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An Archaeological Evaluation at Wynyard Park, Stockton on Tees

James McMeekin
BA MA AIFA

PROJECT SUMMARY SHEET

<i>Client</i>	WYNYARD PARK LTD
<i>National Grid Reference</i>	NZ 431 273
<i>Address</i>	WYNYARD PARK, STOCKTON ON TEES
<i>Parish</i>	ELWICK (SOUTH)
<i>Council</i>	STOCKTON ON TEES
<i>Planning Application No</i>	99/0857/P
<i>NMRS No</i>	N/A
<i>Oasis No</i>	HEADLAND1-60128
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Signed off by:

Simon Stronach BSc MIFA, Project Manager

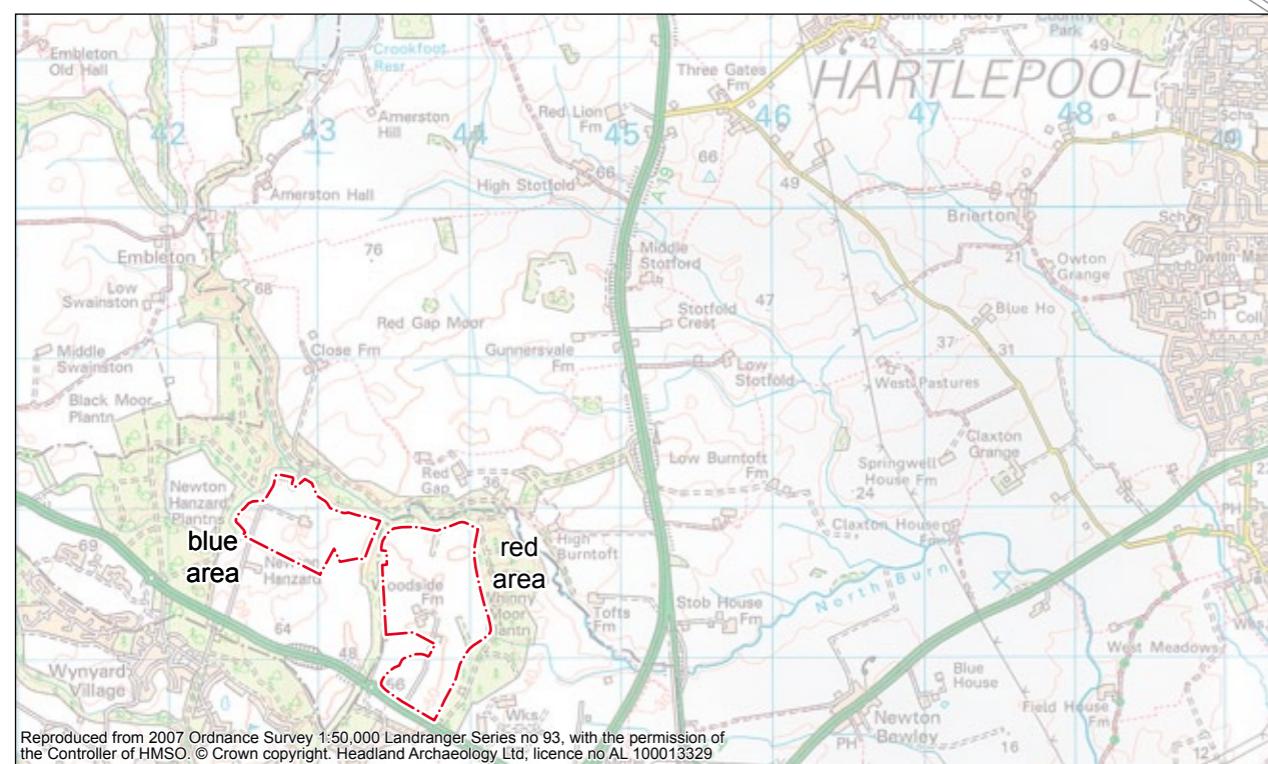
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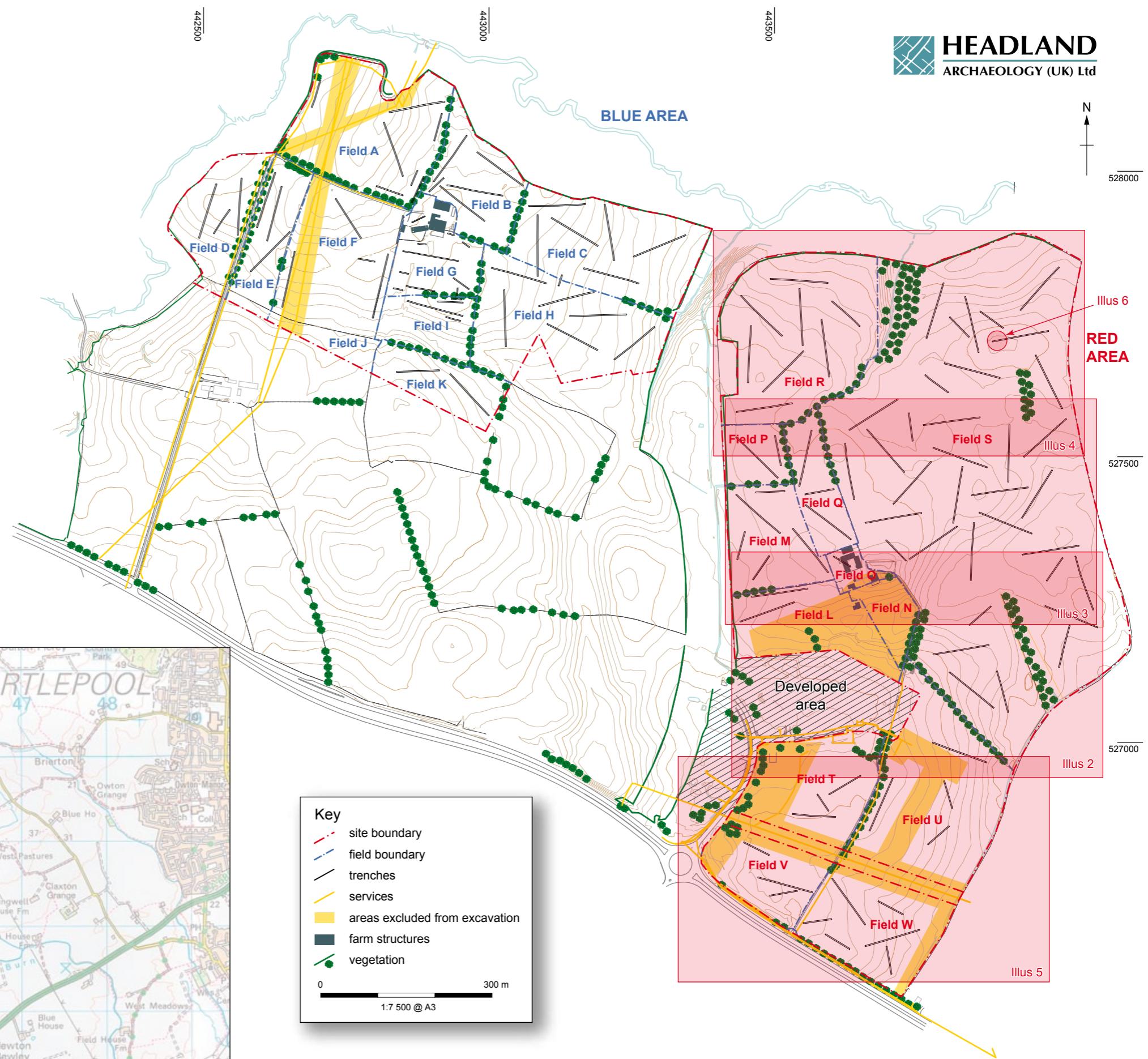
Headland Archaeology (UK) Ltd conducted an evaluation at Wynyard Park near Hartlepool. The work was commissioned by Wynyard Park Ltd and was undertaken in response to a planning condition on outline consent. This report deals with archaeological works carried out in an area that lay within the administrative area of the Borough of Stockton-on-Tees (Ref: 99/0857/P).

