ARCHAEOLOGY

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Northern Archaeological Associates

HEIGHINGTON LANE WEST INDUSTRIAL AREA

COUNTY DURHAM

ARCHAEOLOGICAL EVALUATION

FOR

DURHAM COUNTY COUNCIL

NAA 02/131

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HEIGHINGTON LANE WEST INDUSTRIAL AREA
COUNTY DURHAM

ARCHAEOLOGICAL EVALUATION

Summary

An archaeological evaluation was undertaken of the proposed Heighington Lane West Industrial Area site in order to determine the archaeological potential of the area. With the exception of the site of the former Whitworth Farm and some extant areas of ridge and furrow, no archaeological sites had previously been recorded within the area, however, the potential for previously unrecorded remains of Iron Age or Roman date was felt to be high.

Geophysical survey followed by a programme of targetted trial trenching identified two areas of Iron Age/Romano-British settlement within the area, lying east and west of the former farm. The site to the west comprised a D-shaped enclosure attached to a linear field boundary; that to the east, a series of roundhouses, pits and ditches all lying within a concentrated area, and potentially representing unenclosed settlement. Some field system elements appeared to link the sites and there is the potential that further remains may exist beneath the site of the later farm. The remains of the medieval ridge and furrow, east of the former farm, appeared to have had only a limited impact on the survival of the underlying archaeology. The small pottery assemblage recovered from the sampled features suggested that the sites dated to the later Iron-Age / 1st century AD. Both sites coincided with areas highlighted by the geophysical survey as likely to contain significant archaeological remains. The remainder of the trenches appeared to confirm the geophysical survey results which indicated that there were no significant remains lying in any other areas.

In accordance with national planning guidance (PPG16) and local plan policies, consideration should be given in the first instance to preserving archaeological remains in-situ. However on the basis of the existing evidence, neither site could be considered to be of national importance and if preservation was not a feasible option, development of the site should be acceptable subject to the implementation of an appropriate scheme of investigation.

1.0 INTRODUCTION

1.1 A series of fifteen evaluation trenches were excavated by Northern Archaeological Associates (NAA) on behalf of Durham County Council at Heighington Lane near Newton Aycliffe in the County of Durham to evaluate a proposed extension to the existing industrial estate. The evaluation was part of a phased programme of archaeological work and was undertaken during May - July 2002.

1.2 The proposed site is located east of Heighington and west of Aycliffe Village and lies approximately 2km from each (Figure 1). The site covers an area of some 60ha and comprises a parcel of fields on the south side of Heighington Lane (B6444), west of the Darlington to Bishop Auckland railway line.

1.3 With the exception of the former Whitworth Farm, no recorded archaeological sites were identified within the proposed development area in a desktop study undertaken by Babtie in 1995. However, Durham County Council Archaeology Section require evaluation in circumstances where large scale development is proposed for areas where no archaeological information is available or has been previously recorded. An initial evaluation was therefore undertaken comprising geophysical survey. The results of this survey are set out below and in the attached geophysical survey report (GSB 2002/41).

1.4 A site inspection was undertaken prior to the commencement of the evaluation. The fields were all improved pasture. Particularly well-preserved medieval ridge and furrow earthworks were noted to the east of the site of Whitworth farm (Figure 2). The ridges measured between 5m - 9m in width and stood c.0.4m high. Slight evidence of broad ridge and furrow was also noted in two fields at the north-west corner of the site, but the earthworks were very badly degraded. An EDM survey of the earthworks by Whitworth farm was undertaken during the evaluation.

2.0 GEOPHYSICAL SURVEY RESULTS

2.1 Gradiometer scanning was undertaken within all of the accessible fields, totalling some 50ha within the development area. The remaining areas could not be surveyed due to the presence of tree plantations, roads and tracks and a former munitions storage area. The site of Whitworth Farm was also excluded from the survey. Nine areas containing possible anomalies were identified by the scanning and subject to detailed gradiometer survey (Figure 3). Of these nine areas two appear to contain significant results, while most contained evidence of former ridge and furrow. The survey blocks immediately east of the former farm (D) and against the western boundary (B) contained evidence of linear and pit-type anomalies. Area B appeared to contain several ditches which may define part of a D-shaped enclosure with an attached field system. The area of substantial ridge and furrow earthworks east of the farm has produced evidence of a linear feature which pre-dated these earthworks and an associated area of 'exceptional' magnetic enhancement which was potentially archaeological in origin.

2.2 Survey Area A was located over a single scanned anomaly and identified several pit and ditch type anomalies which were potentially archaeological. The survey also identified evidence of ridge and furrow cultivation which matched the alignment of extant earthworks in the fields immediately to the north. The interpretation of the anomalies and other trends in this area was considered to be tentative. In Area B several scanned anomalies were identified and subsequent survey identified three pronounced ditch type features which appeared to define a D-shaped enclosure measuring approximately 45m by 90m. The enclosure lay close to the western site boundary and partly lay beneath an area of tree planting. Numerous pit type anomalies were also recorded, some of which appeared to be concentrated within the potential enclosure. (These features are shown in detail in Fig. 3 of the GSB report).

2.3 Survey Area C identified further evidence of ridge and furrow cultivation and a single ditch type feature which, because of its alignment, may be associated. An area of increased magnetic response was noted to the west of this ditch, which together with two pits, was thought to represent plough damaged archaeological deposits. In Survey Area D (which contains extant ridge and furrow) at least three ditch type features were identified which ran at a different angle from the ridge and furrow and must pre-date it. The most northerly ditch may be an extension of the ditch identified in Area B. To the south of this ditch was an area of exceptional magnetic enhancement which it was thought could represent redistributed archaeological deposits or medieval manuring.

2.4 Survey Areas E, F, G, H and I produced only occasional isolated pit like anomalies which might have an archaeological origin but otherwise contained only evidence of linear anomalies that coincided with the extant ridge and furrow earthworks.

3.0 METHODOLOGY

3.1 A series of 15 trenches were excavated across the proposed development site (Figure 3). The location of the trenches within the proposed development area was determined in order to sample the potential archaeological remains identified by the geophysical survey together with possible 'blank areas'. The number and position of the trenches was agreed with the Durham County Council Archaeological Officer prior to the commencement of works. All trenches were excavated by machine under constant archaeological supervision until archaeological features or natural deposits were exposed. Those trenches in which significant concentrations of archaeological features were identified were extended in order to investigate their nature and extent (trenches 6 and 7). In these instances a distinct subsoil horizon (0.20m-0.40m thick) was found to seal the Iron-Age/Romano-British features. Where no archaeological features were identified an additional sondage through the natural deposits was undertaken to confirm that this was indeed so. The total area excavated amounted to some 1,372m^2.

3.2 Trenches were located with an EDM on the basis of the geophysical survey and tied into Ordnance Datum. All archaeological features were photographed and recorded by means of both plans and sections and written descriptions.

3.3 A sample of exposed features and deposits considered to be of archaeological significance were excavated by hand in a stratigraphically controlled manner in order to fulfil the aims of the evaluation. It was not considered necessary to completely excavate those features selected for intensive examination, although a sufficient sample was excavated in order to fully understand the stratigraphic sequence in each down to natural subsoil.

