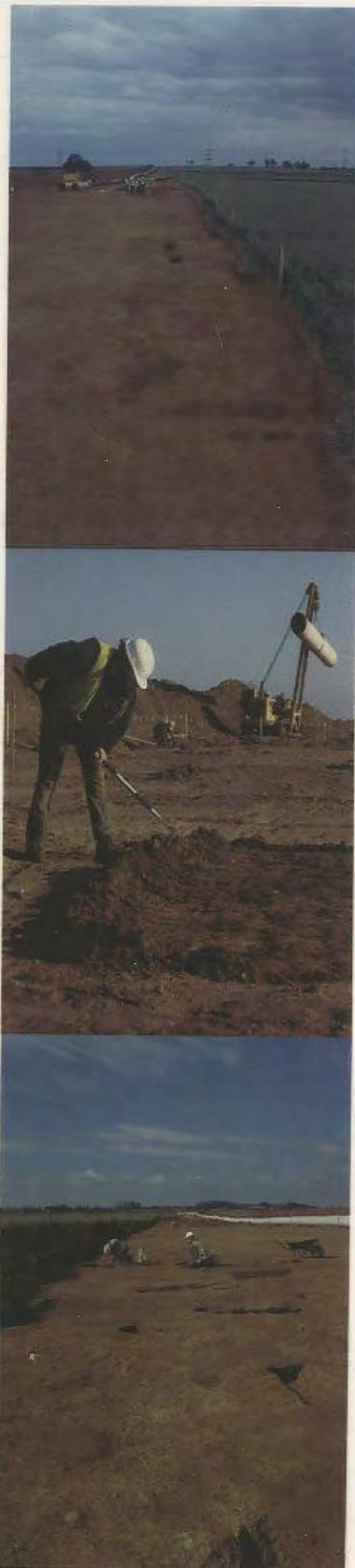


**HATTON  
TO SILK WILLOUGHBY  
1050mm GAS PIPELINE**

**ARCHAEOLOGICAL  
EVALUATION,  
EXCAVATION & WATCHING BRIEF**

**Volume 2: Appendices**

Prepared by  
**NETWORK ARCHAEOLOGY Ltd**  
For  
**TRANSCO**



99/17

**HATTON TO SILK WILLOUGHBY**  
**1050mm NATURAL GAS PIPELINE**

**ARCHAEOLOGICAL EVALUATION, EXCAVATION AND**  
**WATCHING BRIEF 1998**

**Volume 2 : Appendices**

**Prepared by**

**Network Archaeology Ltd**

**For**

**Transco**

**Report No. 134**  
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Lincolnshire County Council  
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## APPENDICES

### *Introduction*

- 1 Flint
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## INTRODUCTION

For the purposes of the main report the archaeological sites have been allocated individual site numbers (1-22). These site numbers were not always available to the specialists at the time of their report writing. For ease of reference Tables 1 and 2 have been reproduced from the main report.

All specialist finds drawings have been included at the end of each appropriate specialist report.

Table 1: Summary of Archaeological Sites

SITE NO.	PLOT NO.	NGR (TF)	DESCRIPTION	PERIOD	LOCATION
1	3	17590 75796	Ridge and furrow earthworks and pottery	Medieval	Hatton
2	8	17176 74842	Field system, pits and well	Romano-British	Greenfield Farm, Minting
3 & Isolated feature	8 - 9	17146 75012- 17169 74280	Ridge and furrow field system, pottery; <i>Field Boundary Ditch [2142]</i>	Medieval; <i>Undated</i> <i>(?Post-Med/Mod)</i>	Greenfield Farm, Minting
4	12	17220 72964	Ridge and furrow earthworks and pottery	Medieval	Home Farm, Gautby
5	17	17090 72280	Ridge and furrow earthworks and pottery	Medieval	Great Park, Gautby
<i>Isolated Feature</i>	19	17077 71886	<i>Field Boundary Ditch [4403]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Moor Farm, Bucknall</i>
6	20	17064 70624	Settlement and field system	Late Iron Age- Romano-British	Moor Farm, Bucknall
<i>Isolated Feature</i>	42	14162 65490	<i>Field Boundary Ditch [7018]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Hare Booth Farm, Metheringham Delph</i>
<i>Isolated Feature</i>	43	14110 65348	<i>Field Boundary Ditch [7014]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Duns Dike Bridge, Metheringham Delph</i>
<i>Isolated Feature</i>	44	13940 65033	<i>Field Boundary Ditch [7003]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Duns Dike Bridge, Metheringham Delph</i>
<i>Isolated Feature</i>	46	13777 64713	<i>Field Boundary Ditch [8006]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Duns Dike Bridge, Metheringham Delph</i>
<i>Isolated Feature</i>	61	12834 62238	<i>Field Boundary Ditch [8003]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Blankney Fen Farm, Blankney Farm</i>
7	71	12042 60950	Roadway	?Medieval	Linwood Moor
<i>Isolated Feature</i>	74	11771 60707	<i>Field Boundary Ditch [911]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Linwood Moor</i>
<i>Isolated Feature</i>	74	11792 60713	<i>Field Boundary Ditch [914]</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Linwood Moor</i>
<i>Isolated Feature</i>	75	11434 60536	<i>Ditch [923], probably associated with nearby farm building</i>	<i>Undated</i> <i>(?Post-Med/Mod)</i>	<i>Linwood Moor</i>
8	76 - 81	11338 60470- 11040 59812	Pottery scatter and remnant furrows	Medieval	Martin

SITE NO.	PLOT NO.	NGR (TF)	DESCRIPTION	PERIOD	LOCATION
9	88	10770 58928	Field system	Romano-British	Bogle Holt, Martin
10	109	11050 54120	Artefact scatter and buried Bronze Age soil	Late Neolithic to Bronze Age	Dorrington Fen
11	125	12600 49974	Pottery scatter, ditch and posthole	?Romano-British	Anwick Fen
12	125 - 128	12538 50138- 13150 49310	Flint scatter, Bronze Age pottery and possible blade fragment	Late Neolithic to Bronze Age	Cobbler's Lock, Anwick Fen
<i>Isolated Feature</i>	128	13125 49259	<i>Field Boundary Ditch [1715]</i>	<i>Undated (?Post-Med/Mod)</i>	<i>Cobbler's Lock, Anwick Fen</i>
<i>Isolated Feature</i>	128	12992 49068	<i>Field Boundary Ditch [1719]</i>	<i>Undated (?Post-Med/Mod)</i>	<i>Cobbler's Lock, Anwick Fen</i>
13	131	12518 48551	Ditch [1729]	Pre-13th/14th century; ?Iron Age	Ewerby
14	131- 136	12510 48542- 11464 47242	Pottery scatter and furrow remains	Medieval	Ewerby
<i>Isolated Feature</i>	132	12322 48336 & 11999 47982	<i>Two field boundary ditches [1727], [1733]. Cut into alluvium subsoil (1732)</i>	<i>Undated (?Post-Med/Mod)</i>	<i>Ewerby</i>
15	132	11900 47884	Two substantial ditches and gully	Iron Age	Ewerby
16	135	11612 47472	Settlement : ditches, pits and postholes, five roundhouse gullies	Iron Age	Ewerby
17	139	11320 47018	Settlement : ditches, gullies, pits	Iron Age	Ewerby
18	145	10647 45772	Multi-period site including Mesolithic/Neolithic/Bronze Age artefacts, Iron Age round and square barrows, Romano-British artefacts, Anglo-Saxon burials and Medieval furrow remains	Mesolithic; Neolithic; Bronze Age; Iron Age; Romano-British; Anglo-Saxon; Medieval	Kirkby la Thorpe
19	146	10526 45538	Iron Age settlement remains: ring ditch, boundary ditches, gullies and pits. Re-deposited Bronze Age pottery	Bronze Age; Iron Age	Kirkby la Thorpe
20	145 - 151	10718 45908- 09545 44428	Pottery scatter and furrow remains	Medieval	Kirkby la Thorpe
21	147 - 149	10440 45320- 10356 45090	Field system and pits	Romano-British	Kirkby la Thorpe
22	150	10200 44734	Rectilinear enclosures with settlement debris	Iron Age	Kirkby la Thorpe

**Table 2: Location of Pipeline Construction Plots**

Construction Section Number	Construction Plot Number	Route Length Per Plot (to nearest 10m, based on pipeline centreline)	NGR (centre of plot along pipeline centreline)
1	1	70	TF 1730 7610
	2	170	TF 1739 7602
	3	240	TF 1752 7586
2	4	210	TF 1751 7565
	5	150	TF 1739 7551
	6	210	TF 1726 7538
	7	270	TF 1721 7514
	8	230	TF 1718 7488
	9	460	TF 1715 7426
	10	540	TF 1720 7371
	11	330	TF 1722 7327
3	12	250	TF 1722 7298
	13	30	TF 1721 7283
	14	250	TF 1719 7268
	15	70	TF 1717 7255
4	16	130	TF 1713 7244
	17	360	TF 1708 7220
	18	140	TF 1708 7211
	19	740	TF 1708 7177
	20A	170	TF 1707 7120
	20	590	TF 1707 7070
	21	270	TF 1712 7028
5	22	560	TF 1699 6991
	23	270	TF 1662 6969
	24	110	TF 1649 6956
	25	90	TF 1643 6948
	26	150	TF 1636 6937
	27	110	TF 1629 6927
	28	130	TF 1622 6916
	29	120	TF 1616 6906
	30	600	TF 1589 6860
	31	70	TF 1574 6830
	6	32	360
33		300	TF 1553 6778
34		20	TF 1543 6764
35		110	TF 1539 6758
7	36	480	TF 1523 6732
	37	200	TF 1506 6703
	38	160	TF 1494 6691
	39	260	TF 1481 6674
	40	320	TF 1466 6648
	40A	270	TF 1452 6622
	41	250	TF 1435 6588
	42	470	TF 1419 6555
	43	50	TF 1408 6531
	44	300	TF 1400 6515

Construction Section Number	Construction Plot Number	Route Length Per Plot (to nearest 10m, based on pipeline centreline)	NGR (centre of plot along pipeline centreline)
8	45	310	TF 1385 6485
	46	190	TF 1373 6464
	47	370	TF 1365 6438
	48	110	TF 1354 6416
	49	200	TF 1361 6396
	50	130	TF 1354 6381
	51	180	TF 1347 6366
	52	170	TF 1338 6351
	53	180	TF 1331 6335
	54	110	TF 1324 6322
	55	60	TF 1321 6314
	56	180	TF 1315 6303
	57	220	TF 1360 6285
	58	140	TF 1298 6268
	59	10	TF 1299 6261
9	60	160	TF 1297 6253
	61	250	TF 1288 6234
	62	250	TF 1277 6210
	63	130	TF 1269 6191
	64	130	TF 1271 6180
	65	170	TF 1263 6167
	66	170	TF 1254 6152
	67	150	TF 1245 6137
	68	200	TF 1237 6122
	69	30	TF 1229 6113
	70	110	TF 1222 6109
	71	250	TF 1207 6098
	72	90	TF 1195 6085
	73	160	TF 1186 6077
	74	380	TF 1162 6064
10	75	130	TF 1139 6052
	76	130	TF 1131 6041
	77	130	TF 1126 6029
	78	140	TF 1117 6018
	79	80	TF 1111 6011
	80	70	TF 1105 6005
	81	230	TF 1100 5992
	82	100	TF 1100 5974
	83	200	TF 1094 5960
	84	120	TF 1087 5945
11	85	150	TF 1080 5932
	86	50	TF 1075 5923
	87	140	TF 1072 5914
	88	140	TF 1078 5901
	89	200	TF 1085 5885
	90	240	TF 1085 5860
12	91	90	TF 1084 5844
	92	110	TF 1084 5834
	93	120	TF 1083 5822
	94	280	TF 1083 5801
	95	370	TF 1087 5768
	96	390	TF 1093 5730
	97	200	TF 1097 5701
	98	140	TF 1091 5683
	99	300	TF 1096 5662
	100	240	TF 1103 5635
	101	130	TF 1108 5616
102	120	TF 1103 5606	
103	390	TF 1108 5580	