A total of seventy two trenches were excavated and there was evidence of agricultural activity across the majority of the area. This comprised the remnants of ridge and furrow cultivation. The furrows were, in most cases, heavily truncated by more recent ploughing. A single isolated pit was found in one trench. No archaeologically significant sites were located during the evaluation.





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Illus 1
Location plan

An Archaeological Evaluation at Wynyard Park, Stockton on Tees

by James McMeekin

1. INTRODUCTION

An archaeological evaluation was carried out on land at Wynyard Park between 23rd March and 23rd April 2009. Outline planning permission had been granted for a business park development. A condition attached to that permission required the implementation of a programme of archaeological works at the site prior to development.

The site was split into two areas, 'Red' and 'Blue', as shown on Illus.1. The Red Area lay within the administrative area of the Borough of Stockton-on-Tees (Ref: 99/0857/P) and this report deals with the archaeological works carried out in that area.

The works were carried out in accordance with a Written Scheme of Investigation (WSI) prepared by Headland Archaeology (UK) Ltd and based on a brief prepared by Tees Archaeology. The WSI was agreed with Tees Archaeology in advance of work commencing. The works comprised intrusive trial trenching. Wynyard Park Ltd commissioned Headland Archaeology (UK) Ltd to undertake this work.

Fields adjoining and within the area were subject to archaeological investigation prior to this programme of works. An evaluation comprising field walking, earthwork survey and Historic Building Recording (HBR) at Woodside Farm was carried out in 1999 by Tees Archaeology (Platell 1999).

2. SITE DESCRIPTION

The estate lies within the northern part of the Tees lowlands close to the edge of the East Durham plateau. The landscape is characterised by gently undulating ground. Above the 55 m contour the soils are well-drained whereas at lower levels they are heavier and more clayey.

The evaluated area was generally low lying and the ground surface was characterised by gentle rises and falls within an overall west to east slope. Areas of woodland were also present (Illus.1).

3. BACKGROUND

A short distance to the west of the area a prior phase of evaluation recorded pre-Roman Iron Age or Romano-British activity (400BC to AD100). This comprised a possible boundary ditch and a curvilinear feature containing Iron Age pottery sherds. The curvilinear feature may represent the remains of a circular structure, possibly a roundhouse (Murray 2008). Occasional worked flints were recovered from field walking also to the west of the evaluated area. This material was randomly scattered across a field with no concentration of finds from any one spot (Platell 1999).

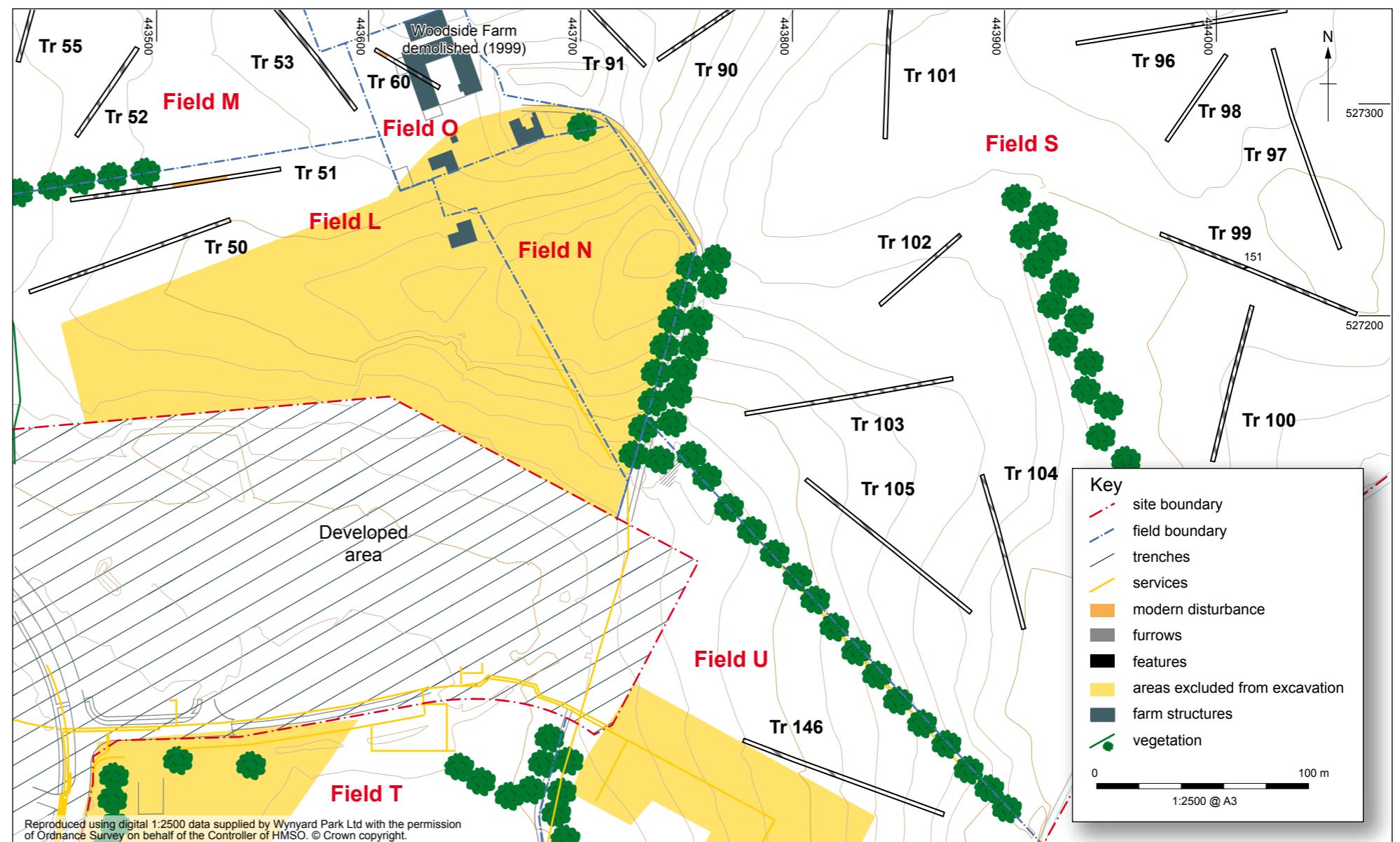
The evaluated area lies within the Wynyard Estate, a large wooded and agricultural estate documented from the 12th century. The manor of Newton Hanzard was most likely acquired with Embleton by Gilbert Hansard - a feudatory of Bishop Pudsey (1153–95) – from the Constable of Chester (Page 1928).