3.4 Ground conditions were exceptionally dry during the evaluation, such that there was very little colour differentiation between archaeological feature fills and natural subsoil when trenches were first machined.

4.0 RESULTS OF EXCAVATION

4.1 The results of the investigation of each trench are summarised below. Context numbers are only provided for the principal features or those trenches where illustrations are provided (Trenches 6, 7, 9, 10, 13, 15). A summary table of context descriptions and finds is included as Appendix 1. The pottery and environmental sample assessments are included as Appendix 2 and 3 respectively.

4.2 **Trenches 1 - 3**
These trenches measured 25m by 2m and were located to evaluate areas which appeared to be 'blank' on the basis of the results of the gradiometer scanning. The trenches lay towards the northern and eastern sides of the site. The trenches were excavated to a depth of between 0.30 - 0.32m into the top of natural subsoil. This comprised an orange-brown clay with frequent sandstone pebbles up to 50mm in size. No archaeological features or finds were recorded in these trenches.

4.3 **Trenches 4 - 5**
These trenches measured 25m by 2m and were located to evaluate potential anomalies in geophysical survey areas G and I respectively. The trenches were excavated to a depth of between 0.35 - 0.40m into the top of natural subsoil. This comprised an orange-brown clay with frequent sandstone pebbles up to 50mm in size. No archaeological features or finds were recorded in these trenches.

4.4 **Trench 6 (Figure 4)**
Trench 6 was located in the south-west part of geophysical survey area D to evaluate an intermittent ditch type anomaly orientated east-west. The trench initially measured 25m by 2m but was widened and extended to demonstrate the form and complexity of archaeological features surviving below the ridge and furrow earthworks. The finished trench was roughly L-shaped in plan and measured 26.5m by 5.5m and 12.5m by 6.5m. Three broad ditches [617], [625], and [629], orientated north-south were identified within the trench, one of which coincided with ditch 703 in trench 7. These ditches measured between 2.0m - 4.4m in width

[635]?

and at least 0.2m in depth. A series of intercutting linear and curvilinear gullies [615], [619], [621], [623], [627], [633], and [635] were also identified on an east west alignment but their relationship with the three ditches could not be established due to the homogeneity of their fills (grey-brown clayey silt). Two sherds of Iron Age pottery were recovered from the fill [622] of a curvilinear ditch [621]. This ditch had a shallow V-shaped profile and measured *c.*1.28m in width and a maximum of 0.64m in depth. Two ring-gullies, [611] and [613], representing probable roundhouses were identified at the eastern end of the trench. These measured approximately 8m and 10m in diameter respectively and appeared to enclose two possible hearth type features [607], [609] and the remains of two post-holes [603] and [605]. All archaeological features recorded in trench 6 were overlain by pronounced ridge and furrow earthworks.

4.6 **Trench 7 (Figure 4)**

This trench was roughly L-shaped in plan and measured 20m by 4m by 10m by 10m (the latter being an extension to the planned trench). It was located towards the northern side of geophysical survey area D to evaluate the junction of two ditch type anomalies. A ditch [703], orientated north-south on alignment with the geophysical trend, was identified within the trench. It measured 1.4m wide and 0.45m deep and had a U-shaped profile. It appeared to terminate prior to its junction with a second ditch [707] which was orientated east-west. Ditch 707 was also on the same alignment as a second geophysical anomaly and measured 2.2m wide and 0.4m deep. The ditch had a shallow U-shaped profile and was cut at one point by a large sub-circular medieval pit [709] which contained 14th century Tees Valley ware. A series of gullies (714, 716 and 718) were also identified within the trench, but it was not possible to establish the relationships of these features due to the homogeneity of their fills (grey-brown silty clays). With the exception of pit 709, all of the above features were truncated by a medieval furrow. All were considered to be late Iron Age in date although no diagnostic finds were recovered from their fills.

4.7 **Trench 8**

This trench measured 25m by 2m and was located to evaluate a potential anomaly in geophysical area C. The trench was excavated to a depth of 0.32m into the top of a natural stoney-clay subsoil (as recorded above). No archaeological features or remains were recorded in this trench.

4.8 **Trench 9 (Figure 5)**

This trench was T-shaped in plan and measured 40m by 4m by 25m by 4m. The trench varied in depth between 0.35 - 0.6m which reflected the increased depth of colluvial material on the slope towards northern end of the trench. It was located to to bisect the D-shaped enclosure identified in geophysical area B. A ditch [922/928], orientated east-west was identified on the same alignment as the anomaly forming the north side of the enclosure. This ditch which measured over 3m in width, appeared to have been recut by a later ditch [915] on the same alignment. The recut ditch had steep sides and a flat bottom and measured 2.1m in width and 0.96m in depth. A single sherd of Iron Age style pottery was recovered from the fill of the recut. A second ditch [918], orientated north south, was identified at the eastern end of the trench which coincided with an anomaly forming the eastern side

of the D-shaped enclosure. This ditch had a shallow U-shaped profile and measured 2.5m in width and 0.68m in depth. A series of five post-holes [904], [906], [908], [910], and [911] were also identified at the western end of the trench which coincided with a series of discrete geophysical anomalies. A stone with a socket hole was recovered from post-hole 908 where it had been re-used as post-packing material. Given the form of the geophysical anomalies and the number of post-holes identified it was thought likely that these features represented the part of the structural remains of a large roundhouse in the centre of the enclosure.

4.9 **Trench 10 (Figure 5)**
This trench measured approximately 5m by 5m and was located to examine the junction between the D-shaped enclosure and the field system identified to the east in geophysical area B. The junction was identified on the western side of the trench. However both the north-south ditch and the east-west ditch had been recut and the primary relationship was not clear. The eastern enclosure ditch, equivalent to ditch [918] in trench 9, had been cut at least three times [1002], [1004], [1014]. A minimum of four separate recuts of the northern enclosure ditch were identified, [1012], 1016], [1018], [1020]. The eastern side of the junction between the enclosure ditches was also cut by a large oval pit [1028] which measured 2.88m by 1.80m by 0.37m deep and which had itself been recut several times [1025 and 1010]. Pit 1028 also cut two post-holes [1030 and 1032].

4.10 **Trenches 11 - 12**
These trenches measured 25m by 2m and were located to evaluate potential anomalies in geophysical area A. The trenches were excavated to a depth of 0.30 - 0.35m into the top of a natural stoney-clay subsoil (as recorded above). No archaeological features or remains were recorded in these trenches.

4.11 **Trench 13 (Figure 6)**
This trench measured approximately 25m by 2m and was located to examine an east-west linear anomaly to the east of the D-shaped enclosure in geophysical area B. A ditch [1302], orientated east-west on the same alignment as the geophysical anomaly, was identified within the trench measuring some 2.5m in width. Ditch [1302] was on the same alignment as the east-west ditches identified in trenches 9 and 10 and was probably part of the same field boundary.