Construction Section Number	Construction Plot Number	Route Length Per Plot (to nearest 10m, based on pipeline centreline)	NGR (centre of plot along pipeline centreline)
13	104	310	TF 1114 5544
	105	290	TF 1119 5515
14	106	250	TF 1116 5484
	107	300	TF 1111 5457
	108	160	TF 1108 5435
	109	640	TF 1107 5390
15	110	220	TF 1118 5346
	111	180	TF 1124 5327
	112	370	TF 1129 5299
	113	150	TF 1134 5274
	114	100	TF 1136 5261
	115	50	TF 1137 5254
	116	290	TF 1142 5237
16	117	160	TF 1150 5214
	118	530	TF 1168 5183
	119	40	TF 1184 5160
	120	110	TF 1189 5153
	121	150	TF 1198 5144
	122	560	TF 1223 5116
	123	180	TF 1231 5081
17	124	600	TF 1243 5043
	125	590	TF 1269 4991
	126	210	TF 1302 4965
	127	200	TF 1314 4947
	128	380	TF 1307 4918
	129	390	TF 1285 4885
	130	240	TF 1262 4867
	131	300	TF 1245 4848
	132	880	TF 1204 4804
	133	140	TF 1184 4775
18	134	70	TF 1178 4764
	135	330	TF 1163 4751
	136	150	TF 1151 4731
	137	100	TF 1143 4719
	138	130	TF 1137 4710
	139	130	TF 1131 4699
19	140	200	TF 1121 4684
	141	160	TF 1121 4668
	142	460	TF 1105 4654
	143	100	TF 1085 4616
	144	240	TF 1077 4601
	145	310	TF 1064 4577
20	146	240	TF 1052 4553
	147	100	TF 1045 4534
	148	160	TF 1040 4523
	149	300	TF 1033 4501
21	150	270	TF 1011 4467
	151	470	TF 0976 4450
	152	70	TF 0951 4441
	153	170	TF 0939 4431
	154	520	TF 0927 4421
	155	190	TF 0867 4398
	156	50	TF 0859 4385
	157	220	TF 0853 4374

## Hatton to Silk Willoughby Flint by David Bonner

### Summary

*The investigations identified a small late Neolithic/Bronze Age flint scatter which might represent a specialist activity area, possibly within a larger settlement site, to the north of the River Slea (Site 10, TF 11050 45120). Excavations of a possible barrow cemetery to the south of the Slea produced late Neolithic/ Bronze Age flints probably relating to funerary activities at the site (Site 18, TF 10647 45772). These activities were preceded by a phase of Mesolithic/Neolithic activity of undetermined nature.*

### Introduction

Two hundred and thirty-three knapped flints weighing 1449g were submitted for analysis. These included seventeen flints found by fieldwalking in 1994, twelve flints found by field survey in 1998, eight flints from trench evaluation and a further 196 found during a watching brief along the pipeline. For ease of reference throughout this report, the context numbers are prefixed by an alphabetic code: FW = fieldwalking 1994, FS = fieldwalking survey 1998, E = evaluation work 1998 and WB = watching brief 1998.

Most of the flints come from two fields, plots 109 (Site 10) and 145 (Site 18), and accordingly are treated as single site assemblages. The remainder of the material is too small in number and wide in provenance for detailed analysis, although general observations are noted.

This report is divided into three main sections: *Plot 109 (Site 10)*, *Plot 145 (Site 18)*, and *Background Activity*. Within each section observations have been made regarding the choice of raw materials, the condition, the morphology of the assemblage, and the date range. There is an overall concluding comment.

### Plot 109 (Site 10), TF 11050 54120

Forty-seven knapped flints forming an apparent concentration were recovered from this plot during the archaeological investigations. The field, which is bounded on two sides by the Dorrington Dike is located over Jurassic clay, close to the River Slea, on the western edge of the Fens. Peat is mapped over this area, but none was found, suggesting that it has been eroded away.

### Raw Materials

Macroscopic analysis on the basis of colour, hue, quality and finish has identified four main categories of flint type (in order of frequency):

- Mid yellow-brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (39%)
- Mid to dark grey opaque material with pale grey cherty mottles and a semi-gloss finish (29%)
- Indeterminable material, usually with a high level of patination, or sometimes burnt (18%)
- Mid to dark grey-brown opaque material with yellow-brown to olive-brown cherty mottles and a matt finish (14%)

The first two groups account for over two-thirds of the flint. Persistently thin, eroded cortex indicates that most (if not all) of the flint is derived. The most likely source of this material is the terrace gravels of the Rivers Slea, Witham and Bain, and possibly small patches of sand and gravel around Sleaford, Billingham and Martin.

### *Condition of Flint*

The assemblage is varied in terms of abrasion, including a range of relatively fresh to moderately worn material, which could be accounted for in terms of longevity of time within the ploughsoil. Only 14% of flakes were broken, suggesting a low level of agricultural landuse. A small number of patinated pieces (18%) have also been identified.

### *Morphology of the Flint Assemblage*

The flints have been divided into tools, cores and flakes (Tables 1-3).

### Tools

Tools have been distinguished from the debitage by macroscopic examination for 'retouch', the deliberate alteration of the flint edge. Of fourteen tools, all are scrapers except for one cutting flake (Table 1).

The scrapers include side, end and side/end types of varying size. Retouch is present on both the dorsal and ventral surfaces, but none of the scrapers are bifacially worked. The scrapers appear to date to the Late Neolithic/ Bronze Age, although the invasive flaking of one core scraper hints of a more restricted date range in the late Neolithic/ *early* Bronze Age. The bias for tools suggests the possibility of specialist activities.

The cutting flake is likely to be earlier in date than the scrapers. It is a ?Late Neolithic denticulate-like tool.

### Cores

Seven cores with an average weight of 33g were found (Table 2). They include cores of single, double and multi-platform type. All of them are moderately to heavily flaked, some have been flaked to near-exhaustion confirming that resources were limited. The cores do not exhibit any diagnostic traits, but from their general appearance are likely to be late Neolithic/Bronze Age.

### Flakes

There are twenty-five waste flakes. The flakes have been subdivided into primary, secondary and tertiary flakes on the basis of the degree of cortication of the dorsal surface (Table 3). More than three-quarters are secondary flakes, and all but one of the remainder are tertiary flakes. Most flakes exhibit the traits of hard-hammer manufacture.

Metrical analysis, involving the measuring of length and breadth was undertaken:

Breadth/length ratios	Number of complete flints	% total
0.4-0.6	4	25%
0.6-0.8	5	31%
0.8-1.0	1	6%
>1.0	6	38%

Table showing the percentage of complete flakes within each B/L ratio

This distribution of flake size accords most closely with those of Late Neolithic/Bronze Age industries (Pitts 1978), and this result correlates with the macroscopic examination, which identified mostly squat-shaped flakes, and only one narrow flake of possibly Neolithic date.

### *Discussion*

The small group of flint from Plot 109 appears to represent a distinct late Neolithic/Bronze Age assemblage. An apparent positive bias for tools may reflect specialist activities at the site (or the

sampled part of the site), and is likely to be the result of settlement. This theory is further supported by the coincidence of domestic pottery and flint at the site. Since the flints and pottery originate from a buried soil which is being actively truncated, the assemblage may eventually be entirely incorporated into the ploughsoil.

The relatively high number of cores is at odds with the low number of primary flakes, and may indicate that the sample of the site is unrepresentative.

#### **Plot 145 (Site 18), TF 10647 45772**

One hundred and thirty-eight knapped flints were recovered during an archaeological excavation in this field. The site is located on heathland over glacial till, close to the River Slea, to the north of the Kesteven Uplands.

#### *Raw Materials*

Five main categories of flint type have been identified (in order of frequency):

- Indeterminable material, usually with a high level of patination, or sometimes burnt (53%)
- Pale to mid yellow-brown semi-translucent material with occasional opaque mottles and a dusky or semi-gloss finish (26%)
- Mid to dark grey opaque material with pale grey cherty mottles and a semi-gloss finish (13%)
- Mid to dark grey-brown opaque material with yellow-brown to olive-brown cherty mottles and a matt finish (6%)
- Mid honey-brown semi translucent material with a semi-gloss finish (2%)

Persistently thin, eroded cortex indicates that most (if not all) of the flint is derived. The most likely source of this material is the terrace gravels of the Rivers Slea, Witham and Bain, and possibly small patches of sand and gravel around Sleaford and Heckington.

#### *Condition of Flint*

The assemblage is varied in terms of abrasion; many examples are relatively fresh, but others exhibit typical wear traits reflecting that they have been within the ploughsoil for some time. Over one third (35%) of flakes are broken, suggesting intensive agricultural landuse.

An exceptionally high number of flints (51%) exhibit a surface patina, of which most are fully patinated. Interestingly, patination appears to favour the older flints, suggesting that this process is chronologically significant at the site; all twenty-two waste flakes believed to be late Neolithic/Bronze Age are unpatinated, whilst of the twenty-six flakes/blades believed to be Mesolithic/Neolithic, the majority (70%) exhibit some degree of patination.

#### *Morphology of the Flint Assemblage*

The flints have been divided into tools, cores and flakes (Tables 1-3).

#### Tools

Of nine tools, all are scrapers, apart from one notched flake and one cutting flake (Table 1). The scrapers include side and side/end scrapers. Retouch is present on both the dorsal and ventral surfaces, but only one is bifacially worked. One scraper incorporates a small side notch. A number of the scrapers are probably late Neolithic/Bronze Age in date. Most scrapers exhibit no diagnostic traits to date them.

The cutting flake has two cutting edges, one of which is saw-like. The notched flake is unremarkable.

#### Cores

Thirteen cores with an average weight of 27g were found (Table 2). Excepting two heavy outliers, the average weight is 16g. The cores include single, double and multi-platform types. All of them are

moderately to heavily flaked, some have been flaked to near-exhaustion confirming that resources were limited. Some of the cores exhibit diagnostic flaking traits; two are probably Mesolithic/early Neolithic in date and two are probably late Neolithic/Bronze Age.

### Flakes

There are one hundred and sixteen waste flakes (Table 3). There are almost identical numbers of secondary and tertiary flakes, and these account for all but two primary flakes. Most flakes exhibit the traits of hard-hammer manufacture.

Metrical analysis, involving the measuring of length and breadth was undertaken:

Breadth/length ratios	Number of complete flints	% total
0.2-0.4	10	12%
0.4-0.6	25	30%
0.6-0.8	19	23%
0.8-1.0	12	15%
>1.0	16	20%

Table showing the percentage of complete flakes within each B/L ratio

This distribution of flake size accords most closely with that of Late Mesolithic/early Neolithic industries (Pitts 1978). This result broadly correlates with the macroscopic examination, which shows that 25% of all flakes are narrow flakes and blades. Furthermore, a significant number of probable blades (the most vulnerable group) were broken (see *Condition of Flint* above) and could not be measured for breadth/length ratios, thereby skewing the results of the statistical analysis.

However, a significant number of squat-shaped flakes (11%) are also present suggesting that the assemblage possibly contains components of Late Mesolithic/early Neolithic and late Neolithic/Bronze Age industries.

The remaining two thirds of the flakes had insufficient traits to determine their date.

### *Distribution of material*

Many flints came from unstratified or residual contexts either as casual surface finds, surface cleaning finds or from Medieval furrows, which truncated the site. However a number of significant dateable finds were made, and these are discussed below:

A series of sections excavated across Ring Ditch 1990 produced twenty-five flints, of which eight are diagnostic. These include a possibly late Mesolithic/Neolithic core from the primary fill (2382), and a possibly late Neolithic/Bronze Age scraper from one of the tertiary fills. Surface cleaning also produced a further five possibly Mesolithic/?early Neolithic flakes and a probable late Neolithic/Bronze Age scraper.

Twenty-two flints were recovered from Ring Ditch 1993. The primary fill (2336) produced a possibly Mesolithic/?early Neolithic flake, whilst the upper fill (1994) contained an apparently mixed assemblage including ten narrow flakes/blades and one core of probable Mesolithic/?early Neolithic date, and seven late Neolithic/Bronze Age squat-shaped flakes. Significantly perhaps, all of the earlier flakes were patinated, whilst none of the later ones exhibited any patination, thereby giving further support to the theory that patination is chronologically diagnostic at the site.