Although there are a number of recorded deserted medieval villages in the vicinity, as well as some recorded prehistoric activity, it is only relatively recently that access to the estate has been possible and archaeological knowledge has been limited (Peter Rowe, Tees Archaeology, pers comm.).

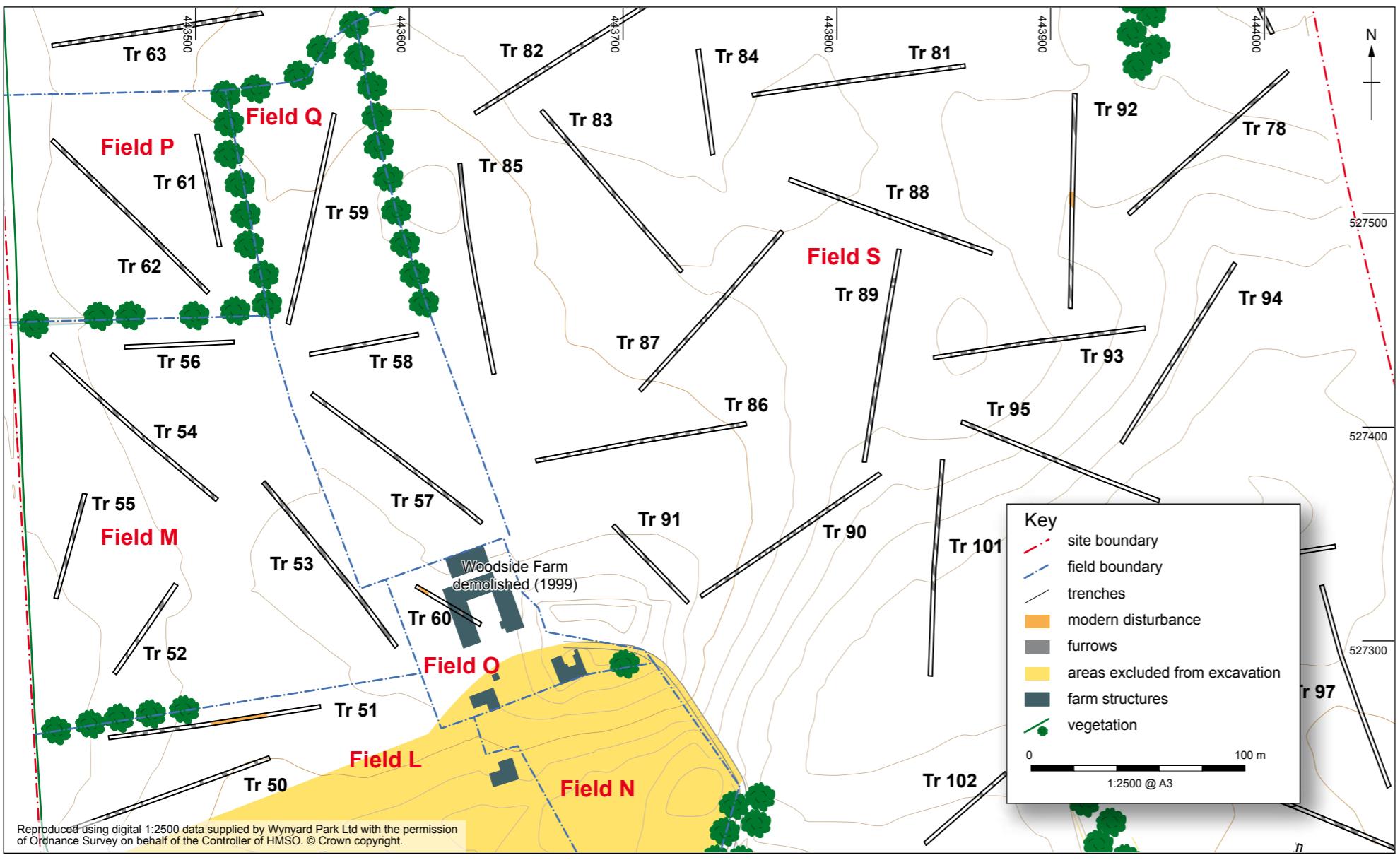
There are two recorded cultural heritage sites in the evaluated area: Woodside Farm (HER 5480), which was a 19th century estate farm of Wynyard Hall with some traces of ridge and furrow to the south (HER 560). The farm was surveyed prior to its demolition in 1999 and an earthwork survey undertaken (Platell 1999).

The earliest maps to show the area in any detail are from the 18th century and show Wynyard estate and a settlement at 'Newton Hanset' (Jeffreys 1768). Some plantations to

the north of Newton Hanzard (SMR 1635) to the south of the river and another near Harestounes are shown on Greenwood's map of 1820. The estate boundaries, plantations, woodlands and field systems were extensively remodelled in the mid 19th century and are shown on the 1st edition Ordnance Survey map (1859). The estate remained virtually unchanged until recent changes and the redevelopment of Wynyard Village.



Illus 2
Close-up of trenches within proposed development area



Illus 3
Close-up of trenches within proposed development area

4. OBJECTIVES AND METHODOLOGY

4.1 Objectives

The objective was to establish the archaeological potential of the development area by means of intrusive trial trenching and sample excavation.

4.2 Method

4.2.1 Trial Trenching

The land to be evaluated comprised 61.26 ha. A 2% sample of the area was trenched resulting in a sample of 11 000 sq m or some 6126 m of linear trench 1.8m wide. A total of 72 trenches were excavated.

