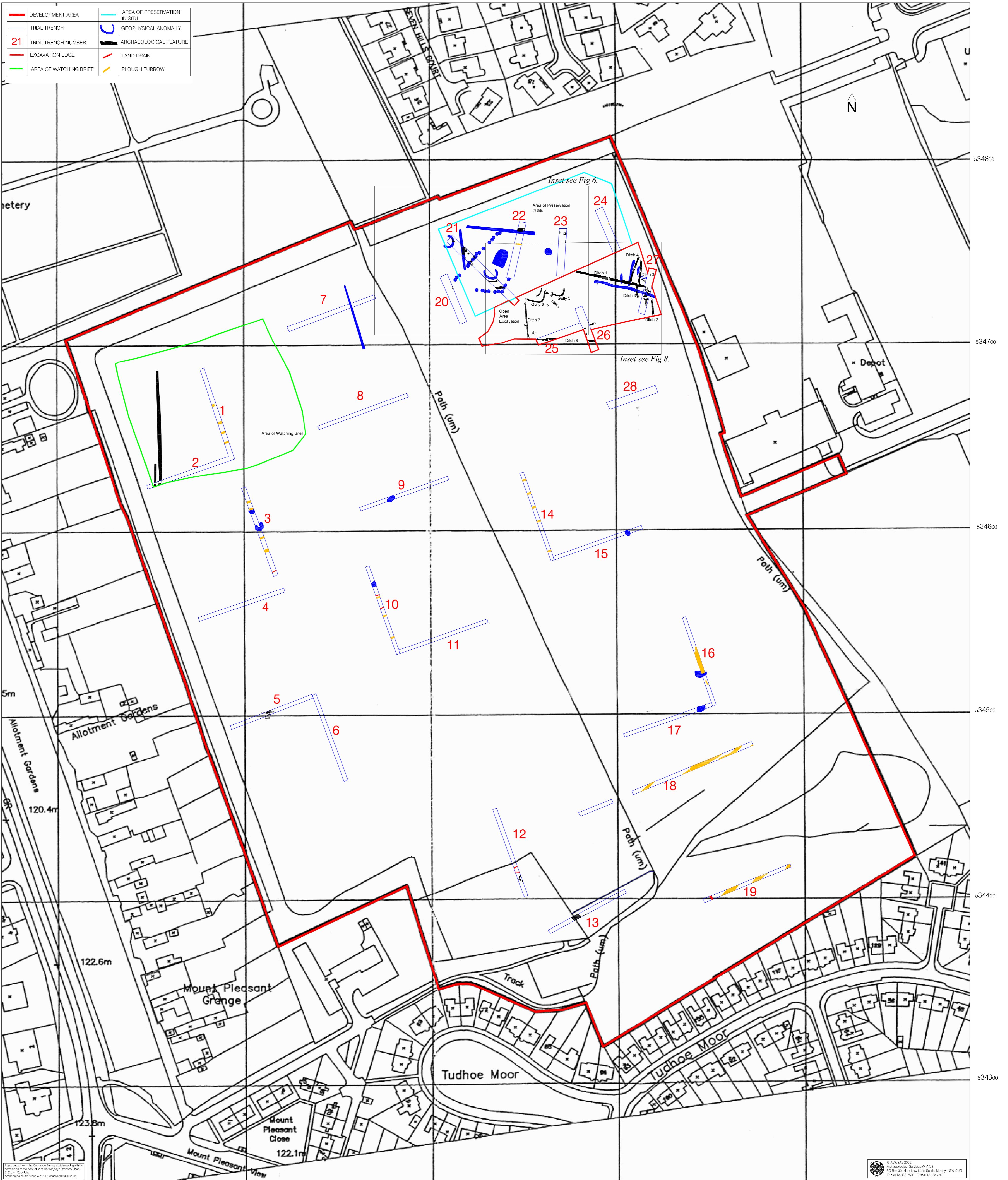


Fig. 2. Site plan showing trench location and geophysics

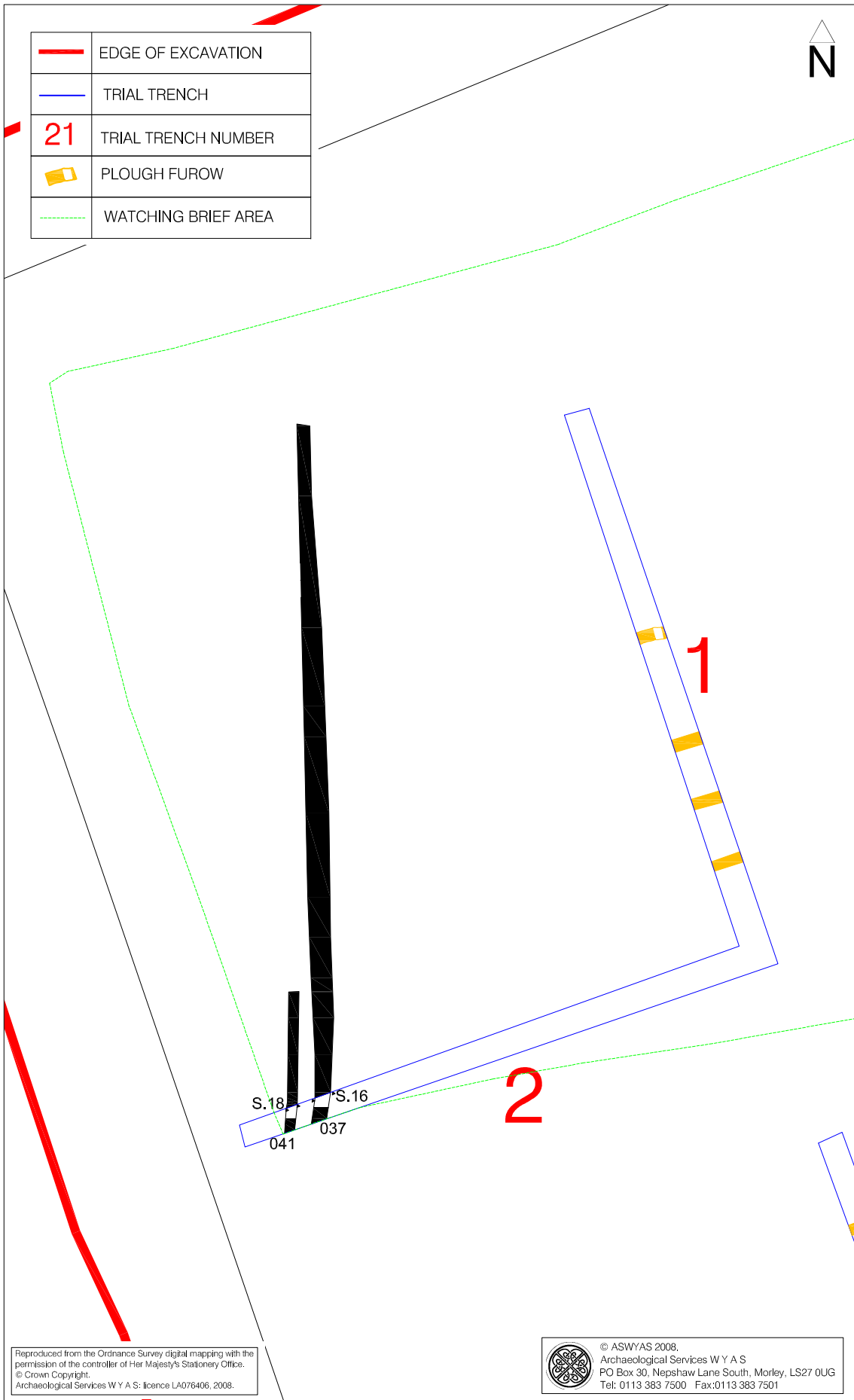


Fig. 3. Plan of Trenches 2 and 3

0 25m

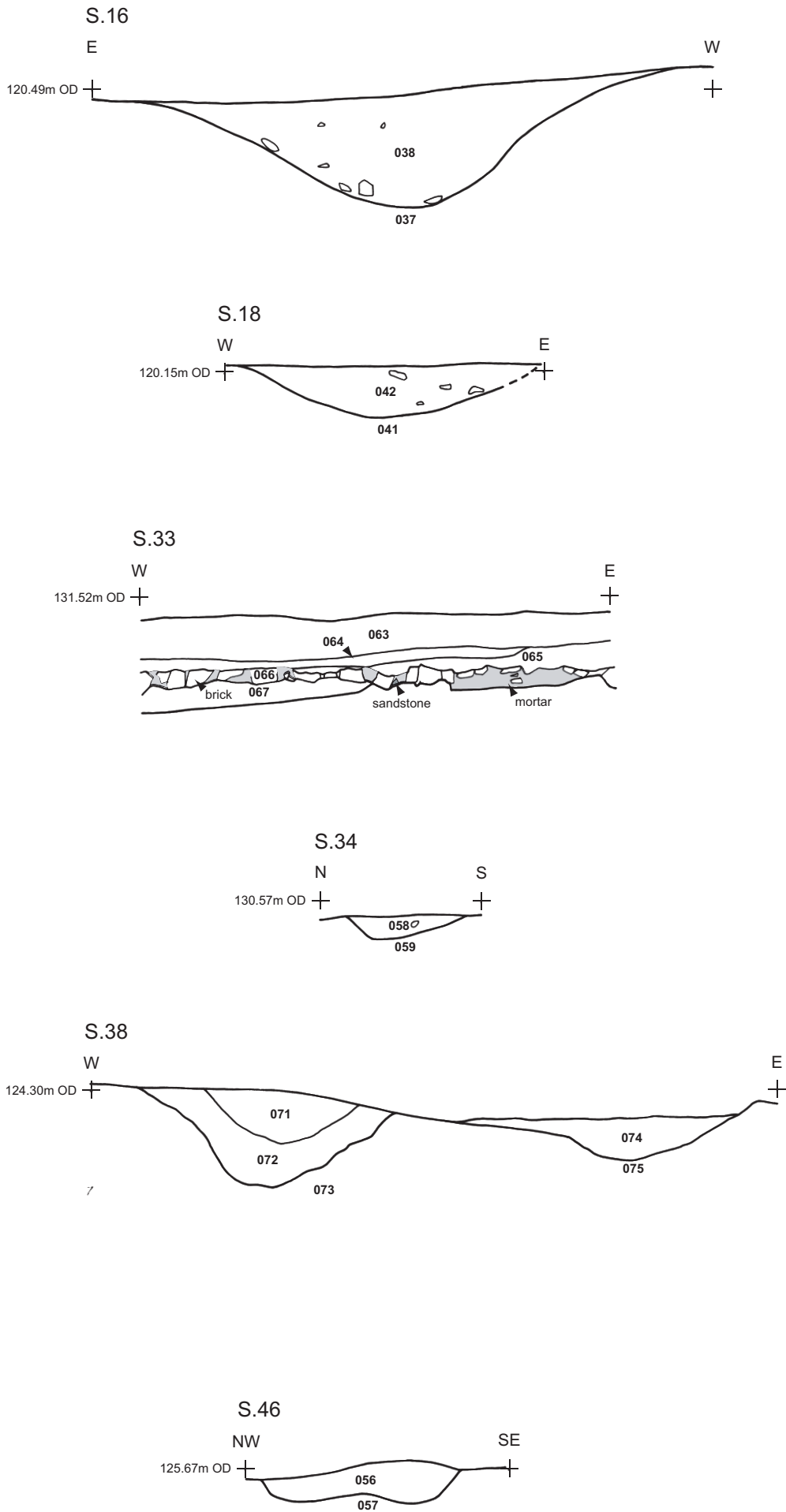


Fig. 4. Trench 2, 5, 12 and 13 Sections