Five graves associated with the ring ditches produced flint. Grave 1987 and Grave 2304 each contained one flake of possibly Mesolithic/?early Neolithic date. Grave 1996 contained a mixed bag of flint; there were two flakes of possibly Mesolithic/?early Neolithic date, and two flakes and a

scraper of probably late Neolithic/*early* Bronze Age. Another grave (2325) contained four flakes of probably late Neolithic/Bronze Age date. An undeterminable core came from Grave 1978.

Other significant finds include a possibly Mesolithic blade fragment and a late Neolithic/ Bronze Age core from the fill of Hollow 1967, and a single possibly Mesolithic/?early Neolithic flake from the ditch of a possible square barrow (2332).

#### *Discussion*

The group of flint from Plot 145 appears to represent a mixed assemblage; there is a significant late Mesolithic/Neolithic component (most notably reflected in the waste flakes), and also a strong late Neolithic/Bronze Age flavour to the assemblage. In some cases (most notably in the upper fills of ring ditches 1990 and 1993) these components are found together, suggesting an element of mixing at the site. The evidence could be interpreted as either a phase of late Mesolithic/Neolithic *feature digging* followed by a phase of late Neolithic/Bronze Age *activity*, or more probably, a phase of late Mesolithic/Neolithic *activity* followed by a phase of late Neolithic/Bronze Age *feature digging*. The latter seems more likely, bearing in mind the nature of the ring ditch features concerned. A significant amount of Bronze Age pottery was additionally found in association with the flints.

It is unclear why so many cores are present at the site when there is a virtual total absence of primary flakes. This implies discard away from areas of core procurement and flaking, and raises the question as to why they were brought to this particular (part of the) site.

#### **Background Activity**

In addition to the flint scatters discussed above, a significant number of other flints were found over twenty-five different fields, along the thirty-eight kilometre length of the route and they represent background indications of mostly Late Neolithic/Bronze Age, and some Mesolithic/Neolithic activity.

There is a detectable increase in background noise around the aforementioned site in Plot 145; a late Neolithic/Bronze Age scraper and two waste flakes were found to the south (Plots 146-150), and a ?Mesolithic scraper and three Mesolithic blades, and one late Neolithic/Bronze Age scraper came from fields to the immediate north (Plots 142-144). A little further north (Plots 124-139) were found a further twelve flints including a Mesolithic/early Neolithic cutting flake and blade, a Neolithic scraper and four late Neolithic/Bronze Age tools.

Two other slight concentrations of activity are apparent at the extreme north end of the pipeline; Plots 8-10 produced thirteen flints including two late Neolithic/Bronze Age scrapers, a possibly Neolithic scraper and a Mesolithic blade; Plots 14-20 produced seven flints including a Mesolithic notched flake and two late Neolithic/Bronze Age scrapers.

#### **Conclusion**

The flint shows variation in distribution along the pipeline. The vast majority came from the southernmost third of the route within the valley of the River Slea.

Two significant concentrations were found; a small, late Neolithic/Bronze Age surface scatter, possibly the result of settlement to the north of the Slea (Plot 109), and a possible barrow cemetery to the south of the Slea (Plot 145), which produced evidence of an undetermined phase of Mesolithic/Neolithic activity, followed by a phase of late Neolithic/Bronze Age activity.

These two sites clearly demonstrate that the Slea valley was exploited for settlement (and funerary purposes) throughout the late Mesolithic, Neolithic and Bronze Age periods.

Excepting these two sites (Plots 109 and 145), the density of recovered flint is very low, reflecting a ?lack of 'visible' prehistoric activity across those parts of The Fens and Clay Vale crossed by the

pipeline. Given that so few prehistoric finds have been made previously in these areas, those flints found by the current survey, although low in number, are significant.

All illustrated flints are highlighted in bold and assigned an individual illustration number.

**Table 1. Tool Quantification Table**

Sectn	Plot	Context	Class	Notes	Date
1	2	FS 151	scraper	bkn, V-ret: steep & some semi-inv ret	?LN/EBA
<b>1</b>	<b>2</b>	<b>WB u/s</b>	<b>borer</b>	<b>retouch on dorsal surface</b>	<b>preh Illus. 1</b>
<b>1</b>	<b>3</b>	<b>WB u/s</b>	<b>scraper</b>	<b>invasive retouch</b>	<b>?LN Illus. 2</b>
2	5	FS 104	misc.	D-ret	LN/BA
2	5	FS 201	side scraper	tiny V-ret, hh	?LN/BA
2	5	FS 52	cutting flake	bkn, semi-inv V-ret	?LN/EBA
2	8	WB u/s	?scraper	none flake	preh
2	8	WB u/s	cutting flake	nibbled convex edge	preh
2	9	FS 1	?piercer	bkn, V-ret	?LN/BA
2	9	WB u/s	scraper	bifacial retouch, large flakes removed on ventral surface, retouch along dorsal surface of one edge	preh
<b>2</b>	<b>9</b>	<b>WB u/s</b>	<b>side/end scraper</b>	<b>long flake, retouch on dorsal surface</b>	<b>?EM Illus. 3</b>
2	10	WB u/s	side scraper		LN/BA
2	10	WB u/s	side scraper		LN/BA
4	14	WB u/s	side/end scraper	steep retouch on end, moderate edge wear	LN/BA
4	20	WB 4296	scraper	none flake, chert	?LN/BA
5	27	FS 156	?cutting flake	tiny steep V-ret	LN/BA
9	71	WB u/s	borer	bifacial retouch	?LN/BA
12	101	FS 216	cutting flake	bkn, semi-inv V-ret, heavily utilised	L.NEO
14	109	FS 166	scraper	hh steep V-ret	?LN/BA
14	109	FS 167	scraper	V-ret	?LN/BA
14	109	FS 170	cutting flake	bkn, denticulate- like V-ret	?L.NEO
14	109	FS 65	scraper	V-ret	?LN/BA
<b>14</b>	<b>109</b>	<b>FW 14</b>	<b>scraper</b>	<b>invasive retouch, heavy edge wear</b>	<b>?LN/EBA Illus. 4</b>
14	109	FW 15i	side scraper		?LN/BA
14	109	FW 6ii	end scraper	retouch at bulbar end	?LN/BA
14	109	FW 9	side/end scraper	steep retouch on three sides	?LN/BA
14	109	WB 166	side scraper	small steep retouch, almost a small notch	?LN/BA
14	109	WB 167	side/ end scraper		?LN/BA
14	109	WB 170	end scraper	semi-invasive retouch	?LN/BA
14	109	WB 65	side scraper	non flake, large dorsal flaking, heavy use	?LN/BA
14	109	WB u/s	Scraper	Ventral retouch	?LN/BA
<b>14</b>	<b>109</b>	<b>WB u/s</b>	<b>Side/ end scraper</b>	<b>retouch on dorsal surface of three sides</b>	<b>?LN/BA Illus. 5</b>
15	110	WB u/s	notched flake	retouch at proximal end on dorsal surface	Meso
16	118	FS 66	knife	large bifacial inv. V-ret with later retouch	E-M NEO

Sectn	Plot	Context	Class	Notes	Date
				thru pat.	
17	124	WB u/s	side/end scraper	shallow, semi invasive retouch, broken	LN/EBA
17	124	WB u/s	notched ?flake	large notch on ?shattered piece	?LN/BA
<del>17</del>	124	WB u/s	cutting flake	nibbled edge	?LN/BA
17	125	FS 181	scraper	steep V-ret	LN/BA
17	125	FS 186	cutting flake	acute semi-inv V-ret plus steep bluntn ret	LN/EBA
17	125	FS 190	cutting flake	semi-inv acute V-ret	?LN/EBA
17	125	FS 68	?scraper	bkn, V-ret	?LN/EBA
17	125	FS 71	scraper	V-ret	LN/BA
17	126	WB u/s	side scraper	broken, patinated,	?Neo
17	127	FS 14	cutting flake	narrow fl with steep bluntn V-ret and util edge	LMESO/EN
17	129	FS 255	notched flake	bkn, semi-inv V-ret	LN/EBA
17	131	FS 241	notched flake	1 notch on V side, 2 notches on D side	LN/BA
17	131	FS 242	side scraper	semi-inv V-ret	?LN/EBA
17	132	FS 82	scraper	semi-inv V-ret	LN/EBA
<del>17</del>	132	WB u/s	cutting flake	blunting retouch along edge and proximal end, edge use on opposite side	Meso/ EN
<b>18</b>	<b>135</b>	<b>WB u/s</b>	<b>?scraper</b>	<b>bifacial retouch</b>	<b>?Neo Illus. 6</b>
18	139	WB 1891	side/end scraper	semi-invasive retouch on dorsal surface, P. patinated	LN/BA
19	142	WB u/s	side/end scraper	heavy edge wear	?LN/BA
19	144	E 003	end scraper	invasive pressure flaking on dorsal surface	?Meso
19	145	FS 248	scraper	semi-inv V-ret	LN/EBA
19	145	WB 1900	Side/ end scraper	irregular steep retouch on dorsal surface	LN/BA
19	145	WB 1900	side/ end scraper with notch	45 degree retouch on dorsal surface with heavy edge wear; small notch to one side	LN/BA Illus. 7
19	145	WB 1986	?Side/end scraper	re-used flake	preh
19	145	WB 1986	cutting flake	Ventral retouch to create robust cutting edge; bifacial retouch to create tooth edge on opposite side	preh
19	145	WB 1991	side scraper	ventral retouch along one side	LN/BA
19	145	WB 1997	Disc scraper	dorsal retouch , on non-flake	?LN/EBA Illus. 8
19	145	WB 2312	Scraper	45 degree dorsal retouch	preh
19	145	WB 2312	Notched flake	steep retouch on dorsal surface to create a small notch	
19	145	WB 2380	scraper	semi-invasive retouch on dorsal surface	?LN/BA
19	149	E 002	end scraper	large flaking, heavy use	?LN/BA

Table 2. Core Quantification Table

Sectn	Plot	Context	Plats	Expl	Wt	Note	Date
1	3	WB u/s	2	M	17g	core flake	preh
2	9	FS 54	2	M	30g		LN/BA
5	30	FS 106	2	H	12g	narrow fl scars	LMESO/EN
5	30	FS 207	M	H	12g		LN/BA
9	80	FS 214	opp	M	28g	?blade core	MESO
14	109	FS 165	M	H	35g		LN/BA
14	109	FS 168	M	H	4g		?MESO/EN
14	109	FS 169	M	M	42g	PP, some narrow fl scars	?LMESO/EN
14	109	FW 6i	1	H	12g		preh
14	109	WB 1405	1	M	62g	core fragment	?LN/BA
14	109	WB 1405	2	M	40g	core fragment	?LN/BA
14	109	WB u/s	multi	H	38g	crude flaking on gravel flint	?LN/BA
16	118	FS 174	1	L	10g	misc ret	LN/BA
17	125	FS 69	opp	M	18g	narrow fl scars	LMESO/EN
17	126	FS 192	1	H	14g		LN/BA
17	131	FS 85	1	M	26g	misc ret	?LN/BA
17	132	FS 81	1	H	30g		LN/BA
19	145	WB 1942	?	?	6g	?core fragment, burnt	preh
19	145	WB 1968	1	M	32g		?LN/BA
19	145	WB 1979	2	M	14g	core fragment ?with misc. retouch	preh
19	145	WB 1986	?	H	8g	core fragment	preh
19	145	WB 1994	2	H	7g		?Meso/E.Neo
19	145	WB 1997	multi	H	39g		?LN/BA
19	145	WB 2312	2	M	5g	core fragment	preh
19	145	WB 2326	multi	H	12g	core fragment	preh
19	145	WB 2326	multi	H	12g	core fragment	preh
19	145	WB 2373	multi	H	8g	core fragment	preh
19	145	WB 2382	multi	H	71g	some blade scars, Pat	?L.Meso/Neo Illus. 9
19	145	WB u/s	2	M	111g		LN/BA
19	145	WB u/s	1	H	32g		?LN?BA