4.12 **Trench 14**
This trench measured 25m by 2m and was located to evaluate a possible anomaly at the southern edge of geophysical area B. The trench was excavated to a depth of 0.46m into the top of a natural stoney-clay subsoil (as recorded above). No archaeological features or remains were recorded in this trench.

4.13 **Trench 15 (Figure 6)**
This trench measured approximately 30m by 2m and was located to evaluate the potential eastern extent of the archaeology within geophysical survey area D. Two ditches [1503] and [1507] orientated north-south were identified within the trench. A possible post-hole [1505] was identified to the west of ditch [1507] but no other

features were recorded to the east of this ditch. All archaeological features recorded in trench 15 were overlain by medieval ridge and furrow cultivation.

5.0 FINDS AND SAMPLE ASSESMENTS

5.1 Three sherds of later prehistoric pottery and two sherds of medieval pottery were submitted to B. Vyner for assessment. The small amount of pottery is sufficient to indicate a pre-Roman Iron Age date for at least some of the features excavated at this site and it may be that the majority of linear features belong to this chronological horizon. The assemblage is very limited by comparison with those from other settlement enclosures in the Tees valley and it may be that the D-shaped enclosure - a relatively unusual feature of this area - had a non-domestic function. Two small pieces of 14th century Tees Valley Ware pottery occurred in a large pit truncated by ridge and furrow earthworks east of Whitworth Farm.

5.2 An irregular cobble containing a tapered socket was recovered from the fill of a post hole (context 908) within the D-shaped enclosure in Area B. The stone had been re-used as post-packing but must originally have formed an earthfast pivot for a door.

5.3 Eighteen sediment samples recovered from excavations were submitted to PRS for an evaluation of their bioarchaeological potential. Subsamples from six of the samples were processed and each yielded large residues of sand and gravel, usually with no other components. Ancient plant remains in the small or very small washovers were confined to small amounts of charred material (mostly wood charcoal). Amongst the charred remains were small amounts of a number of components currently thought to represent material from the burning of heathland/grassland turves. The potential of these deposits for addressing questions concerning the economy and environment of the site is extremely limited given the very low concentrations of charred material. However, the consistent presence of small amounts of charred material that seems likely to have originated in burnt turves adds usefully to the growing number of records for such remains. No animal remains were recovered from the samples.

6.0 DISCUSSION

6.1 Geophysical survey followed by a programme of targetted trial trenching has identified two areas of Iron Age settlement within the proposed development area, lying east and west of the former Whitworth Farm. The site to the west comprised a D-shaped enclosure measuring some 90m by 45m, which was attached to a linear field boundary that ran eastwards for several hundred metres. The western side of the enclosure runs partly beneath an area of tree planting on the western site boundary. A series of postholes identified towards the centre of the enclosure may reflect the position of a possible roundhouse. No other internal features were identified, but several ditch recuts were identified which would imply several phases of re-use. The second settlement site, to the east of the farm, is potentially larger than the D-shaped enclosure site and may represent an area of unenclosed settlement. A dense concentration of features was identified which coincided with an area of magnetic enhancement identified by the geophysical survey. The trenches

within this area identified a series of possible roundhouses, pits, hearths and ditches all lying within a concentrated area. The features lay to the south of a large ditch which appeared to be part of the same field system associated with the D-shaped enclosure.

6.2 The artefactual and environmental assemblages recovered by the evaluation were very small. This may partly have been a product of the degree of truncation and the lack of surfaces, but was also partly because where trenches were extended to expose structural features, it was considered sufficient to record these in plan (with the agreement of the County Archaeologist). The paucity of pottery recovered may also be a function of the date of the settlements, as Iron Age sites often do not produce substantial assemblages and the lack of any Roman material would suggest that the sites pre-date the 2nd century AD. The environmental samples produced no evidence of cereal cultivation or processing but the identification of turf as a fuel source points to the exploitation of heathland/grassland. The bioarchaeological samples suggest that sufficient carbonised material could be obtained which would be suitable for radiocarbon dating. The complete absence of animal bone is probably due to the acidic nature of the soils.

6.3 The remainder of the trenches appeared to confirm the geophysical survey results which indicated that there were no significant remains lying in any other areas. Some field system elements appear to link the sites and there is the potential that further remains may exist beneath the site of the later farm. The remains of the medieval ridge and furrow, which are upstanding to the east of the farm site, appear to have had only a limited impact on the underlying archaeology.

6.4 On the basis of the results of the evaluation both Iron Age sites are certainly sites of regional importance. Few sites of this period have been identified from aerial photography on the boulder clay lands north of Darlington and the River Tees to date and consequently few sites are known. However, evaluation of large development sites at Faverdale (Darlington) and now at Newton Aycliffe are identifying previously unrecorded sites which suggests that this picture has more to do with the visibility of such sites rather than any real distribution.

6.5 In accordance with national planning guidance (PPG16) and local plan policies, consideration should be given in the first instance to preserving archaeological remains in-situ. However, on the basis of the existing evidence, neither site could be considered to be of national importance and if preservation was not a feasible option, development of the site should be acceptable subject to the implementation of an appropriate scheme of investigation.

REFERENCES

GSB Prospection (1999b) *Heighington Lane (West) Industrial Area* GSB Report No. 2002/41

NAA (2002) *Heighington Lane (West) Industrial Area, Project Design* Report No. 02/54

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Text: Alan Rae
Illustrations: Andy Durkin
Edited by: Richard Fraser

Appendix 1: Context and finds index

Context	Trench	Description	Ceramic	Clay pipe	Pottery	Sample	Slag	Stone
100	1	layer (topsoil)						
101	1	layer (subsoil)						
102	1	natural deposit						
200	2	layer (topsoil)						
201	2	layer (subsoil)						
202	2	natural deposit						
300	3	layer (topsoil)						
301	3	layer (subsoil)						
302	3	natural deposit						
400	4	layer (topsoil)						
401	4	layer (subsoil)						
402	4	natural deposit						
500	5	layer (topsoil)						
501	5	layer (subsoil)						
502	5	natural deposit						
600	6	layer (topsoil)						
602	6	layer (subsoil)						
603	6	post-hole cut						
604	6	fill of post-hole 603						
605	6	post-hole cut						
606	6	fill of post-hole 605						
607	6	hearth cut						
608	6	fill of hearth 607						
609	6	hearth cut						
610	6	fill of hearth 609						
611	6	ring-gully cut						
612	6	fill of ring-gully 611						
613	6	curvilinear cut						
614	6	fill of curvilinear 613						
615	6	curvilinear cut						
616	6	fill of curvilinear 615						
617	6	ditch cut						
618	6	fill of ditch 617						
619	6	ditch cut						
620	6	fill of ditch 619						
621	6	curvilinear cut						
622	6	fill of curvilinear 621			2	2		
623	6	curvilinear cut						
624	6	fill of curvilinear 623				1		
625	6	ditch cut						
626	6	fill of ditch 625				2		
627	6	ditch cut						
628	6	fill of ditch 627						
629	6	ditch cut						
630	6	fill of ditch 629						