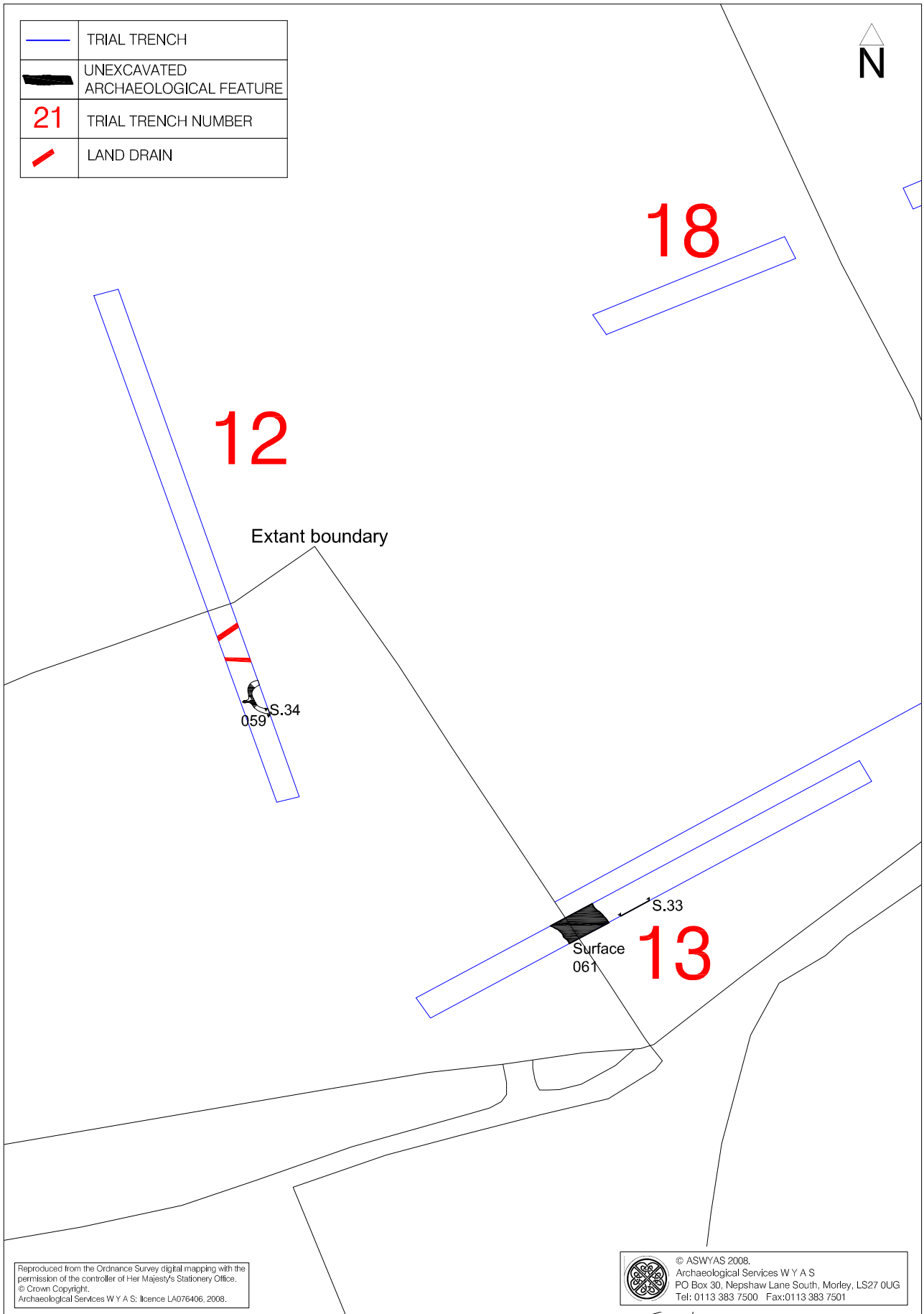


Fig. 5. Plan of Trenches 12 and 13

0 20m

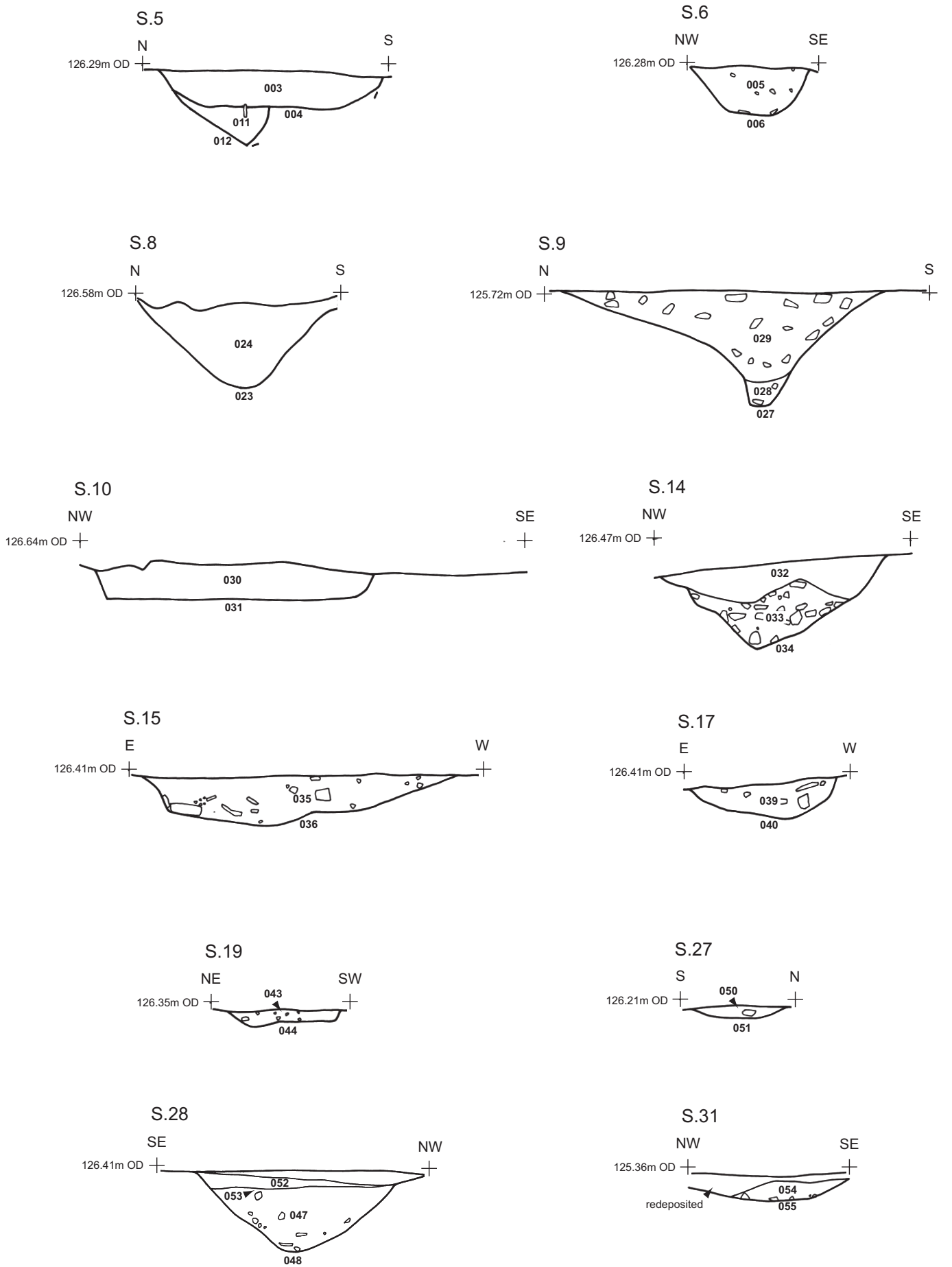


Fig. 7. Sections 5, 6, 8, 9, 10, 14, 15, 17, 19, 27, 28 and 31



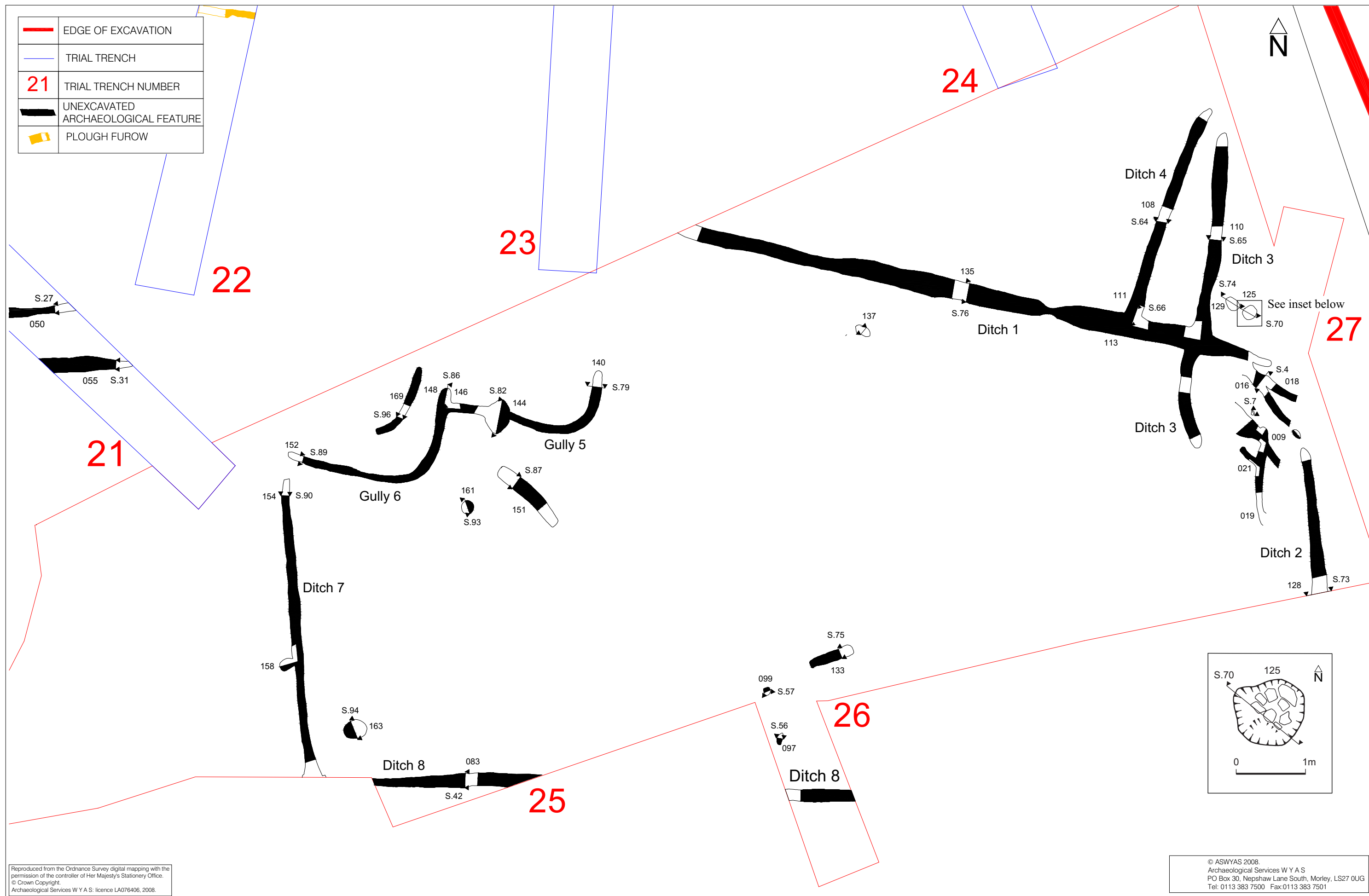


Fig. 8. Inset showing open area features