[Pl ats= no. platforms: opp = 2 opposing platforms; Expl = exploitation: H = high; Col = colour; hh = hard hammer]

Table 3. Flake Quantification Table

Sectn	Plot	Context	C	B	P	Form	Notes	Date
1	2	FS 51	S	-	-	inter		LN/BA
2	6	WB u/s	S			inter		preh
2	7	FS 152	S	-	P	squat		LN/BA
2	7	FS 202	S	Y	-	squat	hh	LN/BA
2	7	FS 203	S	Y	-	inter		LN/BA
2	7	FS 53	P	Y	-	squat		LN/BA
2	8	FS 153	T	-	-	inter		LN/BA
2	8	WB u/s	S			long	blade	?Meso
2	8	WB u/s	S			inter		preh

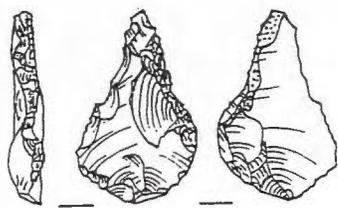
Sectn	Plot	Context	C	B	P	Form	Notes	Date
2	8	WB u/s	P			long		preh
2	8	WB u/s	S	Y		squat		preh
2	9	FS 154	S	Y	-	inter		LN/BA
2	9	FS 3	P	-		squat		LN/BA
2	10	WB u/s	S	Y		inter		preh
2	10	WB u/s	S			long		preh
2	10	WB u/s	S			inter		preh
3	11	FS 105	S	-	-	inter		LN/BA
3	11	FS 206	S	-	-	squat		LN/BA
3	14	WB u/s	S	Y		inter		preh
3	14	WB u/s	S			inter		preh
4	17	WB u/s	S	Y		long		preh
4	19	WB u/s	S			inter		preh
4	20	FS 56	S	-	P	long	narrow fl scars	LMESO/EN
12	103	FS 58	T	Y	-	blade	bkn blade	MESO
14	109	FS 10	S	-	-	inter		LN/BA
14	109	FS 10	S			15/22		LN/BA
14	109	FS 219	P	Y	-	inter		LN/BA
14	109	FS 219	P	Y		?inter		LN/BA
14	109	FS 220	S	-	-	squat		LN/BA
14	109	FS 220	S			15/22		LN/BA
14	109	FS 62	S	-	-	squat		LN/BA
14	109	FS 62	S			21/42		LN/BA
14	109	FW 1	S			16/35		preh
14	109	FW 10	S			22/15		preh
14	109	FW 11	T	Y	P	20/29	frost shattered	preh
14	109	FW 12	S			15/25		preh
14	109	FW 13	S		P	16/32		?Neo
14	109	FW 15ii	S	Y		?		preh
14	109	FW 16	S			27/20		?LN/BA
14	109	FW 2	S			17/40		preh
14	109	FW 3	T	Y		?	burnt	preh
14	109	FW 5	T		PP	22/30	very fresh	preh
14	109	FW 7	S	Y		22/18		preh
14	109	FW 8	S			19/13		preh
14	109	WB 1405	S			30/40		?LN/BA
14	109	WB 1405	S			30/20		?LN/BA
14	109	WB 1405	S			24/24		?LN/BA
14	109	WB u/s	T			32/38		?LN/BA
14	109	WB u/s	S	Y		?		prehistoric
16	118	FS 226	S	-	PP	squat		LN/BA
16	122	FS 227	P	-	-	long		LN/BA
17	124	WB u/s	S	Y		?squat		preh
17	125	FS 118	S	Y	-	squat		LN/BA
17	125	FS 180	S	-	-	squat		LN/BA
17	125	FS 182	S	-	PP	squat	hh	LN/BA
17	125	FS 183	S	-	-	inter		LN/BA
17	125	FS 184	T	Y	-	inter		LN/BA
17	125	FS 188	S	-	-	squat	burnt	LN/BA
17	125	FS 189	T	-	-	long		LN/BA

Sectn	Plot	Context	C	B	P	Form	Notes	Date
17	125	FS 232	S	-	P	inter		LN/BA
17	125	FS 233	S	-	P	long	pebble	LMESO/EN
17	125	FS 235	S	Y	PP	squat		LN/BA
17	125	FS 67	T	Y	-	squat		LN/BA
17	125	FS 73	S	Y	-	inter		LN/BA
17	126	FS 191	T	Y	P	long	narrow fl scars	LMESO/EN
17	126	WB u/s	T			inter		preh
17	126	WB u/s	S	Y		?		preh
17	126	WB u/s	T			inter		preh
17	127	FS 193	S	-	-	squat		LN/BA
17	127	FS 194	P	Y	P	long		LN/BA
17	127	FS 195	S	Y	PP	inter		LN/BA
17	127	FS 76	S	-	-	squat		LN/BA
17	128	FS 130	S	-	-	squat		LN/BA
17	131	FS 253	T	-	PP	squat		LN/BA
17	132	FS 15	P	Y	-	squat		LN/BA
17	132	FS 240	S	-	PP	squat		LN/BA
17	132	WB u/s	T		P	long	blade	Meso
18	135	WB 1857	T			long	blade	Meso
19	144	E 002	P			inter		preh
19	144	E 003	T			long	blade	?Meso
19	144	E 003	T			long	blade	?Meso
19	144	E 003	T	Y		long	blade	?Meso
19	144	E 008	S			inter		preh
19	145	WB 1900	S			23/41		preh
19	145	WB 1900	T		P	27/47		?E.prehist
19	145	WB 1900	S		P	25/80		?E.prehist
19	145	WB 1900	T		P	7/14	tiny flake	preh
19	145	WB 1900	T			22/26		preh
19	145	WB 1900	S			8/17		preh
19	145	WB 1905	S		P	18/35		prh
19	145	WB 1916	T			23/17	shattered piece	preh
19	145	WB 1930	S			10/30		preh
19	145	WB 1930	T			21/13		preh
19	145	WB 1968	S	Y		?		preh
19	145	WB 1968	S	Y		?	?blade fragment	?Meso
19	145	WB 1968	S			21/37		preh
19	145	WB 1968	T	Y		?		preh
19	145	WB 1968	S		PP	14/33		preh
19	145	WB 1979	S	Y		?		preh
19	145	WB 1979	T		P	11/24		preh
19	145	WB 1979	P			37/22	burnt	preh
19	145	WB 1986	S			10/17	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1986	T		PP	10/29	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1986	T	Y	P	?long	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1986	T	Y		?long	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1986	S	Y	PP	?inter		preh
19	145	WB 1988	S			11/13		preh
19	145	WB 1988	S			22/21		preh
19	145	WB 1988	T			9/22	tiny flake scars	preh
19	145	WB 1988	T	Y	P	?long	narrow flake	?Meso/ E.Neo

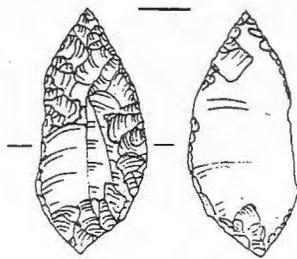
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19	145	WB 1991	P			12/28		preh
19	145	WB 1991	S	Y		?		preh
19	145	WB 1991	S			14/19		preh
19	145	WB 1991	T			25/25		preh
19	145	WB 1991	T		P	17/25		?Meso/ E.Neo
19	145	WB 1991	S	Y		?long		?Meso/ E.Neo
19	145	WB 1991	T		P	22/40		?Meso/ E.Neo
19	145	WB 1991	T	Y	P	?long		?Meso/ E.Neo
19	145	WB 1991	T	Y	PP	?		?Meso/ E.Neo
19	145	WB 1994	S	Y		?inter		?LN/BA
19	145	WB 1994	T			13/15		?LN/BA
19	145	WB 1994	S			15/20		?LN/BA
19	145	WB 1994	S			18/22		?LN/BA
19	145	WB 1994	S			16/24		?LN/BA
19	145	WB 1994	S			16/20		?LN/BA
19	145	WB 1994	S			20/22		?LN/BA
19	145	WB 1994	S		PP	20/32		preh
19	145	WB 1994	T		PP	13/26		preh
19	145	WB 1994	T		P	12/24		preh
19	145	WB 1994	S		P	10/25		preh
19	145	WB 1994	T		P	10/35	narrow flake scars	?Meso/ E.Neo
19	145	WB 1994	T		P	10/30	narrow flake scars	?Meso/ E.Neo
19	145	WB 1994	T	Y	P	?long	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1994	S	Y	P	?long	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1994	S	Y	PP	?long	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1994	T	Y	PP	?long	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1994	T	Y	P	?long	?blade/ narrow flake	?Meso/ E.Neo
19	145	WB 1994	T		P	12/26	bladelet	?Meso/ E.Neo
19	145	WB 1994	T	Y	P	?inter		?Meso/ E.Neo
19	145	WB 1994	T		P	18/21		?Meso/ E.Neo
19	145	WB 1997	S			10/20		?LN/BA
19	145	WB 1997	S			30/20		?LN/BA
19	145	WB 1997	T	Y		squat		preh
19	145	WB 1997	T		P	18/12		E.preh
19	145	WB 1997	T	Y	P	20/20		preh
19	145	WB 1997	T		PP	11/20		preh
19	145	WB 1997	T	Y	PP	?inter		preh
19	145	WB 1997	S	Y	P	?inter		preh
19	145	WB 1997	S	Y	P	?inter		preh
19	145	WB 1997	T	Y	PP	8/26		?Meso/ E.Neo
19	145	WB 1997	T		P	7/19		preh
19	145	WB 1997	S			10/12		preh
19	145	WB 1997	T			15/18		preh
19	145	WB 1997	T		PP	9/10		preh
19	145	WB 1997	T		PP	8/10		preh
19	145	WB 2303	S			43/27		preh
19	145	WB 2303	T			12/23		preh
19	145	WB 2305	T		P	8/33		?Meso
19	145	WB 2307	S			17/25		preh
19	145	WB 2307	T		P	13/23		preh
19	145	WB 2307	S	Y	P	?		preh

Sectn	Plot	Context	C	B	P	Form	Notes	Date
19	145	WB 2307	S			15/17		preh
19	145	WB 2312	S		PP	16/27	thinning flake	preh
19	145	WB 2312	T		PP	?		?Meso/E.Neo
19	145	WB 2312	S	Y	PP	6/17		preh
19	145	WB 2326	S			29/21		preh
19	145	WB 2326	S			15/25		preh
19	145	WB 2326	S			27/21	burnt	?LN/BA
19	145	WB 2326	S			32/12		?LN/BA
19	145	WB 2326	S			21/19		?LN/BA
19	145	WB 2326	S			20/17		?LN/BA
19	145	WB 2326	S			14/24		preh
19	145	WB 2326	S	Y	P	?		preh
19	145	WB 2326	S		P	8/21		preh
19	145	WB 2326	S			9/12		preh
19	145	WB 2326	T		P	10/15		preh
19	145	WB 2326	S			8/15		preh
19	145	WB 2326	T			8/12		preh
19	145	WB 2326	T		P	28/17		preh
19	145	WB 2333	T	Y	P	?	narrow flake	?Meso/E.Neo
19	145	WB 2336	S	Y		?		?Meso/E.Neo
19	145	WB 2336	S		P	16/27		preh
19	145	WB 2336	S		P	20/24		preh
19	145	WB 2336	S	Y	P	?		preh
19	145	WB 2336	S	Y	P	?		preh
19	145	WB 2336	T	Y		?		preh
19	145	WB 2338	T		P	7/11		preh
19	145	WB 2345	T	Y	P	?		preh
19	145	WB 2353	S	Y		?	burnt	preh
19	145	WB 2353	T			20/20		preh
19	145	WB 2373	T	Y		?		preh
19	145	WB 2373	S	Y		?		preh
19	145	WB 2374	T	Y	P	?long		preh
19	145	WB 2380	S			27/41		preh
19	145	WB 2381	S		P	11/29		preh
19	145	WB 2382	S		P	13/24		preh
19	145	WB 2382	T	Y	PP	?		preh
19	145	WB 2382	T	Y		?		preh
19	145	WB 2382	S	Y	PP	?		preh
19	146	E 002	S	Y		inter		preh
19	146	WB 2417	T	Y		long	burnt	preh
20	149	WB 2038	T		P	inter		preh
20	150	WB 2550	S	Y	PP	?	?blade	?Meso
20	150	WB u/s	T			inter		preh
20	73	WB u/s	T	Y	P	long	blade	Meso