631	6	natural deposit						
632	6	void						
633	6	curvilinear cut						
634	6	fill of curvilinear 633				1		
635	6	ditch cut						
636	6	fill of ditch 635				1		
700	7	layer (topsoil)						
701	7	upper fill of ditch 703						
702	7	primary fill of ditch 703				2		
703	7	ditch cut						
704	7	fill of possible pit 705				1		
705	7	possible pit cut						
706	7	fill of ditch 707				2		
707	7	ditch cut						
708	7	fill of pit 709			2	2 (not sent)		
709	7	pit cut						
710	7	void						
711	7	void						
712	7	fill of pit 709						
713	7	fill of gully 714						
714	7	gully cut						
715	7	fill of gully 716						
716	7	gully cut						
717	7	fill of gully 718						
718	7	gully cut						
719	7	natural deposit						
720	7	plough furrow cut						
721	7	fill of plough furrow 720						
800	8	layer (topsoil)						
801	8	layer (subsoil)						
802	8	natural deposit						
900	9	layer (topsoil)						
901	9	layer (subsoil)						
902	9	void						
903	9	void						
904	9	post-hole cut						
905	9	fill of post-hole 904				1 (not sent)		
906	9	post-hole cut						
907	9	fill of post-hole 906				1		
908	9	cut for post-hole						
909	9	fill of post-hole 908				1 (not sent)		1
910	9	post-hole cut						
911	9	fill of post-hole 910				1		
912	9	post-hole cut						
913	9	fill of post-hole 912				1		

914	9	natural deposit						
915	9	ditch cut						
916	9	upper fill of ditch 915			1	2		
917	9	secondary fill of ditch 915						
918	9	ditch cut						
919	9	upper fill of 918				2		
920	9	primary fill of ditch 918						
921	9	void						
922	9	ditch cut						
923	9	upper fill of 922						
924	9	tertiary fill of ditch 915						
925	9	primary fill of ditch 915						
926	9	void						
927	9	void						
928	9	ditch cut						
929	9	upper fill of 928						
930	9	primary fill of ditch 928						
931	9	primary fill of ditch 922						
1000	10	layer (topsoil)	9	1	2		3	
1001	10	layer (subsoil)			6			
1002	10	ditch cut						
1003	10	fill of ditch 1002						
1004	10	ditch cut						
1005	10	fill of ditch 1004						
1006	10	ditch cut						
1007	10	fill of ditch 1006				1		
1008	10	ditch cut						
1009	10	fill of ditch 1008						
1010	10	pit cut						
1011	10	fill of pit 1010						
1012	10	ditch terminus cut						
1013	10	fill of ditch terminus 1012				1		
1014	10	post-hole cut						
1015	10	fill of post-hole 1014						
1016	10	ditch cut						
1017	10	fill of ditch 1016				1		
1018	10	gully cut						
1019	10	fill of gully 1018						
1020	10	post-hole cut						
1021	10	fill of post-hole 1020						
1022	10	pit cut						

1023	10	fill of pit 1022				1		
1024	10	pit cut						
1025	10	fill of pit 1024				1		
1026	10	ditch cut						
1027	10	fill of pit 1026						
1028	10	pit cut						
1029	10	fill of pit 1028						
1030	10	post-hole cut						
1031	10	fill of post-hole 1030						
1032	10	post-hole cut						
1033	10	fill of post-hole 1032						
1034	10	pit cut						
1035	10	fill of pit 1034						
1036	10	natural deposit						
1100	11	layer (topsoil)						
1101	11	layer (subsoil)						
1102	11	natural deposit						
1200	12	layer (topsoil)						
1201	12	layer (subsoil)						
1202	12	natural deposit						
1300	13	layer (topsoil)						
1301	13	layer (subsoil)						
1302	13	ditch cut						
1303	13	fill of ditch 1302						
1304	13	natural deposit						
1400	14	layer (topsoil)						
1401	14	layer (subsoil)						
1402	14	natural deposit						
1500	15	layer (topsoil)						
1501	15	layer (subsoil)						
1502	15	natural deposit						
1503	15	ditch cut						
1504	15	fill of ditch 1503						
1505	15	post-hole cut						
1506	15	fill of post-hole 1505						
1507	15	ditch cut						
1508	15	fill of ditch 1507						
1509	15	field drain cut						
1520	15	fill of field drain 1509						
Total			**9**	**1**	**13**	**24**	**3**	**1**

Appendix 2: Pottery Assessment

Blaise Vyner

A small amount of pottery is sufficient to indicate a pre-Roman Iron Age date for at least some of the features excavated at this site, and it may be that the majority of linear features belong to this chronological horizon. The assemblage is very limited by comparison with those from other settlement enclosures in the Tees valley and it may be that the D-shaped enclosure - a relatively unusual feature of this area - had a non-domestic function. Other material present includes a small quantity of slag which may also be early in date, and two small pieces of medieval pottery.

Treatment
In the fabric descriptions provided 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 (<3mm), medium (3 to 6 mm) and large (6 to 9 mm). 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: few (2) and many (3 to 4). No thin section analysis has been done and identification has been using a 10x lens.

Pre-Roman Iron Age or native Romano-British pottery
Body sherd from a medium-sized jar, exterior surface brown-grey, interior surface and fabric dark grey, occasional small and medium-sized angular sedimentary quartz grits, with many clear quartz sands, wall thickness 10 mm, wt 25 g. HLWO2 622

Sherd from base of wall of a medium-sized jar, exterior surface grey-brown, interior surface and fabric dark grey, occasional medium-sized and large milky quartz chunks, quartz dust in the clay matrix but otherwise with little tempering so that the fabric is smooth to the touch, wall thickness perhaps 10 mm, wt 25 g. A clear small fingerprint on the exterior suggests that the potter may have been female. HLW02 622

Abraded ceramic fragment, originally with orange-grey surfaces, grey fabric containing quartz dust, with a few mixed igneous grits visible. HLWO2 916

The fabrics present are also represented at Newby, south of the River Tees, and in other assemblages in the Tees valley, although the use of milky quartz chunks is less common and probably expedient. Given the small quantity of pottery present, the absence of Romano-British material may not be significant. A later Iron Age date is probable.

Medieval pottery
Two small sherds from a thin-walled jug, exterior olive green glaze over an orange fabric. Numerous small mixed sands are present in the fabric. Probably Tees Valley Ware, *c.*14th century. HLW7O8

Environmental Sample Assessment

Allan Hall & John Carrott

Eighteen of the recovered sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) were submitted to PRS for an evaluation of their bioarchaeological potential. All of the deposits considered in this report were provisionally dated (from the small pottery assemblage recovered) as later Iron Age (probably pre-1st century AD).

Methods

All eighteen of the submitted sediment samples were inspected in the laboratory. Six were selected for evaluation and their lithologies were recorded, using a standard pro forma, prior to processing, following the procedures of Kenward et al. (1980; 1986), for recovery of plant and invertebrate macrofossils.

The washovers resulting from processing were dried and examined for plant and invertebrate macrofossils. The residues were also dried prior to being scanned for larger plant macrofossils, bone, and other biological and artefactual remains.