0 10m

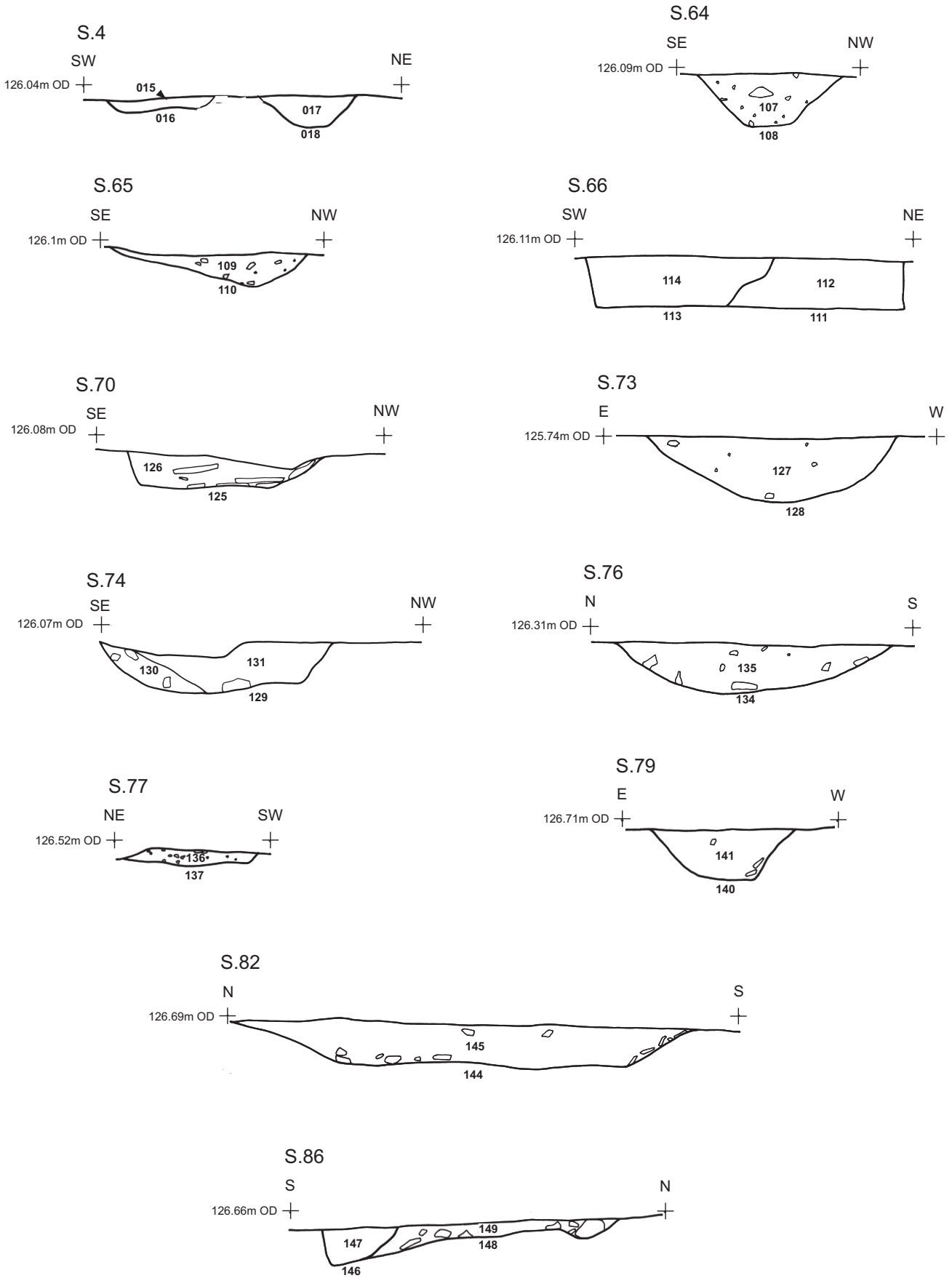


Fig. 9. Sections 4, 64, 65, 66, 70, 73, 74, 76, 77, 79, 82 and 86



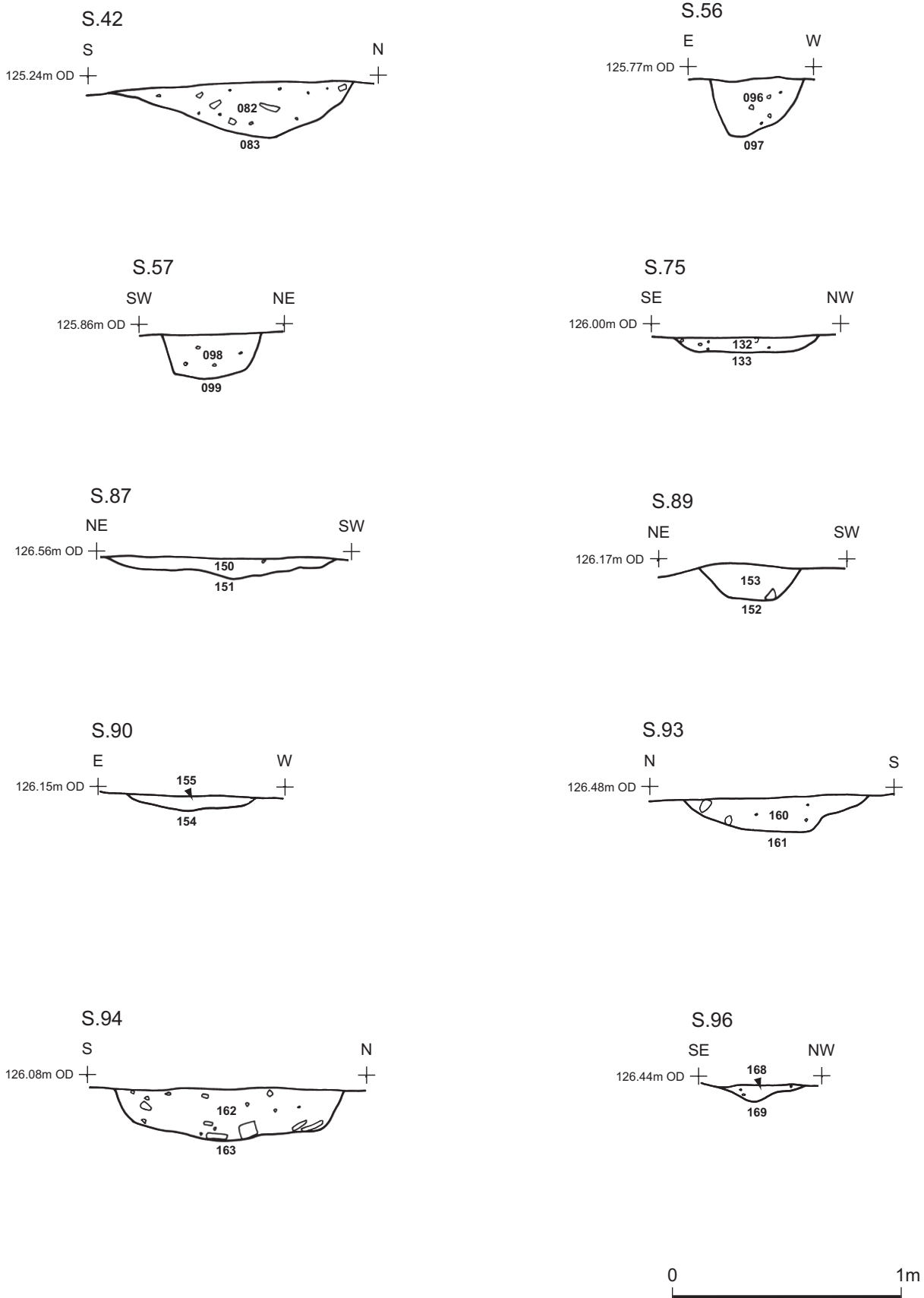


Fig. 10. Sections 42, 56, 57, 75, 87, 89, 90, 93, 94 and 96

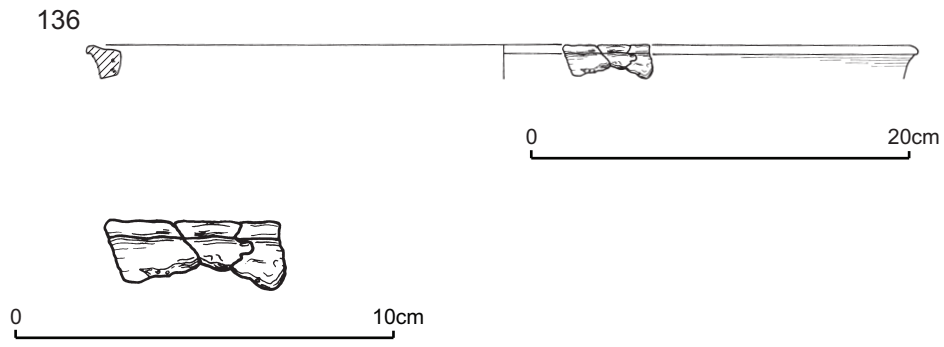


Fig. 11. Pottery rim fragment from context 136



Plate 1. Trench 2 showing ditches 037 and 041, looking north-east



Plate 2. Trench 21 showing feature 044 in foreground, looking south-east



Plate 3. Open area looking north-west showing Ditch 1 with Ditches 3 and 4 to the right