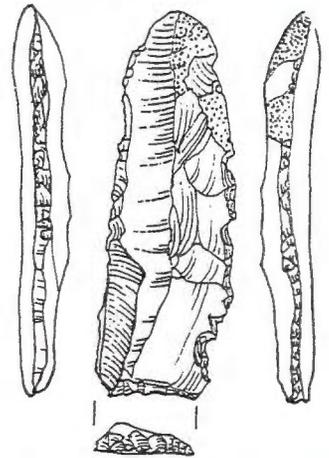
[C = class: P = primary, S = secondary, T = Tertiary, B = broken; P = patination]



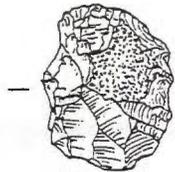
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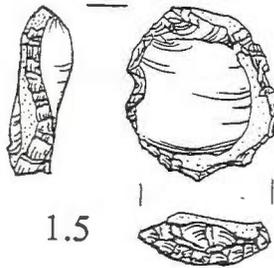
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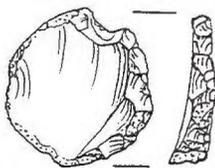
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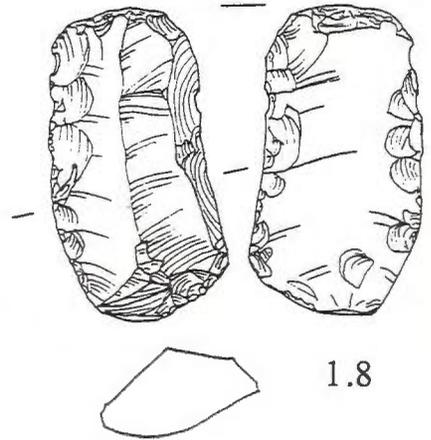
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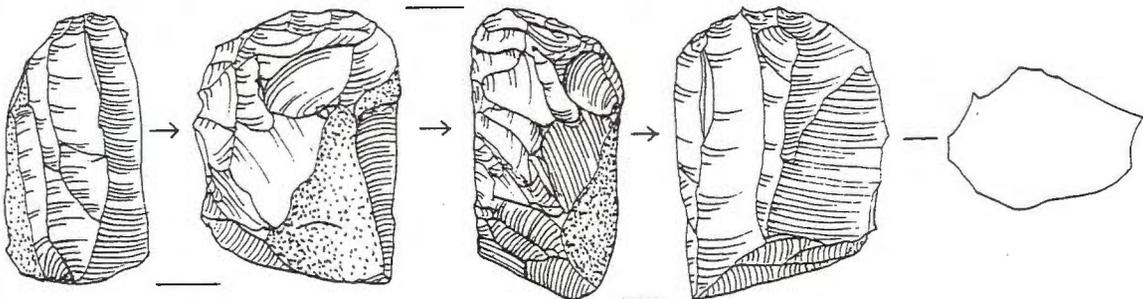
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1.7



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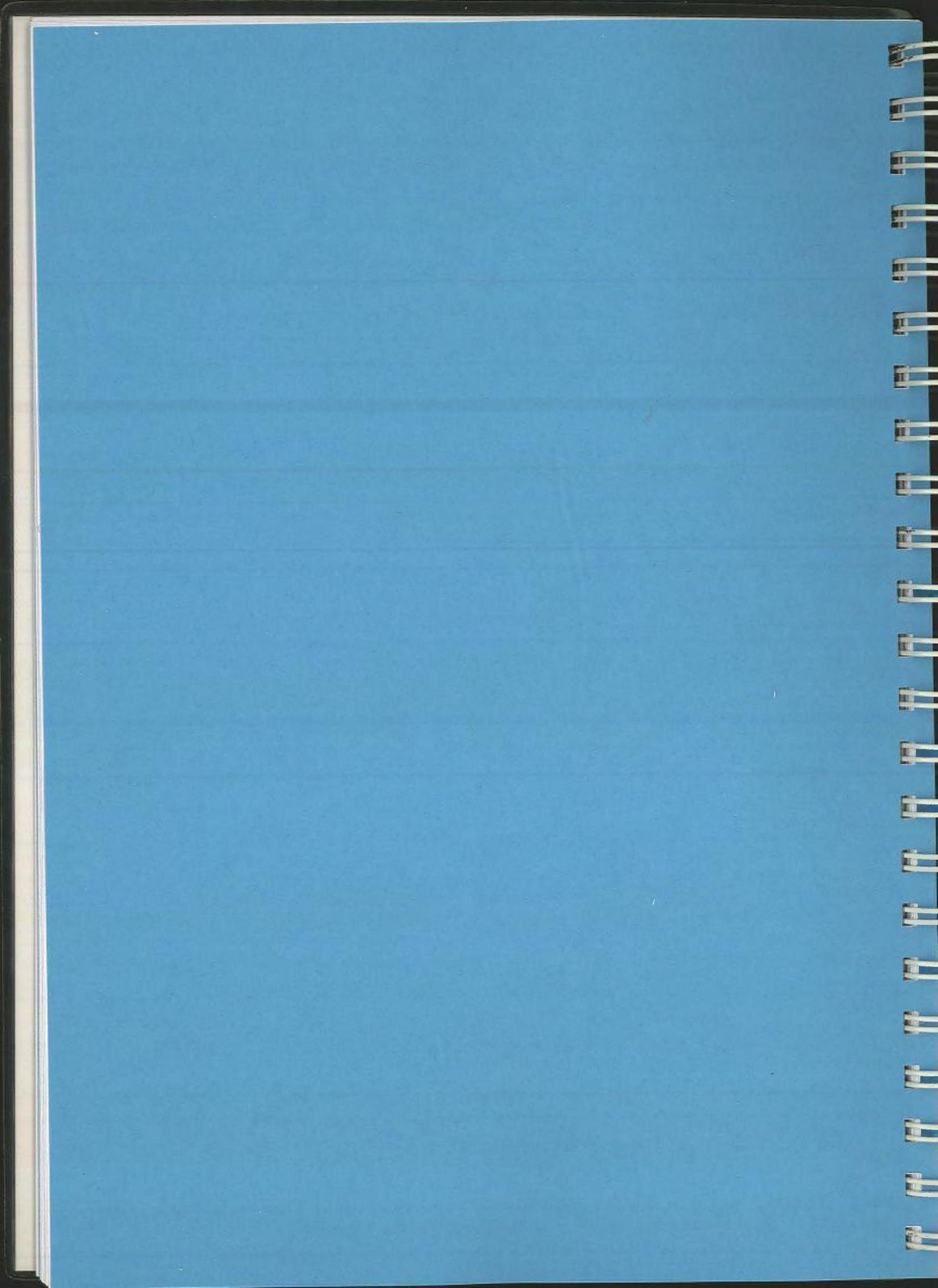


1.9

Flint Illustrations, 1.1-1.9 [Scale 2:3]

**APPENDIX 2**

**Bronze Age Pottery**  
**Dr. C. Allen**



**HATTON TO SILK WILLOUGHBY GAS PIPELINE**

**HWP 98**

**REPORT ON BRONZE AGE POTTERY**

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## REPORT ON BRONZE AGE POTTERY

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## HATTON TO SILK WILLOUGHBY GAS PIPELINE

HWP 98

## REPORT ON BRONZE AGE POTTERY

**1 Introduction**

During the course of excavations in advance of a proposed gas pipeline, Bronze Age pottery was uncovered at nine separate locations along the route. These areas are identified by the following construction section/plot references: 14/109, 15/113, 16/118, 16/122, 17/126, 17/128, 19/145, 19/146 and 21/151. The contexts in which the pottery was found are described below.

**2 Quantity**

A total of 101 sherds of prehistoric pottery were found at these locations, with a total weight of 1.893 kg. The sherds are detailed in the *Catalogue* given in Appendix I at the end of this report.

**3 Fabrics**

Five fabric types were apparent, three of which (1, 2 and 4), contain grog (pre-existing fired and crushed pottery), and three fabrics have a background of shelly material (2, 3 and 5). All contain quartz in varying quantities, as described below.

Inclusions in the pottery fabrics are indicated by the following codes:

*Type:* GR, grog: SH, shelly (probably fossil) material or voids indicating the former presence of shell: QU, quartz

*Quantity:* R, Rare - less than 3%: S, sparse - 3 to 9%:  
M, Moderate - 10 to 19%:

*Modal Size:* F, Fine - less than 0.25mm: M, Medium - 0.25 to 1.00mm:  
C, Coarse - 1.00 - 3.00mm: V, Very Coarse - over 3mm.

**1 GRMC/QUF: 12 sherds, 96g.**

This fabric represents 20% of the total pottery by weight, and is common at locations 15, 16, and 19. The clay contains a moderate amount of poorly sorted and angular grog of coarse size, together with a rare amount of rounded and well sorted fine quartz. The exterior of the sherds is orange and buff colour, the interior is buff and brown and the core is dark grey and black.

**2 GRSV/SHSC/QUF: 8 sherds, 130g.**

26% of the pottery had these inclusions. At location 14 all the pottery had this fabric but it was also seen at the other locations. The clay contains a sparse quantity of poorly sorted and angular grog of very coarse size, together with a rare to sparse amount of well rounded and very well sorted fine quartz. A background of shelly material, rare to sparse in quantity, angular and coarse in size was also apparent in the fabric. The pottery has a buff to brown exterior and interior colour and the core is brown and grey.

**3 QUMF/SHRC: 3 sherds, 44g.**

This composed only 9% of the total amount of pottery, and is apparent only at location 19/145. The clay contained a moderate amount of very well sorted and rounded fine quartz grains, and also had a background of rare to sparse shelly material which was poorly sorted and angular and coarse in size. The exterior of the pottery sherds was orange, the interior and core was black and grey.

**4 QUMF/GRSV: 13 sherds, 157g.**

This was the most common fabric type of the Bronze Age pottery composing 32% of the total amount, and apparent at locations 17/126 and 19/145 only. The clay contains a sparse amount of poorly sorted, angular grog of very coarse size, together with a moderate quantity of very well sorted, and well rounded fine quartz. The exterior of the sherds is orange and brown, and the interior is grey, with a grey to black core.

**5 SHMC/QUSF: 5 sherds, 64g.**

13% of the sherds by weight were of this fabric, which occurs only on 19/145, and contains a moderate quantity of poorly sorted, angular and very coarse shelly material together with a sparse amount of well sorted and well rounded fine quartz grains. Some occasional angular flint is also seen. The exterior of the sherds is buff and brown, the interior is grey and the core dark grey.

**4 Source of Inclusions**

**4.1 Grog** Pieces of grog, or crushed pre-fired pottery, are a common inclusion in Bronze Age pottery of the East Midlands region (Allen 1987). They provided an ideal tempering material which had exactly the same thermal properties as the material being fired. These pieces are angular as they had been broken and crushed. Often grog differs in colour from the pottery clay, as the pieces had been fired at least twice and sometimes originated from the unoxidised core of a pre-existing pot.

**4.2 Shell** The shelly material apparent in the pots appears as a background inclusion in fabrics 2 and 3, and this suggests that it could have been contained within the clay from which pots were made. Some of the sherds merely exhibit vestiges of shelly limestone and voids, indicating the former presence of limestone which has been leached out during deposition. These sites lie within about 3km of the western fen edge, and the underlying geology of the area is the Oxford Clays. These clays contain shelly limestone and quartz, and it is possible that there may have been outcrops of this material close to the sites which would have been suitable for pottery manufacture. Fabric 5 contains slightly more shelly material, probably from the same sources, but thin section analysis would be required to confirm the identification and source of the inclusions in all these fabrics.