Results

The results of the examinations are presented in Table 1. Archaeological information, provided by the excavator, is given in the row titled 'Context type' in the table. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment is also included. Sample numbers were derived from the context numbers by PRS for internal record keeping purposes.

The sediment descriptions for each of the samples were almost identical: Just moist, mid to mid-dark grey-brown (with an orange-brown cast in places), brittle to crumbly (working soft and sticky when wetted), ?slightly sandy clay silt (to silty clay). Stones (2 to 60 mm) and modern rootlets were present. Flecks, and occasionally larger pieces, of charcoal were apparent in most of the samples, and coal was noted in the sample from Context 702.

All the subsamples processed yielded large residues of sand and gravel, usually with no other components. Plant remains in the small or very small washovers were confined to small amounts of charred material (mostly wood charcoal), with a very few uncharred seeds and some roots (all thought to be of recent origin) and a little coal (no doubt from the local drift).

No animal remains were recovered from the samples.

Discussion and statement of potential

Amongst the charred plant remains were small amounts of a number of components currently thought likely to represent material from the burning of heathland/grassland turves (cf. Hall forthcoming). These were small fragments of both aerial and subterranean herbaceous plant material and tentatively identified basal twig/root fragments of heather, a group recorded frequently from (mainly late) prehistoric and early historic occupation sites in the north-east of England (the single charred sedge nutlet may belong with them, too). A single unidentified charred wheat grain was recorded from one context (702) and there were a very few weed seeds; no remains of chaff were noted.

Table 1. Plant remains and other components of the residues and washovers from Heighington Lane (HLW02). Abundance is recorded on a four-point scale from + (one or a few remains or a trace) to ++++ (abundant remains or a major component). Figures in parentheses indicate actual numbers of remains observed; numbers in square brackets indicate the maximum size (in mm) of the largest specimens.

Trench	**6**	**7**	**7**	**9**	**10**	**10**
Context	**626**	**702**	**706**	**916**	**1007**	**1025**
Context type	fill of ditch 625	primary fill of ditch 703	fill of ditch 707	upper fill of ditch 915	fill of ditch 1006	fill of pit 1025
Sample	62601	70201	70601	91601	100701	102501
Subsample weight (kg)	3	3	3	3	3	3
Processing summary	sieved to 300 microns with washover	sieved to 300 microns with washover	sieved to 300 microns with washover	sieved to 300 microns with washover	sieved to 300 microns with washover	sieved to 300 microns with washover
unprocessed sediment remaining (litres)	17	15	15	14	4	5
Residue volume (ml)	300	350	300	250	300	225
Washover volume (ml)	<10	<10	<10	<10	<10	~30
Charred plant remains						
cf. *Calluna vulgaris* (L.) Hull (heather/ling: root/basal twig fragments)		+[2]	+[5]	+[5]	+[5]	
Carex sp(p). (sedge: nutlet)						+(1)
Galium aparine L. (goosegrass: fruit)			+(1)			
Polygonum persicaria L. (persicaria: nutlet)					+(1)	
Triticum sp(p). (wheat: caryopsis)		+(1)				
unidentified herbaceous stem material (probably grass/rush)			+[3]	+[3]		+[5]
unidentified herbaceous root/rhizome material	+[2]		+[5]	+[2]	+[5]	+[5]
Uncharred plant remains (probably modern)						
Atriplex sp(p).		+		+		
Fumaria sp(p).				+		
root/rootlet fragments						
Other components						
charcoal	+[5]	+[10]	+[10]	+[5]	+[10]	+[10]
coal	+[2]	+[5]	+[5]	+[5]		+[2]
gravel	++[25]	+++[40]	+[30]	+++[55]	++[25]	++[30]
sand	+++	+++	+++	++	+++	+++
?mor humus						+[5]
undisaggregated sediment			++[5]			

The potential of these deposits for addressing questions concerning the economy and environment of the site is extremely limited given the very low concentrations of charred material. However, the consistent presence of small amounts of charred material that seems

likely to have originated in burnt turves adds usefully to the growing number of records for such remains.

Recommendations
No further work on the samples investigated here can be justified, but subsamples from other sampled primary contexts not as yet examined should be processed to explore the distribution of the 'turf' component through different kinds of deposits. Given the low concentrations of the remains recovered from the deposits examined so far, larger subsamples of 5 kg to 10 kg should be processed.

Any further excavation at the site should be accompanied by sampling of primary contexts (especially where charred plant remains can be detected in the field).

Retention and disposal
All of the current material should be retained for the present.

Archive
All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

Acknowledgements
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Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* **22**, 3-15.

Kenward, H. K., Engleman, C., Robertson, A. and Large, F. (1986). Rapid scanning of urban archaeological deposits for insect remains. *Circaea* **3,** 163–172.