A 16 ton tracked mechanical excavator equipped with a 1.8m wide flat edged ditching bucket was used under archaeological supervision to excavate the trenches in Fields L to U. A JCB was used under archaeological supervision to excavate the trenches in Fields V and W to avoid the larger machine tracking across a high pressure gas main which ran across the south side of the area. National Grid was notified prior to work commencing

near the gas main and a 30m exclusion zone to either side was respected. Exclusion zones were also placed around other known active services in Fields T to W.

Topsoil, ploughsoil or modern overburden was removed by machine and excavation terminated at the uppermost significant archaeological horizon or when the clean surface of geological sediments had been exposed. The positioning of the trenches provided coverage across the site and targeted locations with advantages in elevation and south facing slopes. Poorly drained low lying areas and woodland were excluded from trial trenching.

Identified archaeological features were subject to sample hand excavation. This was carried out to a sufficient degree to meet the objectives of the evaluation.

4.3 Recording

All recording followed standard archaeological guidelines as set out by the Institute for Archaeologists (IfA). All contexts, small finds and environmental samples were given unique numbers and all recording was undertaken on pro forma record cards that conform to accepted archaeological norms. All stratigraphic relationships were recorded.

Colour transparencies and black and white print photographs were taken to record

archaeological contexts and to illustrate the progress of the trial trenching. A graduated metric scale was clearly visible in record photographs of contexts. All photographs were recorded by individual print number and included information on the context and direction taken.

An overall site plan at an appropriate scale and relative to the National Grid was recorded using a combination of digital survey and 1:20 plans of individual features, and sections/elevations as required. Digital survey using a Penmap system linked to a Leica total station allowed the surveyor to view the site plans as they were created. A digital survey archive will be created using ADS guidance on best practice and will be archived at the ADS.

4.4 Samples and artefacts

Any finds retrieved during the excavations were bagged and labelled by context. Small finds were 3D plotted where appropriate. Finds were processed and stored appropriately, according to established archaeological guidelines.

Archaeological deposits were sampled systematically in accordance with standard environmental sampling practice. Bulk samples were taken for wet sieving and flotation. A representative proportion of these samples were processed and analysed with the results included in Appendix 3.

5. RESULTS

5.1 Trial Trenching

Fields L to W (trenches 50-105, 143-149 and 150-158) were located in the area reported on here (Fields A to K - trenches 1-49, 106-108 – were located in the other evaluated area and are not reported here).

The stratigraphy in this area was relatively simple with dark brown loam topsoil or ploughsoil generally 0.25m to 0.3m thick overlying orange grey silty clay subsoil. A general lack of topsoil finds suggested that there has been little or no manuring of this area. The absence of finds (Appendix 2) made it difficult to assign a date to agricultural activity. Full detailed descriptions of each trench can be found in Appendix 1. Results are summarised below.

Field L

Two trenches were excavated in Field L; both contained furrows (Illus.2). The furrows in both trenches were oriented NNW-SSE. The preservation of the furrows was variable. A substantial deposit of modern brick, wire and concrete rubble measuring approximately 26m across was exposed in trench 51. This most likely related to the occupation of Woodside Farm or its demolition in 1999. The south and east areas of Field L were not trenched due to poor drainage in these areas, with standing water present in the eastern half of the field.

Field M

Four of the five trenches excavated in Field M contained furrows (Illus.3 & 7). The furrows were oriented N-S to NNW-SSE. Due to plough truncation the preservation of the furrows was variable. The furrows in trenches 52, 54 and 55 were present at intervals of 4.5m to 6.5m, their width varied between 0.8m and 1.6m. The furrows in trench 53 were spaced at slightly larger intervals of 6m to 8m apart, their width varied between 1.7m and 2.8m. No furrows were present in trench 56.

Field N

No trenches were excavated in Field N due to the presence of standing water and modern bunds that most likely related to the demolition of Woodside Farm.

Field O

A single trench was excavated in Field O, the site of Woodside Farm prior to its demolition in 1999 (Illus.3). A surface composed of modern machine made red bricks was exposed at the NW end of the trench. A single furrow oriented roughly N-S lay

directly beneath the footprint of the old farm building. No other archaeological features were exposed in this trench, with frequent areas of brick and concrete rubble interspersed with the topsoil. The southern half of Field O was covered by a bund made of modern demolition material and redeposited soil.

Field P

Two trenches were excavated in Field P (Illus.3). Trench 61 contained a single N-S oriented furrow that extended through most of the trench. Trench 62 contained ten N-S oriented furrows, at intervals of 5m to 8m. The width of the furrows varied between 1.3m and 3.2m.

Field Q

Three trenches were excavated in Field Q (Illus.3). All three trenches contained furrows oriented roughly NNW-SSE to N-S. The sequence of furrows was found to be most concentrated on higher ground. Ten furrows were exposed in trench 57 with the best preserved sequence exposed in the south eastern half of the trench. The furrows here were spaced at intervals of 5.5m to 7m and were between 1m and 2.4m wide. The ground dropped away slightly in the northern area of Field Q - from about the halfway point along trench 59. No furrows were found in this lower area.

Field R

Eight trenches were excavated in Field R, targeted on higher ground (Illus.4). Two distinct patterns of furrows were uncovered, one running roughly N-S and the other E-W. Due to plough truncation the preservation of the furrows was variable. The E-W pattern of furrows was concentrated in the central area of the field and was found in trenches 64, 65 and 67-69.

The N-S pattern of furrows was found in all the trenches in Field R. Across the central area of the field these furrows tended to a more NE-SW orientation. This was most likely a result of the angle of the slope affecting ploughing as the slope dropped away to the north and east. The furrows throughout the field measured between 0.8m and 1.8m wide. The furrows belonging to the N-S pattern were spaced at intervals of 3m to 5m. The preservation of the furrows belonging to the E-W pattern was comparatively poor. This poor preservation may indicate that these furrows represent an earlier phase of activity than the NE-SW oriented sequence. These furrows were spaced at intervals of approximately 4m to 6m.