**4.3 Quartz** Sandy deposits were apparent at all these locations which could have been the source of the quartz inclusions in the pottery fabrics. Alternatively quartz could also be found within the Oxford Clays.

**4.4 Source and Thin Sections** There is nothing within the fabrics of the vessels on macroscopic analysis to indicate anything other than a fairly local source for the inclusions within these pottery fabrics. However, if this report is to be published it is recommended that a small programme of thin section analysis should be undertaken to verify the source of the material.

## 5 Form and Decoration

The sherds originate from a number of locations along the southern part of the pipeline but present a surprisingly similar form and decoration, indicative of middle Bronze Age bucket shaped vessels. The wall thickness varies between about 12 and 14mm and all the sherds have a buff to orange and oxidised exterior: the interior surfaces and core show some variation as indicated in the fabric descriptions.

A number of sherds show the simple flattened or rounded rim of this type of vessel (figures 1.1, 1.2 and 1.3), and one sherd indicates a thick flat bottomed base (1.9). Decoration consists of horizontal incised lines (1.1 and 1.6) occasionally with a small raised cordon (1.7), and of fingernail impressions (1.4 and 1.5). Most of the body sherds are undecorated as is the rounded rim sherd shown 1.3). Two sherds (one illustrated, 1.2) show decoration consisting of a small pre-firing perforation, approximately 8mm in diameter and piercing the wall, which lies about 15mm below the rim. One sherd (1.8) has an applied cordon decorated with vertical fingernail impressions.

This form and decoration, of mainly undecorated bucket-shaped, thick walled pots, is typical of the East Midlands tradition of the middle Bronze Age Deverel Rimbury type of pottery. Rims are simple and types of decoration when apparent are restricted to the few types as described, with simple horizontal patterns. Similar vessels have been found on settlement sites in this area such as Billingborough (Chowne in prep), Bourne Meadow Drove (Allen 1998), Kirkmond Le Mire (Field and Knight 1992) and more recently at Welland Bank (Pryor 1998, 142).

Very similar pottery from cremation cemeteries of the period is also known in the Lincolnshire area (Allen *et al* 1987: Lane 1995). At Pasture Lodge Farm, near Long Bennington, and at Frieston and Grantham, horizontal incised lines and small raised cordons are seen (Allen 1987, fig.13.1(A), & fig.14.13). Fingernail decoration and fingernail impressions on a cordon are also apparent (*ibid*, fig. 15.23). Similar rim types can also be seen on these sites (*ibid*, fig.5 VI). Perforations below the rim are more unusual but are apparent on similar pottery from Grimes Graves in Norfolk (Longworth *et al* 1988, fig.27.396) and from Ardleigh, Essex (Brown 1995, 126). Bucket-shaped pottery of similar type has been found in Lincolnshire in the past, and similar shaped pots with cordons and incised decoration are known from Stainsby (May 1976, 79), Crosby and Metheringham (Allen 1988, nos 153 & 291). These pottery sherds therefore fit comfortably into the local and eastern regional tradition of this type of pottery (Allen 1987, 212).

## 6 Contexts

**6.1 Settlement Sites** Much of the Bronze Age material found at these locations originates from disturbed contexts as summarised below. Only three contexts on site 19/145 (SK1064 4576) seem to indicate Bronze Age features, two post-holes (1920 and 2307) and a shallow pit (1930), which also contained animal bone, flints, shell and daub with wattle impressions. A Bronze Age linear feature (2407 and 2449) was apparent on adjacent site 19/146 (SK1050 4550): these two sites lie only about 100m apart. All other contexts on site 19/145 unfortunately seem to have been disturbed by later activity as indicated below. Even the ring ditch where Bronze Age pottery was found in lower levels seems to have been recut in the Iron Age, and later pottery was found

alongside the Bronze Age sherds. There is no evidence of burials, and the fragmentary nature of the pottery seems to suggest that this material is very likely to represent the remains of settlement debris. The date of the construction of the ring ditch is not clear from the pottery.

The largest single deposit of Bronze Age pottery (787g) is from a possible buried prehistoric soil on site 14/109 (SK1100 5400). All these sherds have the same fabric (see *Catalogue*) and many are undecorated, but it is clear from the rim forms and those sherds where decoration is apparent (figures 1.1, 1.2 and 1.4) that a number of vessels, at least three, are represented. This seems very likely therefore again to be rubbish from the remains of a settlement site.

**6.2 Unstratified** A number of sherds, detailed in the *Catalogue*, came from unstratified contexts: 14/109 (1401), 15/113, 16/118, 16/122, 17/126, 19/145, 19/146 and 21/151.

**6.3 Disturbed Contexts** On site 19/145 a number of contexts containing Bronze Age pottery seem to have been disturbed by later activity on the site. These sherds came from medieval furrows (contexts 1986, 2312), probable Anglo-Saxon features (contexts 1994, 1997, 2308, 2310, 2336) and the larger ring ditch which seems to have been recut in the Iron Age (contexts 2338, 2356, 2377, 2382). Bronze Age pottery was also found in a probable natural linear feature (1968, 1971).

## 7 Dating

Pottery of this middle Bronze Age type from Billingborough settlement site was given a date of 1520-1372 Cal BC, but this date is now under review (Lane 1995, 19). However, a date in the middle to later second millennium BC is still considered to be appropriate for this type of bucket-shaped vessel with simple rims and finger-tip decoration (Allen 1988, 161; Barnatt 1991, 368; Needham 1996, 133). At Swarkestone in Derbyshire a small bucket-shaped vessel was found in a sawn tree-bole and the wood has been dated to 1440-1145 Cal BC (D. Knight pers comm.; 3080±60BP, Beta 104995).

As the pottery along the route comes from a number of different locations, it is not surprising that there is some variation in fabric types. However, the variations at the single site 19/145, may indicate that a longer period of time covering several generations might be appropriate for the pottery and thus for the occupation of the location. Small and gradual changes in fabric types at the well stratified site of Billingborough, were seen to be a chronological indicator (Allen 1991).

## 8 Discussion

**8.1 Settlements** The context and fragmentary nature of the vessels on these sites strongly suggests that the pottery originated from areas which were occupied in the middle Bronze Age period. In the largest single deposit of material (14/109 [1405]), it is also clear that several pots are represented, again suggesting that these were domestic refuse, found alongside a quantity of flint. This pottery was found in the southern part of the pipeline away from the peat areas, and this suggests that, as at Billingborough about 12km further south, middle

Bronze Age settlement took place on the western boundary of the Fen Edge and on the higher ground, rather than in the lower-lying and peat covered areas.

**8.2. Function and Potters** The pre-firing perforations seen on some of these sherds are quite unusual even on this type of pottery, and raise the question of the possible function of the vessels. It has been suggested that these holes may have been used for attaching a leather or fabric cover to the pot, suggesting their use for storage of dry goods (Brown 1995, 126). A few sherds in context 14/109 (1405) show some sooting the interior. This could indicate that the vessels were used in a domestic context as cooking pots.

The small fingernail marks found on this type of pottery may indicate, as suggested by Tomalin (1995, 101) that women may have been responsible for the pottery production in the Bronze Age period.

**8.3 Pottery Fabrics** There is at present no reason to suggest that these vessels were made anywhere other than close to the locations where they were found. All the fabric types are consistent with those found in middle Bronze Age pottery in this area, such as the settlement site of Billingborough (Chowne in preparation) and the cremation cemeteries of Pasture Lodge, near Long Bennington, and at Frieston and Grantham in Lincolnshire (Allen 1987). However, the tempering materials employed are not merely those which were available locally. This is clearly apparent on these sites with the inclusion of grog, or recycled crushed pottery, when there were other suitable materials available. The use of grog in the Bronze Age is widespread in this area, and it is possible that there may have been other reasons why this tempering tradition was popular. It has been shown that the use of grog for tempering is not necessarily indicative of pot function (Allen 1991, 4), and it has been suggested that this tradition may be more symbolic (Brown 1995, 127) showing the transformation or continuity of one vessel or one period into another. This was seen at Pasture Lodge, Long Bennington, where a small decorated piece of pottery was incorporated with other grog into another vessel (Allen 1991, 7, figure 4).

**8.4 Conclusion** This interesting and unusual collection of middle Bronze Age pottery originates from a number of settlement sites in the area, and adds to the growing information on the middle Bronze Age period in the eastern areas of England. Due to the linear nature of the excavations a sample is provided of what were probably more extensive Bronze Age settlement sites.

## 9 References

Allen C S M, Harman M and Wheeler H, 1987. 'Bronze Age Cremation Cemeteries in the East Midlands' Proceedings of the Prehistoric Society 53, 187-221.

Allen C S M, 1988. Bronze Age Pottery of the Second Millennium bc in the East Midlands of England. Ph.D. Thesis, University of Nottingham.

Allen C S M, 1991. 'Thin Sections of Bronze Age Pottery from the East Midlands of England' in A Middleton and I. Freestone (eds), Recent Developments in Ceramic Petrology. British Museum Occasional Paper No 81.

Allen C S M, 1998. Report on Prehistoric Pottery: Bourne Meadow Drove, Lincs. Heritage Lincolnshire.

Barnatt J, 1994. 'Excavation of a Bronze Age Unenclosed Cemetery, Cairns and Field Boundaries At Eaglestone Flat, Curbar, Derbyshire, 1984, 1989-1190', Proceedings of the Prehistoric Society 60, 287-370.

Brown N, 1995. 'Ardleigh reconsidered: Deverel-Rimbury pottery in Essex' in I. Kinnes and G. Varndell (eds), 123-144.

Chowne P, in preparation. Excavations at Billingborough, Lincs, 1975-8: Bronze Age and Iron Age Settlement and Salt-Working Site.

Field N and Knight D, 1992. 'A later Bronze Age site at Kirkmond le Mire', Lincolnshire History and Archaeology 27, 43-45.

Lane T W, 1995. The Archaeology and Developing Landscape of Ropsley and Humby, Lincs.

Kinnes I and Varndell G (eds), 1995. 'Unbaked urns of Rudely Shape'. Oxbow Monograph 55.

Longworth I H, Ellison A and Rigby V, 1988. Excavations at Grimes Graves, Norfolk, 1972-1976.

May J, 1976. Prehistoric Lincolnshire

Needham S, 1996. 'Chronology and Periodisation in the British Bronze Age', Acta Archaeologica Supplementum I.

Pryor F, 1998. 'Welland Bank Quarry, Lincolnshire' Current Archaeology 160, 139-145.

Tomalin D, 1995. 'Cognition, ethnicity and some implications for linguistics in the perception and perpetration of "Collared Urn art"', in I Kinnes and G Varndell (eds), 101-122.