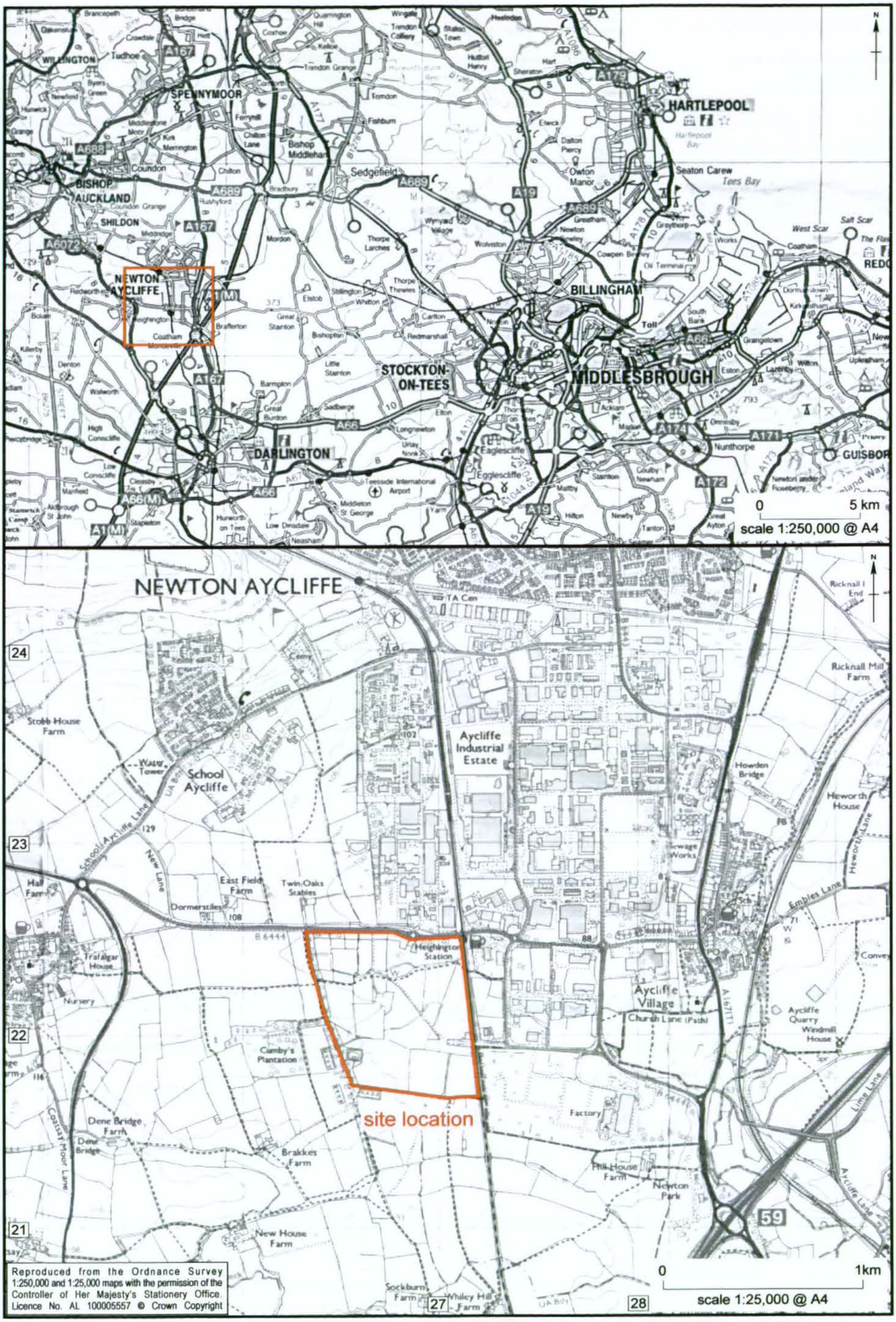

Figure 1 Heighington Lane West Industrial Area: site location

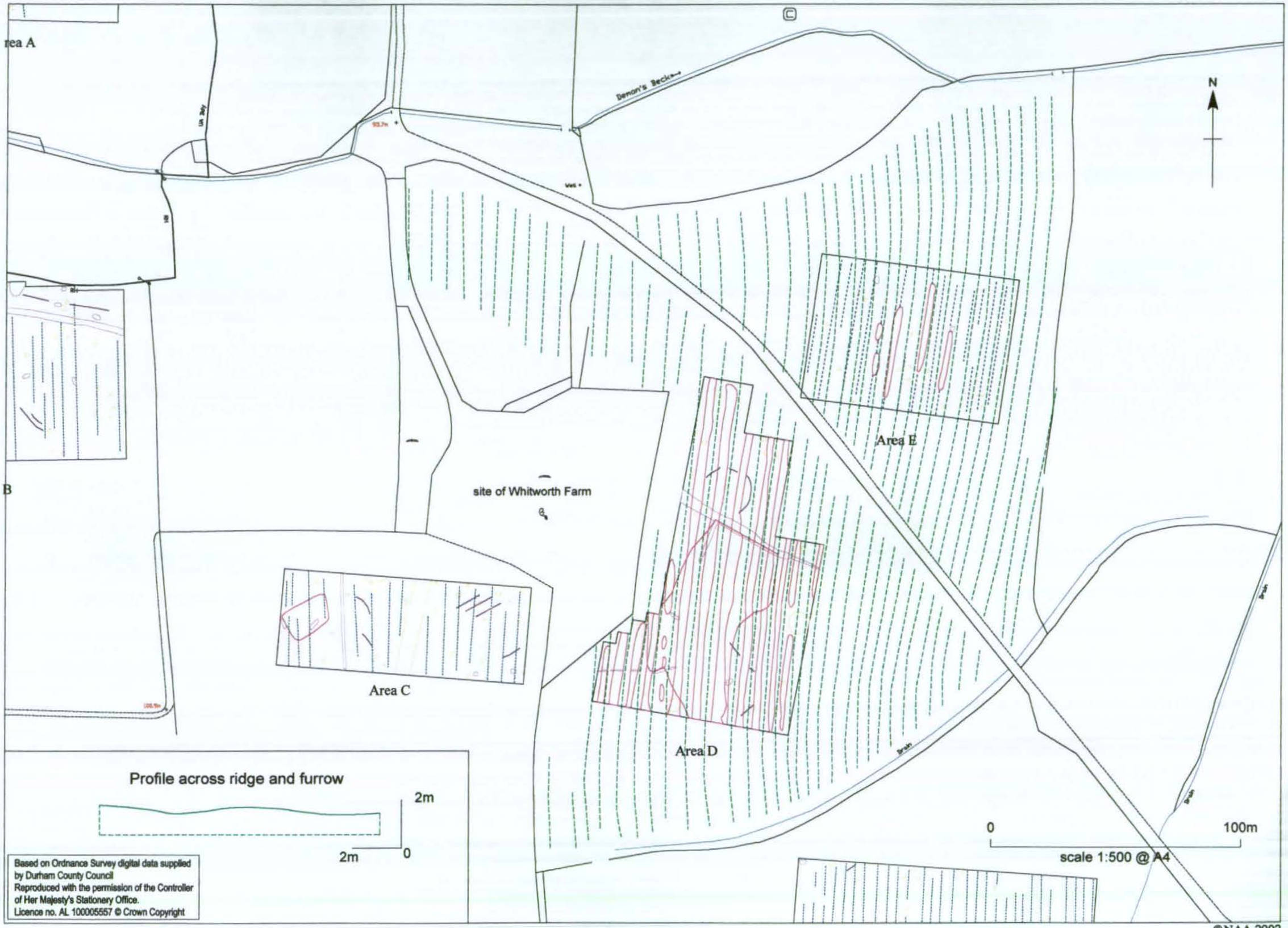

Figure 2 Heighington Lane: surveyed ridge and furrow in relation to geophysical survey results (after GSB Prospection)