Plate 4. Excavation of Post-hole 125 looking north



Plate 5. Pit 163 looking south-west



Plate 6. Open area looking east with gullies 5 and 6 in foreground

Land off Butcher's Race Spennymoor, Co. Durham

Written Scheme of Investigation for an Archaeological Watching Brief (NW Corner) and Strip and Record Investigation (NE Corner)

1. Introduction

- 1.1 The proposed development area occupies a 13 hectare area of open pasture on the north-eastern fringe of Spennymoor (NGR NZ 42695 53455). The site is bounded to the east by the Green Lane Industrial Estate (accessed via Butcher's Race), to the south by residential housing off North Road, to the west by allotments off North Road and to the north by a cemetery and new housing off York Hill Road.

2. The Development

- 2.1 This document is prepared on behalf of the GMI Group to further fulfill the requirements of the planning condition for archaeological mitigation requested by Durham County Council's Culture & Leisure: Archaeology section, in advance of the construction of two new industrial units and associated car parks and access roads.

3. Archaeological Background

- 3.1 A desk-based assessment carried out in 2006 revealed that the site then had little known archaeological potential, although there was some evidence for medieval ridge and furrow earthworks and the site of a post medieval structure, revealed in early ordnance Survey mapping, in the southern part of the site (Northern Archaeological Associates 2006).
- 3.2 Subsequent geophysical survey work over a sample of the site identified a concentration of magnetic anomalies in the north-eastern part of the site and a scattering seven other anomalies across the rest of the surveyed area. The scattered features may be former pits, kilns, or hearths. The north-eastern group of anomalies form two coherent alignments of discrete features, three discrete features and a number of linear and curvilinear anomalies. Although these features remain undated their form and arrangement is typical of prehistoric pit alignments and later Iron Age and Romano-British settlement/field systems (Archaeological Services University of Durham 2006).
- 3.3 An evaluation by 28 trial trenches investigated the geophysical anomalies as well as all other areas of the site. Only in the north-eastern corner of the site did the trial trenches find archaeological features consistent with the anomalies mapped in the geophysical data, a small amount of pottery suggesting that these features were of later iron Age or Romano-British date. Elsewhere the geophysical anomalies were not upheld by the targeted trenching programme.

- 3.4 The non-targeted trenches generally revealed no evidence for archaeological activity, except for a number of linear features at the western margins of the site. These remain undated but are thought to correspond to field boundaries on earlier Ordnance Survey mapping (see Northern Archaeological Associates 2006).

4. *Aims and Objectives*

- 4.1 The aim of this mitigation work is to ascertain, through further stripping, the form, character date, depth and extent of the potential archaeological features and deposits in the north-west and north-east corners of the proposed development area.

5. *Methodology*

- 5.1 In the north-western corner of the site a Watching Brief will be carried out by an archaeologist during the topsoil stripping of the site in order to plot the course and sample the linear features discovered in Trial Trench 2 (see attached plan).
- 5.2 In the north-eastern corner of the site the developer has decided to preserve *in situ* as much as possible of this archaeology without unduly compromising the development. It is proposed therefore that a rectangular area, measuring 100m by 50m, running parallel to the northern boundary from footpath in the north-eastern corner, be excluded from development (see plan supplied separately by GMI). To the south of the excluded area part of the archaeologically sensitive north-eastern corner will be impacted upon to facilitate the cut and fill works and the construction of an access road. Consequently, it is proposed that a polygonal area, measuring about 0.5ha in area will be subject to an archaeological strip and record investigation. This area will extend from the southern ends of Trenches 23 and 24 and include the areas of Trenches 25, 26 and 27. The investigated area will be 100m long, approximately 75m wide along its eastern edge and 25m wide along its western edge (see plan supplied separately by GMI). The area will be topsoil stripped under archaeological supervision and the exposed archaeological features recorded and sample excavated.
- 5.3 All topsoil and/or modern deposits will be removed by mechanical means under archaeological supervision using a 360⁰ excavator equipped with a smooth ditching bucket. Machining will stop at the first identifiable archaeological horizon or natural, whichever is the shallower. Thereafter all further investigation will be manual. The stripped surface will be inspected for archaeological remains and where these require clarification the relevant area will be cleaned by hand.
- 5.4 All identified archaeological features will be accurately recorded in plan at scales of either 1:20 or 1:50 as appropriate. If excavated

feature sections will be drawn at scales of either 1:10 or 1:20 as appropriate. All plans and sections will include spot heights related to Ordnance Datum in metres.

- 5.5 Unless otherwise determined, all linear features will be subject to a manual sampling regime of 10% of their length within the designated area of investigation. An appropriate sample of each feature will be excavated, to its full depth. No section will be less than 1m in length. Where possible one section will be located and excavated adjacent to a trench edge and particular attention will be paid to terminal-ends, corners and intersections.
- 5.6 Discrete features, such as pits, post-holes, kilns, hearths and graves, to be subject to a 50% manual excavation.
- 5.7 A full written, drawn and photographic record will be made of all material revealed during the course of the excavation.
- 5.8 All artefacts recovered will be recorded and removed from the site for appropriate storage in controlled environments. All artefacts recovered will be retained, cleaned, labelled and stored as detailed in the guidelines laid out in the IFA Guidelines for Finds Work. Conservation, if required, will be undertaken by approved conservators. UKIC guidelines will also apply.
- 5.9 Context recording will be by Archaeological Services WYAS standard method. All contexts, and any small finds and samples from them will be given unique numbers. Bulk finds will be collected by context. Significant small finds will be recorded 3-dimensionally.
- 5.10 Colour digital and monochrome negative photographs will be taken at a minimum format of 35mm. Suitable digital images will be made to illustrate the 'Keys to the Past' website.
- 5.11 Soil sampling will be undertaken where there is clear potential for environmental analysis. Where appropriate and practicable soil samples of up to 30-40 litres will be taken from excavated contexts, and larger samples will be taken of any rich carbonised deposits. Particular attention will be paid to the sampling of primary ditch fills, large discrete features (e.g. refuse pits), structural and occupational evidence, skeletal remains and any surviving buried soils. The recovery of material suitable for radiocarbon and/or archaeomagnetic, determinations will be sought, as appropriate. If buried soils or other appropriate deposits are encountered, column samples may be taken for micromorphological and pollen analysis.
- 5.12 All human remains will be recorded on-site prior to removal and analysis by the project's assigned osteoarchaeologist. Disturbance of human remains will only take place under appropriate government and environmental health regulations, and in compliance with the Burial Act

1857 and the Disused Burial Grounds Act 1981. If human remains are identified the DCC Assistant Archaeology Officer will be informed immediately. A licence will be obtained from the Department of Constitutional Affairs prior to the commencement of any formal exhumation work. It is expected that evaluation works would normally record but not remove human remains.

5.13 All finds of gold and silver and associated objects shall be reported to HM Coroner according to the procedures relating to the Treasure Act 1996, after discussion with the landowner and the County Archaeologist.

5.14 Unless otherwise agreed with the developer, each trench will simply be reinstated with the excavated soil after excavation has been completed.

6. Analysis and Reporting

6.1 The site archive will contain all the data collected during the excavation, including records, finds and environmental samples. The archive will be quantified, ordered, indexed and internally consistent. Archive consolidation will be undertaken immediately following the conclusion of fieldwork:

- the site record will be checked, cross-referenced and indexed as necessary;
- all retained finds will be cleaned (and conserved as appropriate), marked and packaged in accordance with the requirements of the recipient museum (advice on conservation has been sought from Jennifer Jones at Durham University);
- all retained finds will be assessed and recorded using pro forma recording sheets;
- all retained environmental samples will be processed and recorded using pro forma recording sheets.