Field S

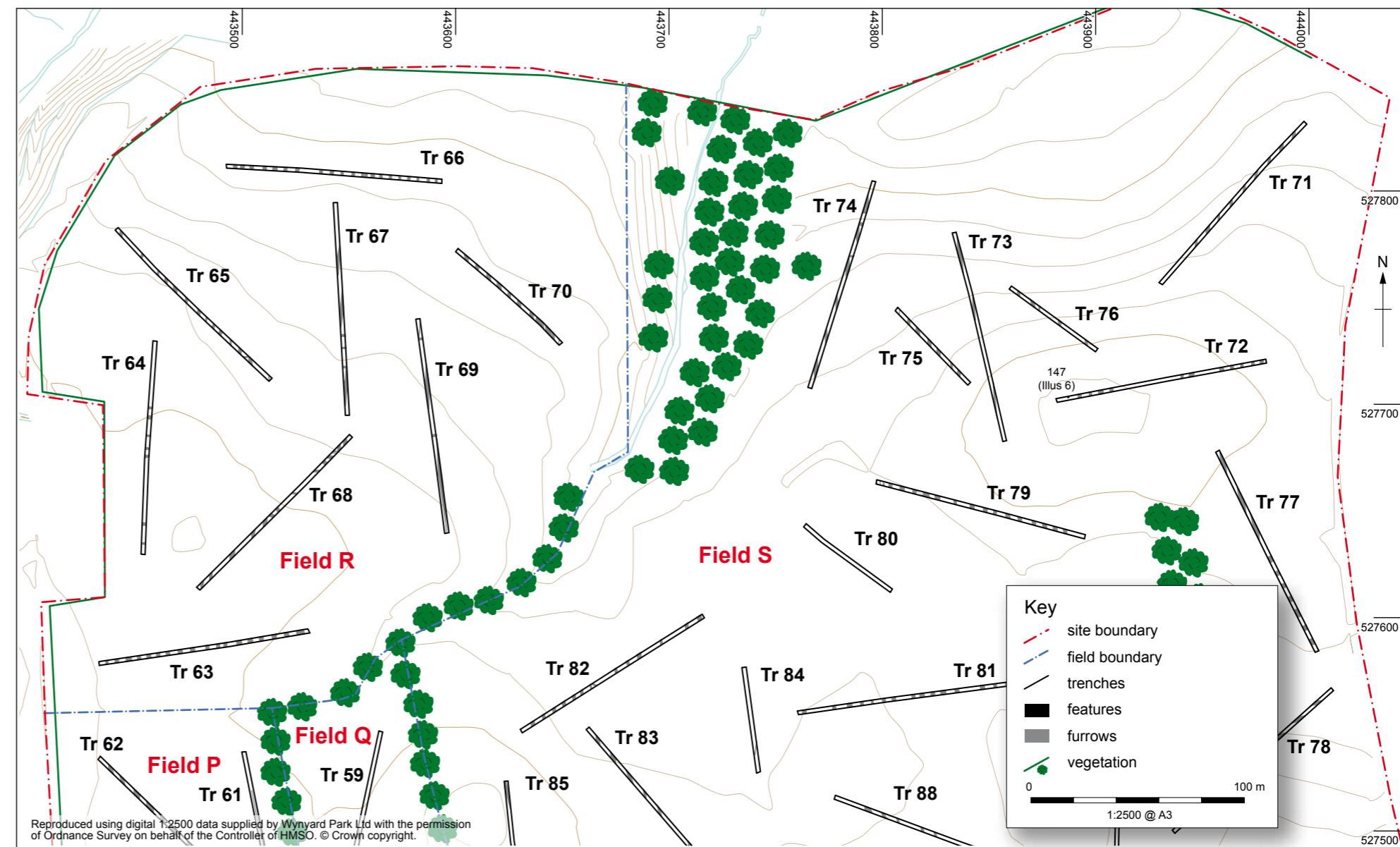
Thirty five trenches were excavated in Field S, targeting high ground and south facing slopes (Illus.2-4). Furrows were found in thirty two of the thirty five trenches (Illus.7). As in Field R, two distinct patterns of furrows were exposed. An E-W oriented pattern of furrows was exposed in trenches 77, 78, 83, 85, 87 and 89. These E-W oriented furrows were isolated on an area of south facing slope which formed a central band across Field S. These E-W oriented furrows were typically spaced at intervals of 6m to 8m and were between 1.3m and 4.2m wide.

A NNW-SSE to N-S pattern of furrows was exposed throughout Field S. This pattern of furrows represented a fairly intensive level of ploughing on the high ground and south facing slopes of Field S, with as many as sixteen furrows present in a single 100m trench. Far fewer furrows were found in the low lying areas of Field S.

The vast majority of furrows exposed in Field S were oriented N-S making it difficult to ascertain whether old field boundaries had been removed and this large field represented an amalgamation of several smaller fields. The E-W pattern of furrows limited to the south facing slope most likely represent an earlier period of ploughing.

The E-W furrows were found towards the higher ground in Field R and on a south facing slope in Field S, that is to say the best drained land that received the most sun. This further suggests that they represent an early phase of cultivation of the area. No finds were recovered from the furrows in Field S making it difficult to determine when this period might have been.

A single pit or posthole [147] was exposed at the west end of trench 72 (Illus.6). This trench ran approximately E-W across the highest ground in Field S. Pit [147] was circular with a diameter of 0.6m and a depth of 0.18m (Illus.6). Regular sloping sides led to a



Illus 4
Close-up of trenches within proposed development area

rounded base. A moderately compact black silty clay with infrequent small stones and flecks of charcoal filled pit [147]. No finds were recovered from the fill. A small fragment of unburnt bone and three small fragments of charcoal ($\leq 0.005\text{m}^3$) were recovered from the environmental processing of a sample from the fill (Appendix 3). These fragments were not of sufficient size to be suitable for radiocarbon analysis. This was an isolated pit with no further features identified in the vicinity.

Field T

Three trenches were excavated in Field T (Illus.2). The location of the trenches in Field T was constrained by the presence of a high pressure gas main running E-W across the south of the field and a low pressure gas main that ran along the western part (Illus.1). All three trenches contained NNE-SSW to N-S oriented furrows. The best preserved sequence of furrows was found in trench 145. Here, furrows were typically spaced at intervals of 4.5m to 6m and were 0.63m to 0.86m wide. An area of modern rubble and debris was located in the NW corner of Field T.