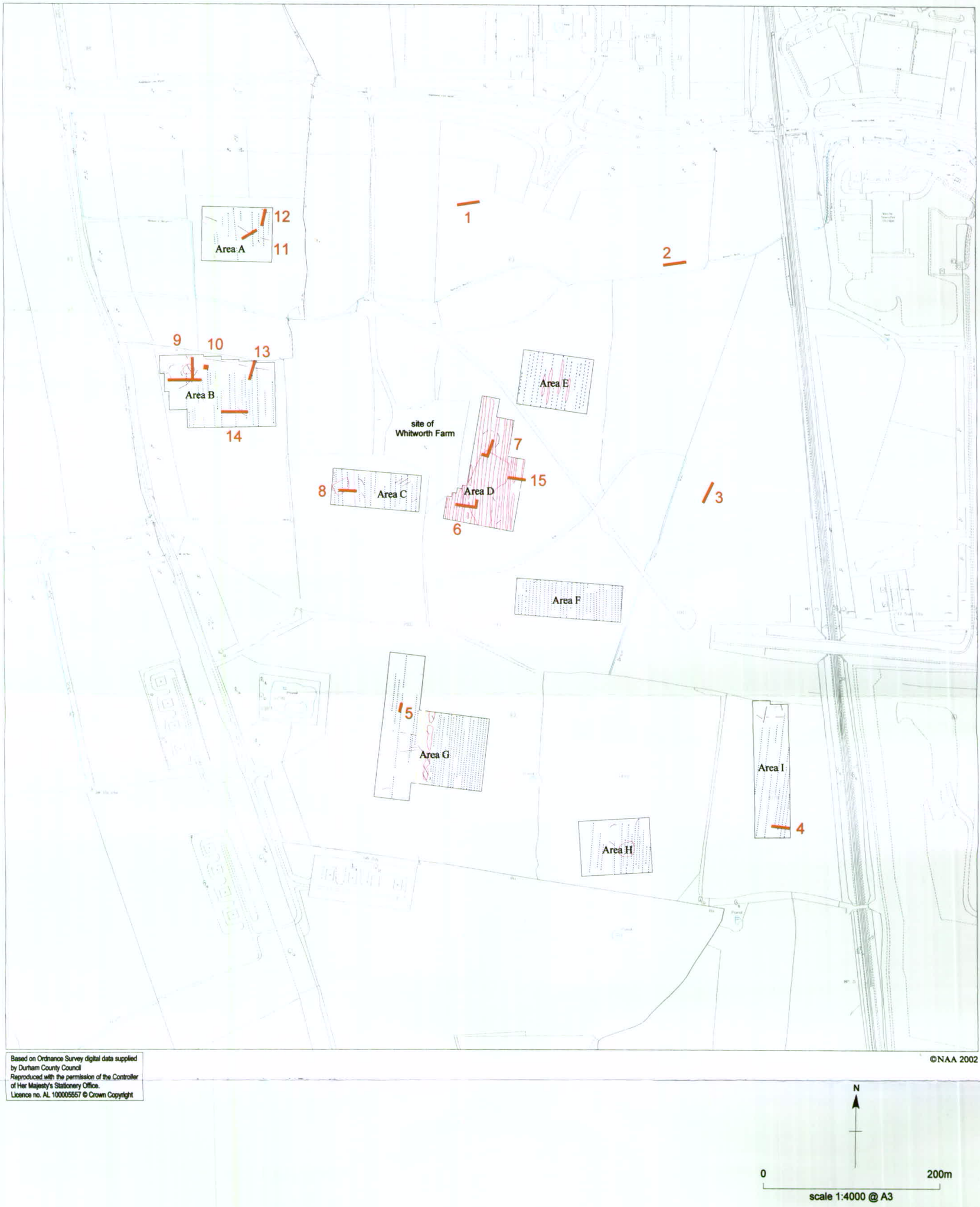

Figure 3 Heighington Lane: geophysical survey results in relation to trial trenches