6.2 The archive will be assembled in general accordance with the specification set out in English Heritage's *Management of Archaeological Projects* (English Heritage 1991; Appendix 3). In addition to the site records, artefacts, ecofacts and other sample residues, the archive shall contain:

- site matrices where appropriate;
- a summary report synthesising the context record;
- a summary of the artefact record;
- a summary of the environment record.

6.3 Provision will be made for the deposition of the archive, artefacts and environmental material, subject to the permission of the relevant landowner (and if no further archaeological work is to be initiated), in the appropriate recipient museum. The museum will be advised of the timetable of the proposed investigation prior to excavation commencing. The archive will be prepared in accordance with the

guidelines published in "*Guidelines for the preparation of Excavation Archives for long-term storage*" (United Kingdom Institute for Conservation, 1990) and *Standards in the Museum care of archaeological collections* (Museums and Galleries Commission 1994). Provision will be made for the stable storage of paper records and their long-term storage.

- 6.4 Upon completion of the investigations, the artefacts, ecofacts and stratigraphic information shall be assessed as to their potential and significance for further analysis. All appropriate metalwork will be subject to x-ray analysis.
- 6.5 An interim report will be prepared within four weeks of completion of on-site archaeological investigations and include the following:
- a non-technical summary of the results of the work;
 - a summary of the project's background;
 - the site location;
 - an account of the method;
 - the results of the excavation, including phasing and interpretation of the site sequence and spot-dating of artefacts, if recovered;
 - an assessment of the stratigraphic and other written, drawn and photographic records;
 - a catalogue of the archaeological material recovered during the excavation
 - a summary of the contents of the project archive and its location.
- 6.6 The report will be produced within an agreed timetable. It will be supported by an overall plan of the site, accurately identifying the location of the trial excavations.
- 6.7 Copies of the report will be supplied to GMI Group and to the Durham County Council Assistant Archaeology Officer.
- 6.8 It is possible that the evaluation findings will warrant wider publication. This shall either be through Durham County Council's archaeology magazine or through publication with an appropriate archaeological journal.
- 6.9 Within 3 months of completion of the report an on-line OASIS form shall be completed.

7. Copyright, Confidentiality and Publicity

- 7.1 Unless the Client commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic record and reports will rest with the originating body (Archaeological Services WYAS).

- 7.2 The circumstances under which the report or records can be used by other parties will be identified at the commencement of the project, as will the proposals for the distribution of the report. Archaeological Services WYAS will respect any requirements regarding confidentiality, but will endeavour to emphasise the company's professional obligation to make the results of archaeological work known to the wider archaeological community within a reasonable time.

8. Health and Safety

- 8.1 Archaeological Services WYAS has its own Health and Safety policy which has been compiled using national guidelines such as SCAUM. These guidelines conform to all relevant Health and Safety legislation.
- 8.2 In addition each project undergoes a 'Risk Assessment' which sets project specific Health and Safety requirements to which all members of staff are made aware of prior to on-site work commencing.
- 8.3 Health and safety will take priority over archaeological matters. Necessary precautions will be taken over underground services and overhead lines at the outset of the project.

9. Insurance

- 9.1 Archaeological Services WYAS is covered by the insurance and indemnities of the City of Wakefield Metropolitan District Council. Insurance has been effected through: Zurich Municipal Insurance, Park House, 57–59 Well Street, Bradford, BD1 5SN (policy number RMP 03GO39–0143). Any further enquiries should be directed to: The Chief Financial Officer, Insurance Section, Wakefield MDC, PO Box 55, Newton Bar, Wakefield WF1 2TT.

10. Monitoring

- 10.1 The Durham County Council Assistant Archaeology Officer will be responsible for monitoring the project, acting on behalf of the local planning authority, and will be afforded the opportunity to inspect the site and the records at any stage of the work.

11. Resources and Programming

11.1 Project personnel:

Project Management:	I. Roberts BSc FSA MIFA
Project Surveyor	M. Pollington BA MA
Project Supervisors:	M. Rose BSc
	R. Szymanski BSc

Site Assistants	TBA
-----------------	-----

11.2 Specialists:

Prehistoric pottery specialists:	Blaise Vyner (Stokesley)
Roman pottery specialist:	Dr Ruth Leary (Nottingham)
Medieval pottery specialist:	Dr Chris Cumberpatch (Sheffield)
Flint specialist:	Dr I. Brooks (Blaenau Ffestiniog)
Environmental:	Dr Jane Richardson (ASWYAS)
Faunal analyst:	Dr Jane Richardson (ASWYAS)
Human bone specialist:	Malin Holst (York)
Metalwork specialist:	Dr Hilary Cool (Nottingham)
Conservator:	Jennifer Jones (Durham)
Radiocarbon dating:	SUERC (Glasgow) or Beta Analytic (Florida)
Archaeomagnetic dating:	Dr C. Batt (Bradford)

11.3 Project personnel may be subject to change.

Bibliography

Northern Archaeological Associates, 2006, 'Land at Merrington Lane and Green Lane Industrial Estates, Spennymoor, County Durham: Archaeological Desk-based Assessment', NAA 06/91

Archaeological Services University of Durham, 2006, 'Green Lane Industrial Estate, Spennymoor, County Durham: geophysical surveys', Report 1462

Land off Butcher's Race Spennymoor, Co. Durham

Written Scheme of Investigation for Archaeological Evaluation by Trial Trenching

1. *Introduction*

- 1.1 The proposed development area occupies a 13 hectare area of open pasture on the north-eastern fringe of Spennymoor (NGR NZ 42695 53455). The site is bounded to the east by the Green Lane Industrial Estate (accessed via Butcher's Race), to the south by residential housing off North Road, to the west by allotments off North Road and to the north by a cemetery and new housing off York Hill Road.

2. *The Development*

- 2.1 This document is prepared on behalf of the GMI Group to further fulfill the requirements of the planning condition for archaeological mitigation requested by the Local Planning Authority, following advice from Durham County Council's Culture & Leisure: Archaeology section, in advance of the construction of two new industrial units and associated car parks and access roads.

3. *Archaeological Background*

- 3.1 A desk-based assessment carried out in 2006 revealed that the site then had little known archaeological potential, although there was some evidence for medieval ridge and furrow earthworks and the site of a post medieval structure, revealed in early ordnance Survey mapping, in the southern part of the site (Northern Archaeological Associates 2006).
- 3.2 Subsequent geophysical survey work over a sample of the site has identified a concentration of magnetic anomalies in the north-eastern part of the site and a scattering seven other anomalies across the rest of the surveyed area. The scattered features may be former pits, kilns, or hearths. The north-eastern group of anomalies form two coherent alignments of discrete features, three discrete features and a number of linear and curvilinear anomalies. Although these features remain undated their form and arrangement is typical of prehistoric pit alignments and later Iron Age and Romano-British settlement/field systems (Archaeological Services University of Durham 2006).

4. *Aims and Objectives*

- 4.1 The site has the potential to address research aims expressed in the North East Regional Research Framework for the Iron Age and Romano-British periods, and those relating to later medieval and post-medieval agricultural practice.

- 4.2 The aim of this evaluation exercise is to ascertain, through trial excavation, the form, character date, depth and extent of the potential archaeological features and deposits within the proposed development area. Specifically this will involve the targeting of geophysical anomalies, as well as more general sampling in order to test for features invisible to, and the areas not covered by, the geophysical technique. The work will also aim to inform any necessary future mitigation, either in the form of preservation *in situ* or preservation by record (i.e. further excavation).