Field U

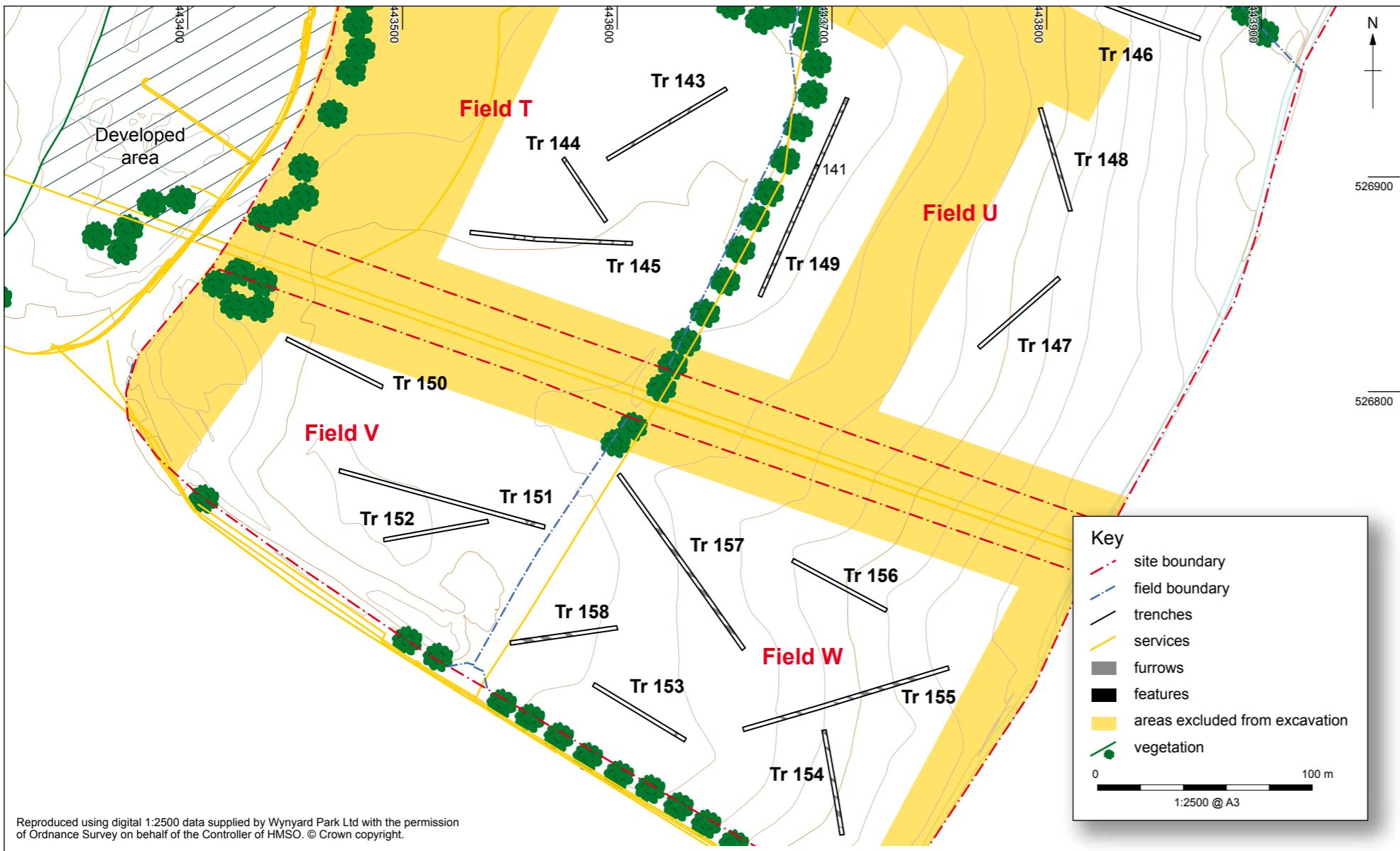
From the high ground in Field T the ground surface in Field U dropped away to the east at a ratio of 1:20. Four trenches were excavated in Field U (Illus.2 and 5). Two NNE-SSW furrows were found at the east end of trench 151, a similar pattern to the furrows found to the north in Field T. The rest of the trenches in Field V contained no features.

Nineteen E-W oriented furrows were found in trench 149 and a further four in trench 148. The E-W orientation of these furrows ran with the slope. Intervals between furrows were somewhat irregularly spaced due to variable preservation; furrows were between 0.8m and 1.65m wide. No furrows were found in trench 147; this may be a result of plough truncation given the high number of furrows found both upslope and at approximately the same height to the north.

Two roughly N-S oriented furrows were found in trench 146 in the northern area of Field U. This pattern is more similar to the furrow sequences found in the southern part of Field S than to the E-W oriented furrow sequences found in the trenches to the south in Field U. This distinction may reflect the former presence a field boundary previously located between trenches 146 and 148.

Field V

The location of trenches in Field V was constrained by the presence of a high pressure gas main running E-W to the north of the field and a low pressure gas main that ran along the western part. Three trenches were excavated in Field V (Illus.5). Two NNE-SSW furrows were found at the east end of trench 151, a similar pattern to the furrows found to the north in Field T. The rest of the trenches in Field V contained no features.



Illus 5
Close-up of trenches within proposed development area

Field W

Six trenches were excavated in Field W (Illus.5). Four of these trenches contained roughly E-W to WNW-ESE furrows. The orientation of these furrows was in keeping with those found in the southern half of Field U and at variance with those found in the eastern halves of Fields T and V. This suggests the existing field boundary (the old road access to Woodside Farm) is in keeping with the field boundary at the time the furrows were created. The best preserved sequences of furrows were spaced at intervals of 7m to 8m. Variable preservation resulted in the width of the furrows varying between 1m and 3.65m.

A single NNE-SSW oriented linear feature [139] was exposed in trench 153. This feature was 1m wide, 0.35m deep with rounded sides and base and cut across the trench at a right angle. This linear feature was at variance with the orientation of the furrows found in Field W and may have been an infilled boundary or drainage ditch.

DISCUSSION

There was evidence of agricultural activity across the majority of the evaluated area. This comprised the bases of furrows that were, in most cases, heavily truncated by

later ploughing. The majority of furrows were oriented roughly N-S, although a pattern of E-W furrows was found across the high ground and south facing slopes, predominantly in Field S. These furrows may represent an earlier period of ploughing distinct from the general N-S trend.

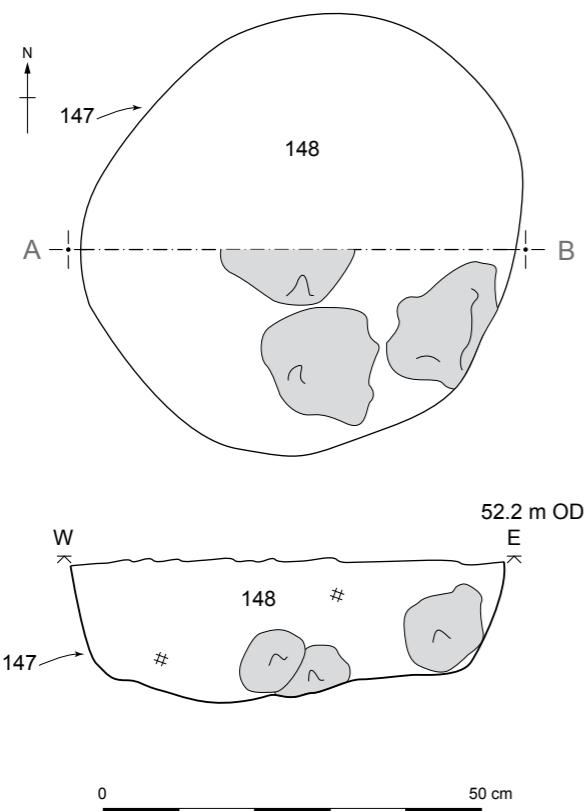
These E-W oriented furrows were concentrated on the better drained ground that would receive the most sun, prime ground that was likely to have been cultivated prior to the improvement of less desirable areas.