## HATTON TO SILK WILLOUGHBY GAS PIPELINE - HWP 98

## CATALOGUE OF PREHISTORIC POTTERY

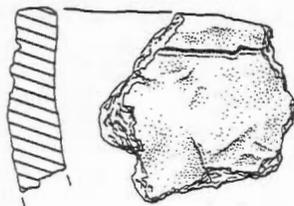
Const Sect/ Plot	Context	Sherds	Weight	Fabric & Description
14/109	1401:U/S	1	33	(2) base/wall sherd: <i>drawing 9</i>
14/109	1401:U/S	17	236	(2) body sherds undec
14/109	1401:U/S	2	45	(2) base sherds
14/109	1405	1	43	(2) rim sherd, incised decoration: <i>drawing 1</i>
14/109	1405	1	49	(2) rim sherd inc dec
14/109	1405	1	26	(2) body sherd, with fingernail dec: <i>drawing 4</i>
14/109	1405	1	21	(2) rim sherd with pierced hole dec: <i>drawing 2</i>
14/109	1405	1	12	(2) rim sherd with hole
14/109	1405	2	19	(2) base sherds
14/109	1405	19	617	(2) undec body sherds
<b>Total:</b>	<b>14</b>	<b>46</b>	<b>1101</b>	
15/113	U/S	1	15	(1) undec body sherd
<b>Total:</b>	<b>15</b>	<b>1</b>	<b>15</b>	
16/118	U/S	1	16	(1) undec body sherd
16/122	U/S	2	26	(1) undec body sherds
<b>Total:</b>	<b>16</b>	<b>3</b>	<b>42</b>	
17/126	U/S	1	20	(4) undec body sherd
17/128	1705	1	31	(2) undec body sherd
<b>Total:</b>	<b>17</b>	<b>2</b>	<b>51</b>	
19/145	U/S south	7	90	(4) undec body sherds
19/145	U/S south	1	26	(4) base sherd
19/145	U/S south	1	12	(4) rim sherd: <i>drawing 3</i>
19/145	U/S tsoil	3	23	(4) undec body sherds
19/145	U/S tsoil	2	25	(2) 2 x 2 joining undec body sherds
19/145	1920	1	11	(5) undec body sherd
<b>Const Sect/ Plot</b>	<b>Context</b>	<b>Sherds</b>	<b>Weight</b>	<b>Fabric &amp; Description</b>

## APPENDIX 2

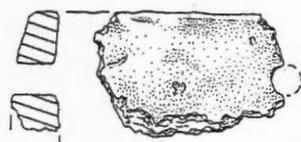
19/145	1930	1	23	(5)	undec body sherd
19/145	1968	1	25	(5)	undec body sherd
19/145	1968	1	8	(1)	undec body sherd
19/145	1971	2	5	(5)	small undec sherds
19/145	1986	3	57	(2)	undec body sherds
19/145	1994	1	18	(3)	base sherd
19/145	1994	5	17	(1)	small undec sherds
19/145	1994	1	6	(4)	body sherd with fingernail dec: <i>drawing 5</i>
19/145	1994	1	22	(3)	body sherd with incised dec: <i>drawing 6</i>
19/145	1997	1	5	(1)	undec body sherd
19/145	2307	1	2	(1)	undec body sherd
19/145	2309	1	4	(3)	undec body sherd
19/145	2312	1	7	(2)	undec body sherd
19/145	2338	1	31	(1)	undec body sherd
19/145	2351	1	22	(1)	incised dec & raised cordon: <i>drawing 7</i>
19/145	2351	1	3	(1)	undec body sherd
19/145	2356	1	8	(1)	undec body sherd
19/145	2377	1	19	(2)	undec body sherd
19/145	2382	1	22	(2)	undec body sherd
<b>Total:</b>	<b>19/145</b>	<b>41</b>	<b>491</b>		
19/146	U/S	3	104	(2)	undec body sherds
19/146	2407	1	6	(2)	undec body sherds
19/146	2449	1	43	(2)	body sherd with fingernail dec cordon: <i>drawing 8</i>
19/146	2449	2	31	(2)	undec body sherds
<b>Total:</b>	<b>19/146</b>	<b>7</b>	<b>184</b>		
21/151	U/S	1	9	(2)	undec body sherd
<b>Total:</b>	<b>21</b>	<b>1</b>	<b>9</b>		
<b>TOTALS</b>	<b>ALL</b>	<b>101</b>	<b>1893</b>		

**FIGURES - HATTON TO SILK WILLOUGHBY GAS PIPELINE****Figure Caption****Figure 1: Middle Bronze Age Pottery. 1 - 9.****Catalogue of Illustrated sherds****Figure 1: Middle Bronze Age Pottery**

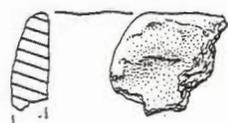
- 1 GRSV/SHSC/QURF: rim sherd, flattened rim, incised horizontal line 10mm below rim, unabraded: 14/109 (1405)
- 2 GRSV/SHSC/QURF: rim sherd, flattened rim, small pre-firing perforation 8mm diameter, approximately 10mm below the rim, unabraded: 14/109 (1405)
- 3 GRSV/QUMF: rim sherd, rounded rim, undecorated, unabraded: 19/145, unstrat south of site.
- 4 GRSV/SHSC/QURF: body sherd, with horizontal fingernail decoration, abraded: 14/109 (1405)
- 5 GRSV/QUMF: body sherd with fingernail decoration, unabraded: 19/145 (1994)
- 6 QUMF/SHRC: body sherd with horizontal incised decoration, unabraded: 19/145 (1994)
- 7 GRMC/QURF: body sherd, with incised horizontal line, above slightly raised horizontal cordon, unabraded: 19/145 (2351)
- 8 GRSV/SHSC/QURF: body sherd with applied horizontal cordon with fingernail decoration, unabraded: 19/146 (2449)
- 9 GRSV/SHSC/QURF: base sherd, undecorated, unabraded: 14/109 (1401) unstrat



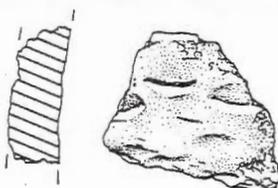
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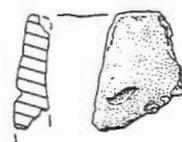
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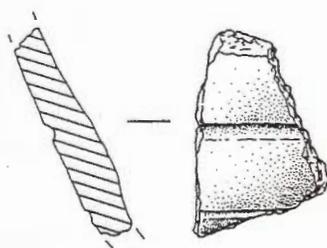
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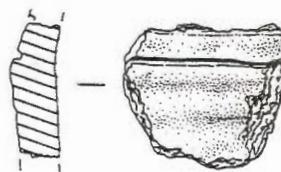
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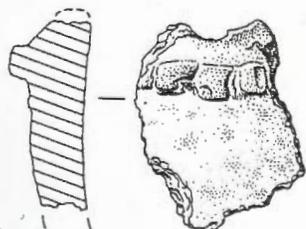
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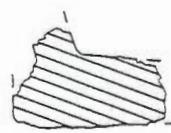
2.6



2.7



2.8



2.9

## **APPENDIX 3**

**Iron Age and Romano-British Pottery**  
**M. Darling**

## REPORT ON THE POTTERY FROM THE HATTON TO SILK WILLOUGHBY PIPELINE, HWP98

for NETWORK ARCHAEOLOGY

by Margaret J. Darling, M.Phil., F.S.A., M.I.F.A.

15 April 1999

### 1 INTRODUCTION

The total quantity of pottery amounted to 2427 sherds, weighing 29.558, the bulk coming from ten separate sites, spread over 40km of pipeline. This has been archived to the standard recommended by the *Study Group for Roman Pottery*, with sherd count and weight measures; the computer archive is available on disk. The condition was generally good, although abraded and scrappy sherds were present; there are no problems for long term storage.

### 2 OVERVIEW OF THE SITES

The sites are referred to by their Plot Number. The quantities from each are shown on table 1.<sup>1</sup>

**Table 1** Sites, quantities

Plot	Sherds	%	Weight	%	Dating
008	101	4.27	2822	9.82	3rd-VL4
020	1023	43.22	12552	43.67	LIA-EM2;3-4 S end
088	117	4.94	1301	4.53	LIA to 3-4c
132	17	0.72	239	0.83	LIA (ML2 unstrat)
135	100	4.22	548	1.91	LIA (ROM one cxt)
139	300	12.67	4864	16.92	LIA (ROM two cxts?)
145	172	7.27	972	3.38	MLIA (ROM S end)
146	186	7.86	2042	7.10	LIA (ROM subsoil)
147	8	0.34	101	0.35	ML3
147-9	16	0.68	266	0.93	M3-4
149	131	5.53	1164	4.05	ROM (ML4 unstrat)
150	196	8.28	1870	6.51	MLIA (ROM unstrat)
Total	2367	100	28741	100	

<sup>1</sup>A further 10 sherds, 38g VESIC abraded body sherds from a single vessel, cut 4408 on Plot 20, was received as this report was being finalised. This has been added to the archive.

A further 60 sherds, 817g came from unstratified deposits on various plots in the pipeline. These are summarised in Table 2.

**Table 2** Unstratified finds by plot

CS	Plot	Sherds	%	Weight	%	Date
01	003	1	1.67	3	0.37	ROM?
01	007	1	1.67	5	0.61	ROM?
03	014	1	1.67	26	3.18	4C
04	017	3	5.00	59	7.22	ROM?-POSTRO
04	019	3	5.00	22	2.69	ROM
06	029	1	1.67	56	6.85	POSTRO?
09	071	2	3.33	54	6.61	ROM?-POSTRO
09	073	1	1.67	35	4.28	ROM?
09	078	1	1.67	10	1.22	ROM
11	090	1	1.67	6	0.73	ROM
12	095	1	1.67	10	1.22	ROM?
14	108	1	1.67	32	3.92	POSTRO?
15	115	1	1.67	22	2.69	ROM
16	118	4	6.67	45	5.51	ML3?
16	122	2	3.33	35	4.28	L1E2
17	131	4	6.67	30	3.67	2C?
17	133	4	6.67	51	6.24	ROM?
18	136	1	1.67	27	3.30	POSTRO
18	140	1	1.67	16	1.96	L3-4
19	144	1	1.67	19	2.33	ROM
21	151	12	20.00	106	12.97	2C
21	153	2	3.33	36	4.41	ROM
21	154	9	15.00	87	10.65	L3-4 & POSTRO
21	155	1	1.67	8	0.98	POSTRO
22	156	0	0.00	16	1.96	ROM?
22	157	1	1.67	1	0.12	ROM
Total		60	100	817	100	

The main groups can be divided into two categories:

- Sites of exclusively or predominantly Roman date, Plots 8, 88, 147, 147-9, and 149.
- Sites originating in the Iron Age, Plots 20, 132, 135, 139, 145, 146, 150

The five groups contributing Roman material are all of the later Roman period, broadly 3rd to 4th century. Earlier Roman pottery occurs on Plot 20, the largest group which is geographically well separated from the sites at the southern end of the pipeline, all clustered to the east of Sleaford. The Roman evidence on Plots 132, 135, 139, 145-6 and 150 is very sparse, mostly from unstratified, and generally impossible to date closely. Most of the Iron Age pottery belongs to the late Iron Age, with possible marginally earlier pottery occurring on plots 145 and 150.

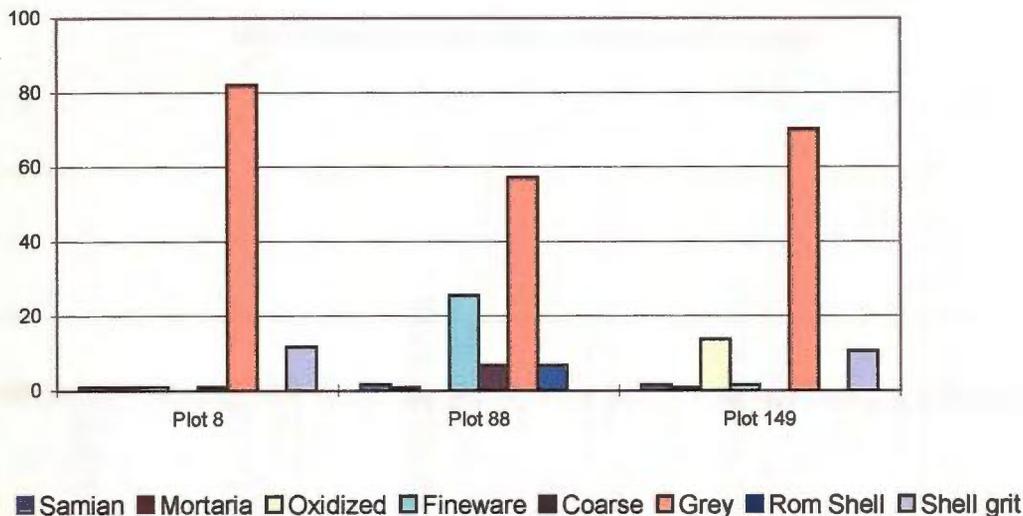
### 3 OVERVIEW OF THE FABRICS

The incidence of fabrics from all the sites is detailed in Appendix 1, and defined below, p10.

Discounting the small groups from Plots 132, 147, and 147-9, the fabrics are summarised by plot for the two main groups, in figs 1 and 2.