5. Evaluation Methodology

- 5.1 The evaluation will be effected through the excavation of a series of trenches, which at a minimum will constitute 2.3% by area of the whole development area (i.e. 3000m²). A further 2-3% of the site will be held as a contingency to be employed if the County Archaeologist requires clarification of the extent and nature of any archaeology revealed in the initial 2% sample.
- 5.2 The initial 2% sample will be disposed in 28 trenches (see Fig. 1). Across most of the site, where there are few specific targets, the trenches will generally measure 50m by 2m. In the north-east corner of the site, however, where the geophysical survey has revealed a number of potential archaeological features, the trenches will measure 4m in width and will, with one exception, be 25m in length. The trenches and their purposes are detailed in Table 1 below.
- 5.3 Excavations are not expected to be deep, but will nevertheless not exceed a depth of 1.2m without the trench edges being stepped or battered.
- 5.4 All topsoil and/or modern deposits will be removed by mechanical means under archaeological supervision using a 360° excavator equipped with a smooth ditching bucket. Machining will stop at the first identifiable archaeological horizon or natural, whichever is the shallower. Thereafter all further investigation will be manual. The stripped surface will be inspected for archaeological remains and where these require clarification the relevant area will be cleaned by hand.
- 5.5 All identified archaeological features will be accurately recorded in plan at scales of either 1:20 or 1:50 as appropriate. If excavated feature sections will be drawn at scales of either 1:10 or 1:20 as appropriate. All plans and sections will include spot heights related to Ordnance Datum in metres.

<i>No.</i>	<i>Orient.</i>	<i>Dims</i>	<i>Purpose</i>
1	N-S	50m x 2m	Investigate linear geophysical anomalies
2	E-W	50m x 2m	Investigate apparently blank area
3	N-S	50m x 2m	Investigate discrete and linear geophysical anomalies
4	E-W	50m x 2m	Investigate apparently blank area
5	E-W	50m x 2m	Investigate apparently blank area
6	N-S	50m x 2m	Investigate apparently blank area
7	E-W	50m x 2m	Investigate linear geophysical anomalies
8	E-W	50m x 2m	Investigate apparently blank area
9	E-W	50m x 2m	Investigate discrete geophysical anomaly
10	N-S	50m x 2m	Investigate apparently blank area
11	E-W	50m x 2m	Investigate apparently blank area
12	N-S	50m x 2m	Investigate apparently blank area
13	E-W	50m x 2m	Investigate apparently blank area
14	N-S	50m x 2m	Investigate apparently blank area
15	E-W	50m x 2m	Investigate discrete and linear geophysical anomalies
16	N-S	50m x 2m	Investigate discrete and linear geophysical anomalies
17	E-W	50m x 2m	Investigate discrete geophysical anomaly
18	E-W	100m x 2m	Investigate apparently blank area
19	E-W	50m x 2m	Investigate apparently blank area
20	N-S	25m x 4m	Establish westward continuation of pit alignment
21	NW-SE	50m x 4m	Investigate pit alignments and curvilinear feature
22	NE-SW	25m x 4m	Investigate large discrete linear curvilinear anomalies
23	NE-SW	25m x 4m	Investigate two discrete anomalies
24	N-S	25m x 4m	Investigate apparently blank area
25	E-W	25m x 4m	Investigate apparently blank area
26	N-S	25m x 4m	Investigate curvilinear and linear anomalies
27	NE-SW	25m x 4m	Investigate apparently blank area
28	E-W	25m x 4m	Investigate apparently blank area
	Total	3000m ²	

Table 1. Trench dimensions and rationale

- 5.6 Unless otherwise determined, all linear features will be subject to a manual sampling regime of 10% of their length within the designated area of investigation. An appropriate sample of each feature will be excavated, to its full depth. No section will be less than 1m in length. Where possible one section will be located and excavated adjacent to a trench edge and particular attention will be paid to terminal-ends, corners and intersections.
- 5.7 Discrete features, such as pits, post-holes, kilns, hearths and graves, to be subject to a 50% manual excavation.
- 5.8 A full written, drawn and photographic record will be made of all material revealed during the course of the excavation.
- 5.9 Blank trenches will be recorded on a 'Trench Sheet', which will detail the location and dimensions of the trench and note the nature and depth of the topsoil and subsoil layers. A photographic record will also be made.
- 5.10 All artefacts recovered will be recorded and removed from the site for appropriate storage in controlled environments. All artefacts recovered

will be retained, cleaned, labelled and stored as detailed in the guidelines laid out in the IFA Guidelines for Finds Work. Conservation, if required, will be undertaken by approved conservators. UKIC guidelines will also apply.

- 5.11 Context recording will be by Archaeological Services WYAS standard method. All contexts, and any small finds and samples from them will be given unique numbers. Bulk finds will be collected by context. Significant small finds will be recorded 3-dimensionally.
- 5.12 Colour digital and monochrome negative photographs will be taken at a minimum format of 35mm. Suitable digital images will be made to illustrate the 'Keys to the Past' website.
- 5.13 Soil sampling will be undertaken where there is clear potential for environmental analysis. Where appropriate and practicable soil samples of up to 30-40 litres will be taken from excavated contexts, and larger samples will be taken of any rich carbonised deposits. Particular attention will be paid to the sampling of primary ditch fills, large discrete features (e.g. refuse pits), structural and occupational evidence, skeletal remains and any surviving buried soils. The recovery of material suitable for radiocarbon and/or archaeomagnetic, determinations will be sought, as appropriate. If buried soils or other appropriate deposits are encountered, column samples may be taken for micromorphological and pollen analysis. **This strategy will be varied to accommodate comments from Jacqui Huntley who is not available until the 1st June.**
- 5.14 All human remains will be recorded on-site prior to removal and analysis by the project's assigned osteoarchaeologist. Disturbance of human remains will only take place under appropriate government and environmental health regulations, and in compliance with the Burial Act 1857 and the Disused Burial Grounds Act 1981. If human remains are identified the DCC Assistant Archaeology Officer will be informed immediately. A licence will be obtained from the Department of Constitutional Affairs prior to the commencement of any formal exhumation work. It is expected that evaluation works would normally record but not remove human remains.
- 5.15 All finds of gold and silver and associated objects shall be reported to HM Coroner according to the procedures relating to the Treasure Act 1996, after discussion with the landowner and the County Archaeologist.
- 5.16 Unless otherwise agreed with the developer, each trench will simply be reinstated with the excavated soil after excavation has been completed.

6. Analysis and Reporting

- 6.1 The site archive will contain all the data collected during the excavation, including records, finds and environmental samples. The archive will be quantified, ordered, indexed and internally consistent. Archive consolidation will be undertaken immediately following the conclusion of fieldwork:
- the site record will be checked, cross-referenced and indexed as necessary;
 - all retained finds will be cleaned (and conserved as appropriate), marked and packaged in accordance with the requirements of the recipient museum (advice on conservation has been sought from Jennifer Jones at Durham University);
 - all retained finds will be assessed and recorded using pro forma recording sheets;
 - all retained environmental samples will be processed and recorded using pro forma recording sheets.
- 6.2 The archive will be assembled in general accordance with the specification set out in English Heritage's *Management of Archaeological Projects* (English Heritage 1991; Appendix 3). In addition to the site records, artefacts, ecofacts and other sample residues, the archive shall contain:
- site matrices where appropriate;
 - a summary report synthesising the context record;
 - a summary of the artefact record;
 - a summary of the environment record.
- 6.3 Provision will be made for the deposition of the archive, artefacts and environmental material, subject to the permission of the relevant landowner (and if no further archaeological work is to be initiated), in the appropriate recipient museum. The museum will be advised of the timetable of the proposed investigation prior to excavation commencing. The archive will be prepared in accordance with the guidelines published in "*Guidelines for the preparation of Excavation Archives for long-term storage*" (United Kingdom Institute for Conservation, 1990) and *Standards in the Museum care of archaeological collections* (Museums and Galleries Commission 1994). Provision will be made for the stable storage of paper records and their long-term storage.
- 6.4 Upon completion of the investigations, the artefacts, ecofacts and stratigraphic information shall be assessed as to their potential and significance for further analysis. All appropriate metalwork will be subject to x-ray analysis.
- 6.5 An interim report will be prepared within four weeks of completion of on-site archaeological investigations and include the following:
- a non-technical summary of the results of the work;

- a summary of the project's background;
 - the site location;
 - an account of the method;
 - the results of the excavation, including preliminary phasing and spot-dating of artefacts, if recovered;
 - an assessment of the stratigraphic and other written, drawn and photographic records;
 - a catalogue of the archaeological material recovered during the excavation
 - a summary of the contents of the project archive and its location.
- 6.6 Notwithstanding the requirement for a further stage of work arising from the evaluation, the final report will be produced within an agreed timetable. It will include a detailed phasing of the site, drawing upon specialist reports of the artefacts and environmental data recovered, as well as any viable scientific dates. The final report will also include a discussion of the significance of the evidence, locally and regionally, and will be supported by detailed plans and section drawings at appropriate scales, photographs and fins illustrations.
- 6.7 Copies of the report will be supplied to GMI Group and to the Durham County Council Assistant Archaeology Officer.
- 6.8 It is possible that the evaluation findings will warrant wider publication. At a popular level this shall either be through Durham County Council's archaeology magazine, for which copy shall be provided by December of the year for inclusion. If academic publication is warranted this shall be through a local or national archaeological journal, depending upon the nature of the findings, as agreed with Durham County Council's archaeologist.
- 6.9 Within 3 months of completion of the report an on-line OASIS form shall be completed.