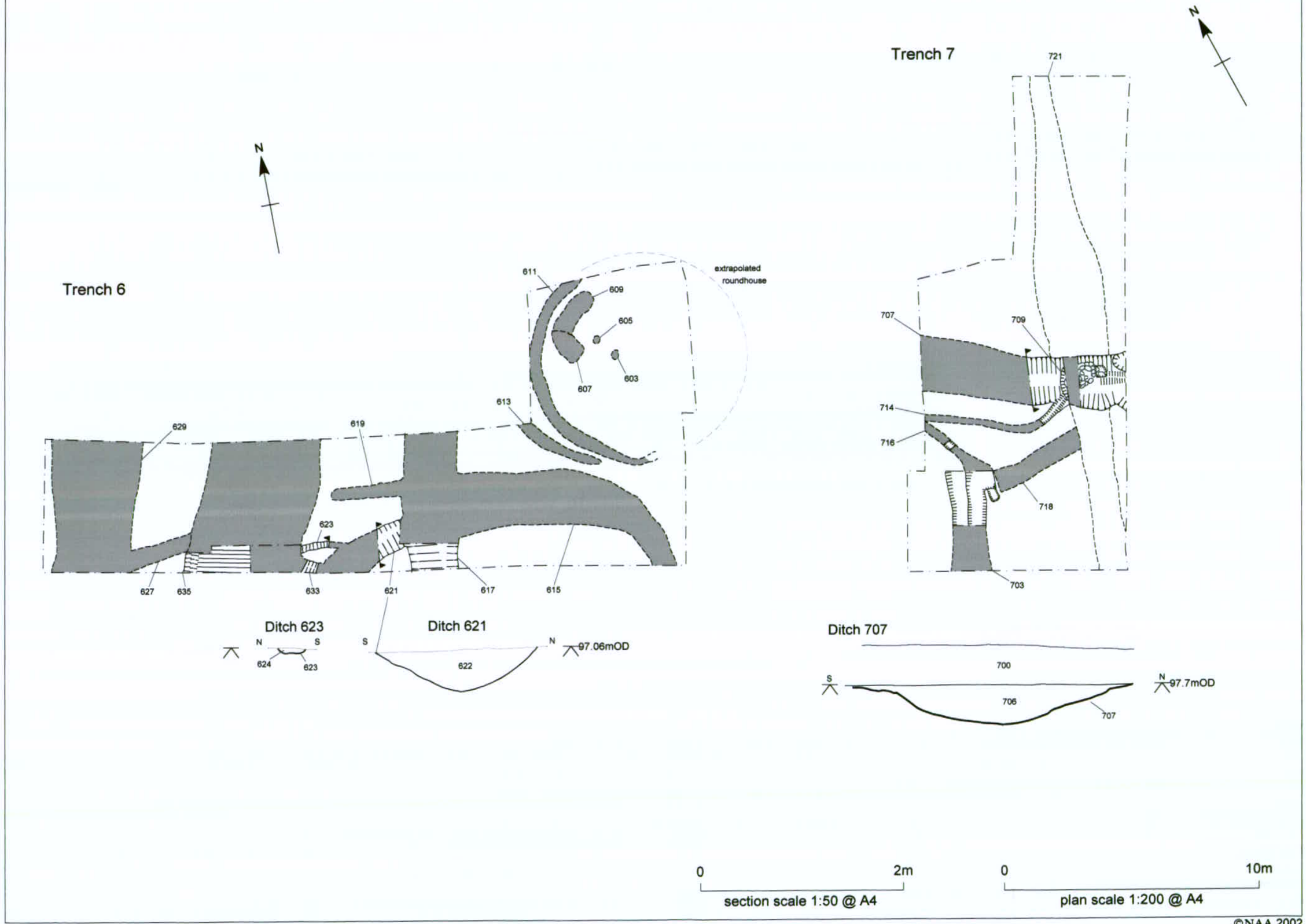

Figure 4 Heighington Lane: plans and sections of Trenches 6 and 7

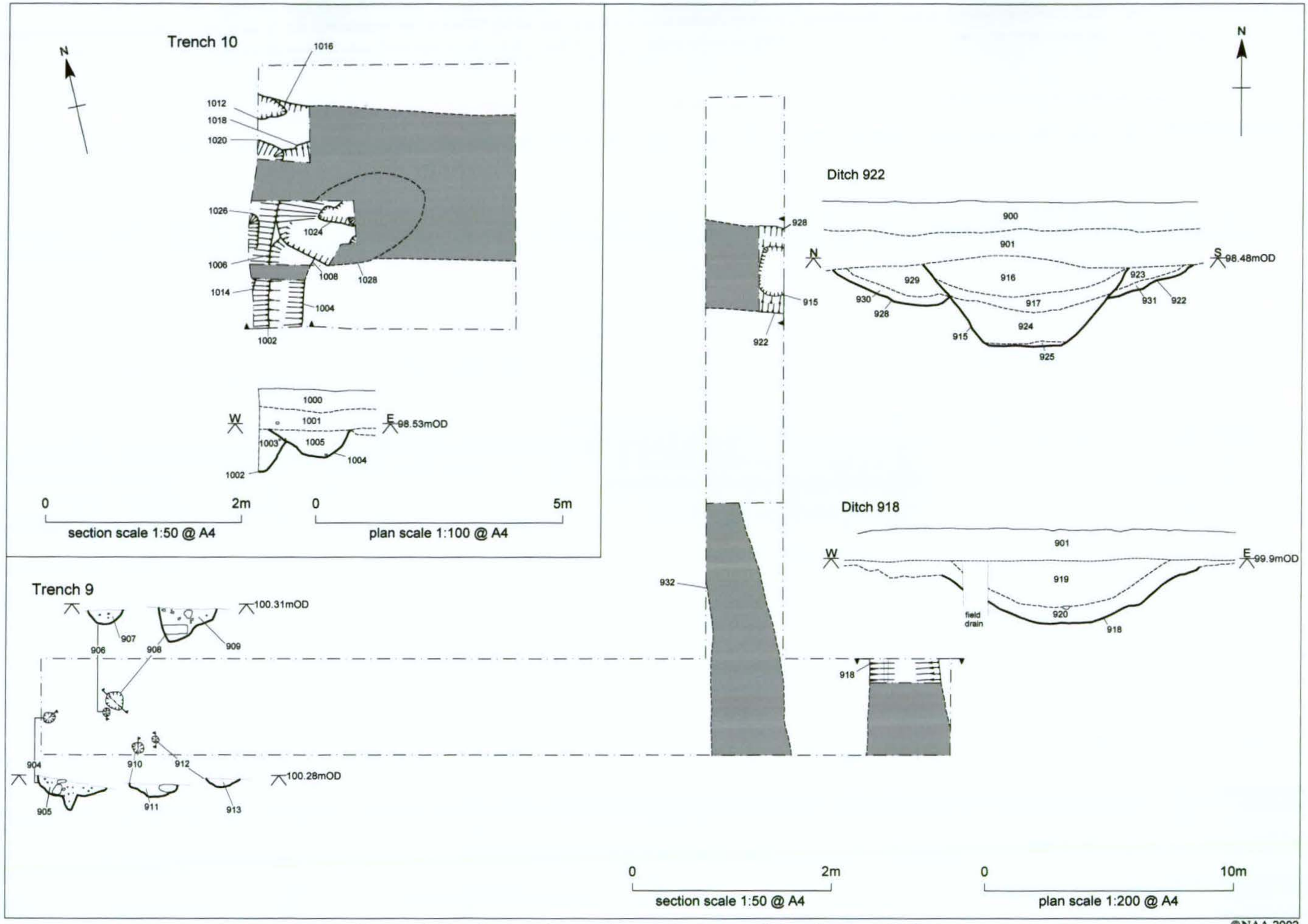

Figure 5 Heighington Lane: plans and sections of Trenches 9 and 10

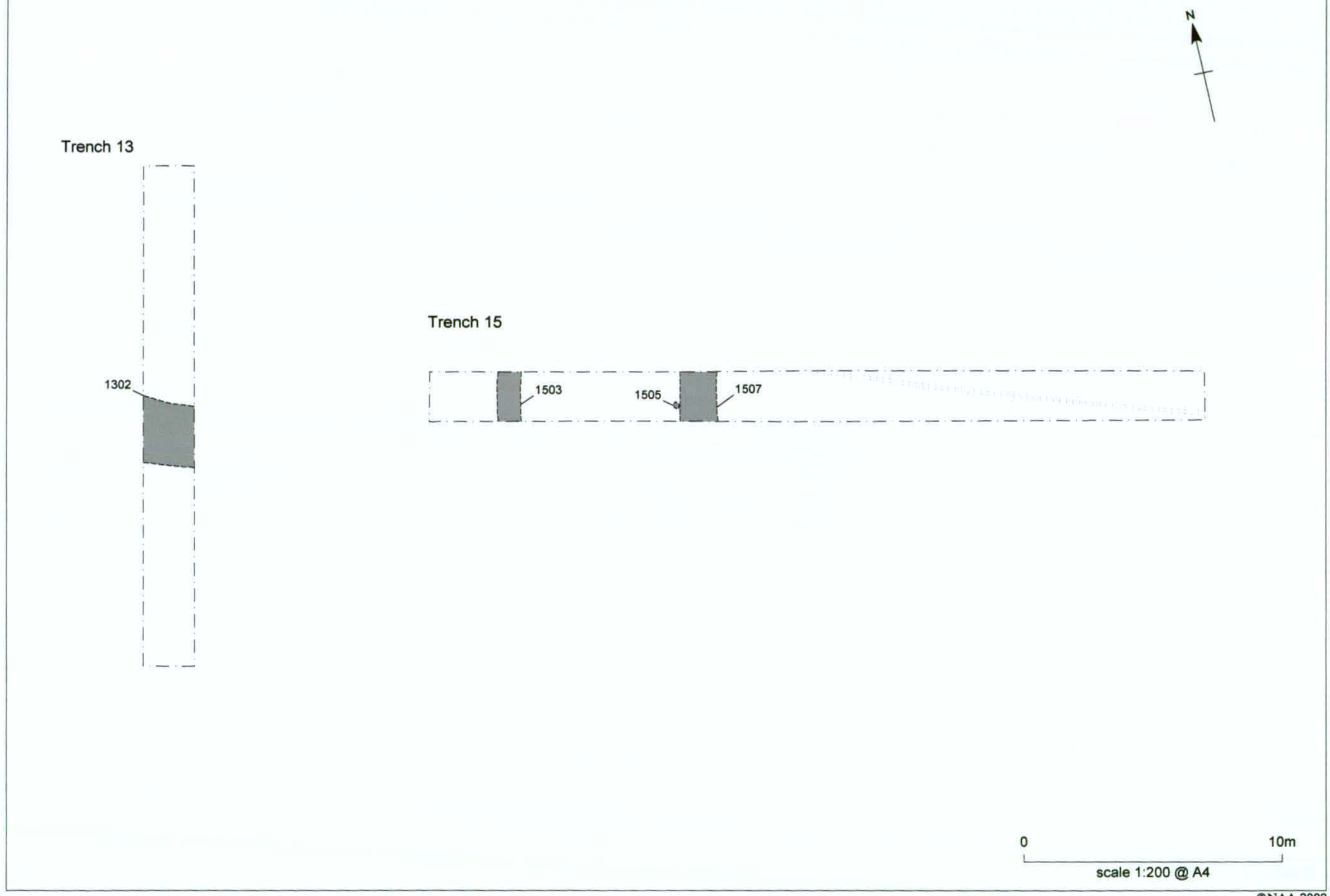

Figure 6 Heighington Lane: plans of Trenches 13 and 15