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Distances between the N-S furrows varied extensively. This may be an indication of distinct phases of cultivation with later sequences of furrows interspersed with the initial pattern. Generally speaking the extent and pace of agricultural exploitation of lowland areas increased in the post medieval period, between 1540-1900 (Petts 2006, 90-91), and increased activity in the area reflects this overall trend.

A trench excavated through the site previously occupied by Woodside Farm gave no indication of settlement in this area prior to the construction of the 19th century farm buildings. A single N-S oriented furrow was exposed amongst the modern building materials in the trench, indicating that before the construction of the farm this area was cultivated.



Illus 6
Photograph, plan and section of pit 147



Illus 7
Furrows within trenches in Field S

APPENDIX 1; SITE REGISTERS

N.B. Numbers may not be sequential as a single register was used to record both the Red and Blue Areas of site.

Trench Register

Trench No	Field	Orientation	Description	Length (m)	Topsoil depth (m)
50	L	E-W	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
51	L	E-W	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
52	M	NE-SW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.3
53	M	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows	100	0.4
54	M	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows	100	0.5
55	M	NE-SW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.3
56	M	E-W	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained no features.	50	0.3
57	Q	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
58	Q	E-W	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.3
59	Q	NE-SW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
60	O	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained brick surface and a furrow.	35	0.3
61	P	N-S	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.25
62	P	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
63	R	ENE-WSW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
64	R	N-S	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
65	R	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
66	R	E-W	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
67	R	N-S	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25

Trench No	Field	Orientation	Description	Length (m)	Topsoil depth (m)
68	R	NE-SW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
69	R	N-S	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
70	R	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	65	0.25
71	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25
72	S	E-W	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained possible pit [147] and furrows.	100	0.2
73	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2
74	S	SSW-NNE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2
75	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows	50	0.2
76	S	NW-SE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows	50	0.2
77	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2
78	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2
79	S	WNW-ESE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows and field drains.	100	0.3
80	S	NW-SE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.2
81	S	E-W	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2
82	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
83	S	NW-SE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows and field drain.	100	0.2
84	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.2
85	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows and field drain.	100	0.3
86	S	E-W	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2

Trench No	Field	Orientation	Description	Length (m)	Topsoil depth (m)	Trench No	Field	Orientation	Description	Length (m)	Topsoil depth (m)
87	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2	143	T	NE-SW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.3
88	S	WNW-ESE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2	144	T	NNW-SSE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	35	0.3
89	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.1	145	T	E-W	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	75	0.3
90	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2	146	U	WNW-ESE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
91	S	NW-SE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.2	147	U	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained no features.	50	0.3
92	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows and an area of modern disturbance.	100	0.25	148	U	NNW-SSE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.25
93	S	E-W	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3	149	U	NNE-SSW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
94	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3	150	V	WNW-ESE	Topsoil: Dark brown sandy loam. Subsoil: Yellow clay. Contained no features.	50	0.3
95	S	WNW-ESE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.25	151	V	WNW-ESE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows at E end.	100	0.3
96	S	E-W	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.15	152	V	ENE-WSW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained no features.	50	0.3
97	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained no features.	100		153	W	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.25
98	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained no features.	50	0.4	154	W	NNW-SSE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.2
99	S	WNW-ESE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained linear [151] and furrows.	100	0.25	155	W	NE-SW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
100	S	NNE-SSW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	75		156	W	WNW-ESE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained no features.	50	0.2
101	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.2	157	W	NW-SE	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3
102	S	NE-SW	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.3	158	W	ENE-WSW	Topsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	50	0.3
103	S	E-W	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	100	0.3						
104	S	N-S	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained furrows.	75	0.3						
105	S	NW-SE	Ploughsoil: Dark brown sandy loam. Subsoil: Orange grey sandy clay. Contained linear [105] and furrows.	100	0.25						

Context Register

Context No	Field	Trench	Description
1	L-W	50-105, 143-158	Turf and topsoil/ploughsoil
139	W	153	Cut of furrow/ditch
140	W	153	Fill of [139]
141	U	149	Cut of furrow
142	U	149	Fill of [141]
143	T	144	Cut of furrow
144	T	144	Fill of [143]
147	S	72	Cut of possible posthole
148	S	72	Fill of [147]
149	S	79	Cut of linear
150	S	79	Fill of [149]
151	S	99	Cut of linear
152	S	99	Fill of [151]
153	S	105	Cut of linear
154	S	105	Fill of [153]

Drawing Register

Drawing No	Section	Plan	Description
24	01:10	-	S facing section of [147].
25	-	01:20	Plan of [147].

Sample Register

Sample No	Context No	Description
29	148	Fill of pit [147].
30	150	Fill of linear feature [149].

Photographic Register

Photo No	Film No	Shot No	Colour Slide	B/W Print	Digital	Direction Facing	Description
100	3	29	*	*	*	NE	General shot of trench 50
101	3	30	*	*	*	E	General shot of trench 51
102	4	1	*	*	*	-	ID shot
103	4	2	*	*	*	NE	General shot of trench 52
104	4	3	*	*	*	NW	General shot of trench 53
105	4	4	*	*	*	NW	General shot of trench 54
106	4	5	*	*	*	E	General shot of trench 55
107	4	6	*	*	*	E	General shot of trench 56
108	4	7	*	*	*	SE	General shot of trench 57
109	4	8	*	*	*	E	General shot of trench 58
110	4	9	*	*	*	NW	General shot of trench 59
111	4	10	*	*	*	SE	General shot of trench 60
112	4	11	*	*	*	S	General shot of trench 61
113	4	12	*	*	*	NW	General shot of trench 62
114	4	13	*	*	*	E	General shot of trench 63
115	4	14	*	*	*	N	General shot of trench 64
116	4	15	*	*	*	NE	General shot of trench 68
117	4	16	*	*	*	NW	General shot of trench 65
118	4	17	*	*	*	SE	General shot of trench 66
119	4	18	*	*	*	S	General shot of trench 69
120	4	19	*	*	*	NW	General shot of trench 70
121	4	20	*	*	*	N	General shot of trench 73
122	-	-	-	-	-	-	Void
123	4	21	*	*	*	NW	General shot of trench 75
124	4	22	*	*	*	N	General shot of trench 74
125	4	23	*	*	*	SE	General shot of trench 76
126	4	24	*	*	*	NE	General shot of trench 71
127	4	25	*	*	*	W	General shot of trench 72
153	5	16	*	*	*	N	General shot of trench 77
154	5	17	*	*	*	SW	General shot of trench 78
155	5	18	*	*	*	NW	General shot of trench 79
156	5	19	*	*	*	WNW	General shot of trench 80
157	5	20	*	*	*	W	General shot of trench 81
158	5	21	*	*	*	SW	General shot of trench 82
159	5	22	*	*	*	SE	General shot of trench 83
160	5	23	*	*	*	N	General shot of trench 84
161	5	24	*	*	*	N	General shot of trench 85
162	5	25	*	*	*	E	General shot of trench 86
163	5	26	*	*	*	NE	General shot of trench 87
164	5	27	*	*	*	SE	General shot of trench 88
165	5	28	*	*	*	N	General shot of trench 89