7. Copyright, Confidentiality and Publicity

- 7.1 Unless the Client commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic record and reports will rest with the originating body (Archaeological Services WYAS).
- 7.2 Archaeological Services WYAS will respect any requirements regarding confidentiality, but will endeavour to emphasise the company's professional obligation to make the results of archaeological work known to the wider archaeological community within a reasonable time. The possible use of the data for educational/promotional purposes by the DCCAS is accepted and permission would not be unreasonably withheld.

- 7.3 Copies of the report will be submitted to GMI Group, the Local Authority and the County Durham Sites and Monuments Record, who will also receive a digital copy of the report (PDF or Word document), along with a selection of digital images for educational and promotional use.

8. Health and Safety

- 8.1 Archaeological Services WYAS has its own Health and Safety policy which has been compiled using national guidelines such as SCAUM. These guidelines embrace the Health and Safety at Work Act 1974 and the Construction (Design and Management) Regulations 1994.
- 8.2 In addition each project undergoes a 'Risk Assessment' which sets project specific Health and Safety requirements to which all members of staff are made aware of prior to on-site work commencing.
- 8.3 Health and safety will take priority over archaeological matters. Necessary precautions will be taken over underground services and overhead lines at the outset of the project.

9. Insurance

- 9.1 Archaeological Services WYAS is covered by the insurance and indemnities of the City of Wakefield Metropolitan District Council. Insurance has been effected through: Zurich Municipal Insurance, Park House, 57–59 Well Street, Bradford, BD1 5SN (policy number RMP 03GO39–0143). Any further enquiries should be directed to: The Chief Financial Officer, Insurance Section, Wakefield MDC, PO Box 55, Newton Bar, Wakefield WF1 2TT.

10. Monitoring

- 10.1 The Durham County Council Assistant Archaeology Officer will be responsible for monitoring the project, acting on behalf of the local planning authority, and will be afforded the opportunity to inspect the site and the records at any stage of the work.

11. Resources and Programming

11.1 Project personnel:

Project Management:	I. Roberts BSc FSA MIFA
Project Surveyor	M. Pollington BA MA
Project Supervisors:	M. Rose BSc R. Szymanski BSc
Site Assistants	TBA

11.2 Specialists:

Prehistoric pottery specialists:	Blaise Vyner (Stokesley)
Roman pottery specialist:	Dr Ruth Leary (Nottingham)
Medieval pottery specialist:	Dr Chris Cumberpatch (Sheffield)
Flint specialist:	Dr I. Brooks (Blaenau Ffestiniog)
Environmental:	Dr Jane Richardson (ASWYAS)
Faunal analyst:	Dr Jane Richardson (ASWYAS)
Human bone specialist:	Malin Holst (York)
Metalwork specialist:	Dr Hilary Cool (Nottingham)
Conservator:	Jennifer Jones (Durham)
Radiocarbon dating:	SUERC (Glasgow) or Beta Analytic (Florida)
Archaeomagnetic dating:	Dr C. Batt (Bradford)

Project personnel may be subject to change

- 11.3 It is anticipated that the fieldwork will be completed within a four week period starting in early June. The post-excavation programme will be dictated by the level of archaeology encountered and the level of finds recovery and remains to be determined. An interim report will be produced within four weeks of the completion of the fieldwork programme.

Bibliography

Northern Archaeological Associates, 2006, 'Land at Merrington Lane and Green Lane Industrial Estates, Spennymoor, County Durham: Archaeological Desk-based Assessment', NAA 06/91

Archaeological Services University of Durham, 2006, 'Green Lane Industrial Estate, Spennymoor, County Durham: geophysical surveys', Report 1462

SPENNYMOOR STRATEGY BRIEFING

Trenches 9, 10, 11, 14 and 15 and parts of trenches 5,6,12 and 17 fall within a temporary exclusion zone for the protection of ground nesting birds.

The excluded area will be fenced off by GMI. The area will be reviewed periodically by ecologists from 'Middlemarch' who will advise GMI when the exclusion zone can be reduced/removed.

In the meantime IR will try and negotiate with Durham SMR for the slight relocation of trenches 5,6 12 and 17 to get them outside the exclusion zone.

Suggested Strategy

Although marked with blue paint, some of the trench pegs are difficult to locate. Some have been removed, although the blue paint on the ground was still visible last Wednesday. Some pegs have been removed entirely, although others have just been bent flat. It is important that we establish how many reference point are lost as early as possible. Equally we need to open up trenches that will maximise the use of the four staff on site.

It is suggested that trench stripping commences with Trench 27 whilst three people locate the remaining trench markers, first in the NE area and then over the rest of the site outside the exclusion zone. Trench pegs should be marked more visibly (large orange circle?). If any cannot be located inform Mitch and he will come and re-survey them in on Wednesday 13th June.

Once the NE trenches are open three staff can concentrate on dealing with the anticipated features whilst the remaining team member supervises the machine stripping the peripheral trenches.

All the available trenches should be stripped in the first week. If the ones outside the NE corner have little or no findings divert staff from the NE area to get them written off quickly.

The site still has public access. GMI will fence off the whole of the NE corner once the trenches are open and will fence individual trenches elsewhere on the site.

I. Roberts 8th June 2007

Bibliography

- Bidwell, P., 1997, *Roman Forts in Britain*
- British Geological Survey, 2001, Solid Geology Map, UK North Street, 4th edition, 1:625,000 Scale
- French, D. H., 1971, An Experiment in Water Sieving. *Anatolian Studies* 21 59-64.
- Haselgrove, C. C. and Allon, V. L., 1982 An Iron Age settlement at West House, Coxhoe, Durham, *Archaeol. Ael.*, ser 5, 10, 25-52
- Heslop, D. H., 1982, *The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, 1980-1982*, CBA Research Report, 65
- Hoopell, Rev. E., 1891, *Vinovia A Buried Roman City*
- Petts, D. and Gerrard, C., n.d., *Shared Visions. The North-East regional Research Framework for the Historic Environment*
- Schweingruber, F. H., 1990, *Anatomy of European Woods*. Paul Haupt Publishers Berne and Stuttgart.
- Soil Survey of England and Wales, 1983, Soils of Northern England Sheet 1 1:250,000
- Stace, C., 1997, *New Flora of the British Isles*. 2nd Edition
- Still, L. and Vyner, B. E., 1986, Air photographic evidence for later prehistoric settlement in the Tees valley, *Durham Archaeol. Journ.*, 2, 11-23
- Still, L., Vyner, B. and Bewley, R., 1989, A decade of air survey in Cleveland and the Tees valley hinterland and a strategy for air survey in County Durham, *Durham Archaeol. Journ.*, 5, 1-10
- Swain, H. P., 1987, 'The Pottery', in Heslop, D. H., *The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, 1980-1982*, CBA Research Report, 65, 57-72
- Tomber, R. and Dore, J., 1998, *The National Roman Fabric Reference Collection. A Handbook*.
- Zohary, D. and Hopf, M., 2000, *Domestication of Plants in the Old World*. 3rd Edition