Photo No	Film No	Shot No	Colour Slide	B/W Print	Digital	Direction Facing	Description
166	5	29	*	*	*	SW	General shot of trench 90
167	5	30	*	*	*	SE	General shot of trench 91
178	6	6	*	*	*	SE	General shot of trench 154
179	6	7	*	*	*	W	General shot of trench 156
180	6	8	*	*	*	SW	General shot of trench 155
181	6	9	*	*	*	NE	General shot of trench 157
182	6	10	*	*	*	S	Ditch [139] in trench 153
183	6	11	*	*	*	W	General shot of trench 153
184	6	12	*	*	*	E	General shot of trench 150
185	6	13	*	*	*	E	General shot of trench 151
186	6	14	*	*	*	NE	General shot of trench 152
187	6	15	*	*	*	S	General shot of trench 149
188	6	16	*	*	*	SW	General shot of trench 148
189	6	17	*	*	*	-	General shot of trench 147
190	6	18	*	*	*	E	General shot of trench 146
191	6	19	*	*	*	SE	Furrow [143] in trench 144
192	6	20	*	*	*	E	General shot of trench 145
193	6	21	*	*	*	SE	General shot of trench 144
194	6	22	*	*	*	N	General shot of trench 143
195	6	23	*	*	*	NW	General shot of trench 91
196	6	24	*	*	*	NE	General shot of trench 90
197	6	25	*	*	*	SE	General shot of trench 89
198	6	26	*	*	*	E	General shot of trench 93
199	6	27	*	*	*	N	General shot of trench 92
200	6	28	*	*	*	NE	General shot of trench 94
201	6	29	*	*	*	NW	General shot of trench 95
202	6	30	*	*	*	W	General shot of trench 96
203	6	31	*	*	*	S	General shot of trench 97
204	6	32	*	*	*	SW	General shot of trench 98
205	6	33	*	*	*	NW	General shot of trench 99
206	7	1	*	*	*	-	ID shot
207	7	2	*	*	*	SE	General shot of trench 100
208	7	3	*	*	*	SW	NE facing slot through [151] in trench 99
209	7	4	*	*	*	NW	SE facing slot through [149]
210	7	5	*	*	*	N	S facing section through [147]
211	7	6	*	*	*	NE	General shot of trench 101
212	7	7	*	*	*	SW	General shot of trench 102
213	7	8	*	*	*	E	General shot of trench 103
214	7	9	*	*	*	SE	General shot of trench 104
215	7	10	*	*	*	NW	General shot of trench 105

APPENDIX 2; FINDS ASSESSMENT

Julie Franklin

Finds Summary

Only three finds were recovered from contexts in the Red Area. All came from the same context (150) the fill of a linear feature. Two were post-medieval or modern pan tiles, the other a flint flake

Context No	Material	Qty	Object	Period	Box No
150	CBM	2	Pan Tile	pm/ Mod	1
150	Lithics	1	Flint Flake		1

Abbreviations:
 medi = medieval
 pm = Post-Medieval (16th-m.18th century)
 Mod = Modern
 Fe = Iron

Table A 2.1
Finds list

APPENDIX 3; PALEOENVIRONMENTAL ASSESSMENT OF SAMPLES

Dr T Holden & D Masson

Introduction

Five samples were taken during an archaeological evaluation at Wynyard Park, nr. Hartlepool.

Method

Samples were processed in laboratory conditions using standard floatation method (cf. Kenward *et al*, 1980). All plant macrofossil samples were assessed using a stereomicroscope at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases including Capper *et al* (2006).

Results

The results are presented in Tables 1 (retent samples) and 2 (floatation samples) below.

Plant remains

Charcoal was present in four of the five samples, three contained fragments of sufficient size for identification or for Accelerated Mass Spectrometry (AMS) dating (see tables 1 and 2). Charred barley grains were present in three samples (148, 165, 179).

Other finds

Uncharred bone fragments were found in all samples. Burnt bone was recovered from one sample (162). A pottery sherd was found in one sample (44). Cinders, and coal fragments were recovered from Contexts 44 & 165.

Discussion

The terms of archaeological significance the barley grain and animal bone are potentially indicative of a settlement of some description but the quantities are so low as to offer little further scope for interpretation. Barley has been a major element in the rural economy since the Neolithic period so again adds little to our understanding of either the chronology or the function of the site.

Of some note is the presence of coal and cinder fragments in Contexts 44 & 165. If available locally as surface outcrops, coal being used as a fuel could be anticipated from pre-historic sites. If not available locally this might me more indicative of a post-medieval date.

References

- Cappers R.T.J., Bekker R.M. and Jans J.E.A. (2006) *Digital seed atlas of the Netherlands* (Barkhuis Publishing and Groningen University Library, Groningen).
- Kenward H.K., Hall A.R. and Jones A.K.G. (1980) *A tested set of techniques for the extraction of plant and animal macrofossil from waterlogged archaeological deposits*. *Science and Archaeology* 22, 3-15.
- Masser P. (2005) *Tabernacle Church, Henderson Street, Leith Archaeological Evaluation*. (Unpublished client report) Headland Archaeology.

Context No	Sample No	Retent Vol (l)	Pottery	MWD	Burnt Bone	Unburnt Bone	Charcoal Qty	Charcoal max size (cm)	Cinders	Coal	Material available for AMS	Comments
44	1	10	+			+			+++	++		Cinders and coal not retained.
148	29	10				+	+	0.5				
162	31	4		+	++	+++	+++	2.0			Charcoal	
165	33	10				+	+	1.0	++	++	Charcoal	Cinders and coal not retained.
179	35	10				++	+	0.5				

Key: + = rare ++ = occasional +++ = common ++++ = abundant

Table A 3.1
Retent sample result

Context No	Sample No	Total flot Vol (ml)	Barley grain	Charcoal Qty	Charcoal Max size (cm)	Material available for AMS	Comments
44	1	300	-	-	-	-	Cinder++++, Lime+
148	29	30	+	+++	1.5	Charcoal	Sea shell
162	31	15	-	-	-	-	Archaeologically sterile
165	33	15	+	+	<1	-	Barley node
179	35	20	+	++	<1	-	-

Key: + = rare ++ = occasional +++ = common ++++ = abundant
NB charcoal over 1cm is suitable for identification and AMS dating

Table A 3.2
Flotation Sample Results