**Fig 1 Fabrics, Plots 8, 88 & 149, sherds percentages**

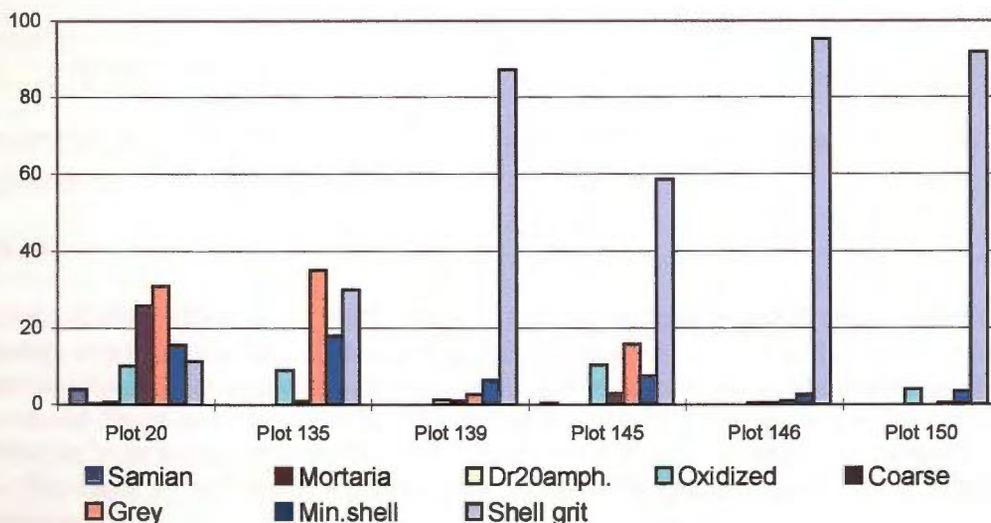
**Fabrics, Plots 8, 88 & 149, sherds percentages.**



This emphasizes the minimal occurrence of samian and mortaria, and the absence of amphorae. All groups are dominated by large quantities of greywares, fine wares only occurring in Plots 88 and 149, the high percentage in the former solely due to the occurrence of a single Moselle beaker, while Plot 149 had a single sherd of NVCC. Shell-gritted wares are low.

**Fig 2 Fabrics, Plots 20, 135, 139, 145-6 & 150, sherds percentages**

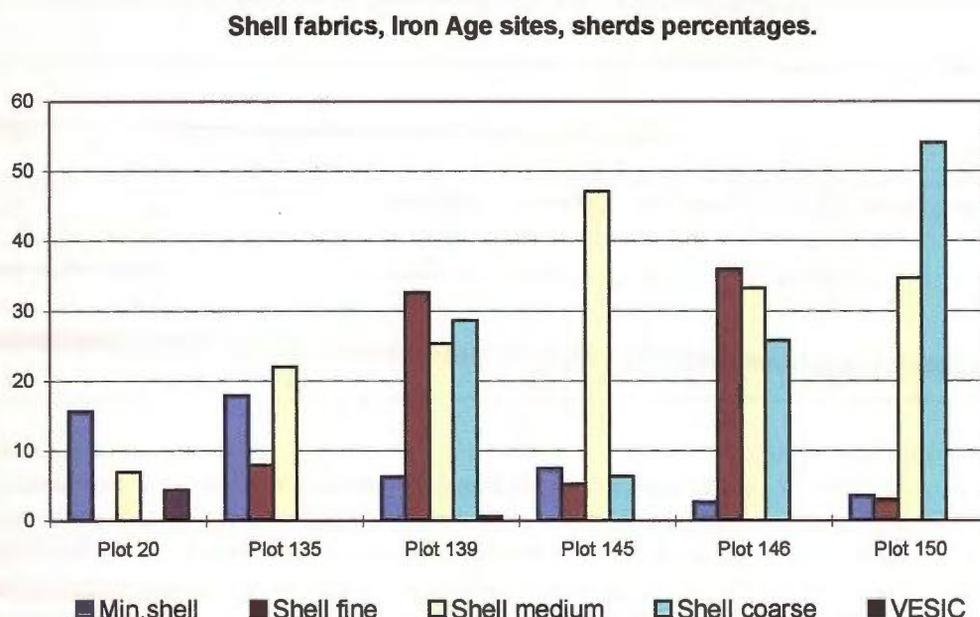
**Fabrics, Plots 20, 135, 139, 145, 146, & 150, sherds percentages.**



This illustrates the mixed character of the pottery from Plot 20, Roman and Late Iron Age, while Plots 135, 139 and 145-6 all have some Roman sherds. The predominance of shell-gritted fabrics from Plots 139 to 150 is typical of Iron Age assemblages.

These shell-gritted fabrics of the exclusively or predominantly Iron Age sites are shown in more detail on fig 3.

**Fig 3 Shell gritted fabrics, sherds percentages.**



Again, Plots 20 and 135 differ from the other sites, particularly taking into account the coarse and grog-tempered fabrics occurring alongside the shell-gritted in Plot 20. The group from Plot 135 is small at only 100 sherds, with very little evidence for close dating, but the fabric content suggests there is more Roman and perhaps later Iron Age than on the other sites. Apart from the differences in dated content between Plot 20 and the other sites, the distance is sufficient for the character of the pottery to have changed fairly radically, which would lie behind the higher quantities of coarse fabrics at Plot 20.

#### 4 THE SITES

Details of the quantities by context, dating, sherd links and comments for each plot are given in Appendix 2.

##### PLOT 8

All the datable pottery from this field system belongs to the later Roman period, from the mid 3rd century onwards including a dales ware jar No 47 in a gritty fabric, together with specifically later 4th century sherds, such as sherds from a red-slipped mortarium from the Oxfordshire kilns, the bead-and-flange bowl, no 53, double-lid-seated jars, nos 48-9 in a late coarse fabric (LCOA) known from the latest Roman deposits in Lincoln, and also in VESIC. A rarity is a strainer no 50. There were no fine wares, 77% of the sherds being grey wares, probably mostly from the late Lincoln kilns at Swanpool.

**PLOT 20**

The largest group of pottery came from this site, accounting for over 43% of the site-based pottery. The site divides into two areas, the smaller group 1 producing 277 sherds, 1.667kg, representing 27% sherds and 13% weight of the total pottery. As the percentages indicate, the pottery from Group 1 is very fragmented, with an average sherd weight of only 6g, compared with 14.6g from the main site.

The useful dating evidence from Group 1 is sparse, and the pottery can be summarised:

**Table 3 Summary pottery from Group 1, Plot 20.**

Type	Sherds	Weight	g/Sherd	Single vessel shs/Wt
Pit; Postholes; construction slots	150	925	6.2	11/51
Ring gully/ditch	107	490	4.6	82/269
Linear feature Cut 4074	17	236	13.9	17/236
Unstratified	3	16	5.3	
<b>Total</b>	<b>277</b>	<b>1667</b>		<b>110/556</b>

The occurrence of four separate vessels accounting for 40% of the sherds illustrates the limited evidence, and the construction slots 4006 and 4013 contained sherds of vesicular coarse fabric so highly burnt and fragmented that secure identification of either fabric, form or manufacture is impossible. It is probable that the vessels concerned were hand-made, and certainly of Iron Age. The sherds from the linear cut 4074 are from a single storage vessel, a type which continues into the early Roman period. The limited range of fabrics from this group is shown on table xx.

**Table 4 Plot 20, Group 1 fabrics**

Fabric	Code	Sherds	%	Weight	%
Oxidized	OX	1	0.4	9	0.6
Grey coarse	GREY?	51	22.7	169	11.3
Coarse	COAR	123	54.7	855	57.4
Grey minimal shell	GYMS?	49	21.8	188	12.6
Shell moderate medium	SHMM	21	9.3	300	20.1
Vesicular	VESIC	32	14.2	146	9.8
<b>Total</b>		<b>225</b>		<b>1489</b>	<b>100</b>

The diagnostic dating sherds are two vessels in GYMS, a LIA type of fabric, a cordoned carinated bowl from the pit 4003, no 27, and a beaker, no 25, from the ring gully 4014, which also produced a vesicular cooking pot, no 3 (4022), while a shell-gritted cooking pot came from the construction slot 4013, no 2. The fabric of the cooking pot, no 2, is the same as that used for a similar cooking vessel, no 1, from the ring gully on the main site, 4120. 31 sherds from another GYMS carinated bowl came from the ring gully 4040, and were possibly from the same bowl as the bowl, no 28, from the upper fill of the ring ditch in the main site, 4027.

The pottery indicates a probable Late Iron Age (LIA) origin for the features of Group 1. The possible link between 4040 and 4027 suggests these were contemporary with similar features on the main site. There appeared to be no positive evidence for Roman activity, although much of this pottery is likely to have continued in use in the early Roman period.

### The main site.

This produced a mixed assemblage of LIA and Roman pottery, including samian, mortaria and amphorae. The overall date range is from LIA through to mid-late 3rd century, with very late 4th century sherds from unstratified levels. Discounting the unstratified material, this can be split into three groups, LIA, LIA to early Roman (probably into the early 2nd century), definite 2nd century contexts, and a single context of mid to late 3rd century date (upper fill linear feature 4278). The fabrics are shown on table xx

**Table 5** Plot 20, main site, fabrics.

Fabric	Code	Sherds	%	Weight	%
Samian South Gaul	SAMSG	17	2.9	224	2.8
Samian Central Gaul	SAMCG	25	4.3	426	5.3
Mortaria Verulamium area	MOVR	1	0.2	90	1.1
Mortaria Mancetter Hartshill	MOMH	2	0.3	173	2.1
Mortaria unsourced	MORT	1	0.2	98	1.2
Dressel 20	DR20	8	1.4	468	5.8
Cream	CR	27	4.6	381	4.7
Pink	PINK	2	0.3	21	0.3
Oxidized light	OXL	5	0.9	23	0.3
Oxidized	OX	69	11.8	868	10.8
Nene Valley colour-coated	NVCC	1	0.2	48	0.6
Colour-coat	CC?	1	0.2	2	0.0
BB1	BB1	1	0.2	20	0.2
IA tradition	IAGR	50	8.5	1684	20.9
Lincoln Legionary grey	LEG?	2	0.3	36	0.4
Grey fine	GFIN	2	0.3	4	0.0
Grey	GREY	266	45.3	3632	45.0
Grog-tempered	GROG	37	6.3	1490	18.5
Grog-tempered oxid.	GROGOX	9	1.5	153	1.9
Grog & Shell	GRSH	1	0.2	8	0.1
Grey minimal shell	GYMS?	110	18.7	283	3.5
Shell moderate medium	SHMM	50	8.5	255	3.2
Vesicular	VESIC	13	2.2	248	3.1
Coarse	COAR	46	7.8	250	3.1
Total		587	100	8063	100

The samian sherds are more concentrated in the south and middle sections of the site, thinning out towards the north (see samian report below). The 1st century South Gaulish sherds came from the south and middle part of the excavation. Most of the Central Gaulish sherds came from the linear features cuts 4266 and 4249, and a gully cut into this, 4282, both in the central area. Given that contexts with small sherds often cannot be clearly dated between LIA and Roman, and that many LIA vessels continued in use into the early Roman period, the features with positively 2nd century pottery seem to be the linear features crossing the pipeline, as 4375/4370, 4249, 4114, 4278, linear 4266 (linking 4370/4375 and 4249), and probably 4112. Contexts dated LIA/early Roman and those dated to the mid-late 1st century are scattered, without any notable concentration.

The contents of the ring gullies have been examined, and the vessels from the gully 4027/4120 are interesting in that the primary fill (4121) contained numerous sherds of two vessels, the GREY beaker no 26 and the shell-gritted cooking pot no 1. Sherds from the beaker also occurred in the upper fill, together with a further vessel represented by numerous sherds, the carinated cordoned

bowl no 28. All of these could be current in the latest LIA, but could equally well extend in use into the early Roman period, particularly the delicate rimmed beaker no 26.

The fill of the gully 4178/4239 included fragments of a GREY beaker or jar decorated with rouletting (not illustrated), a rim from a similar jar or beaker, no 30, a cooking pot in an Iron Age tradition fabric, no 12, and fragments of a CR bowl, no 31, probably carinated. This is Roman rather than earlier in date. The same Roman dating can be applied to the gully 4245/4282. It is therefore debatable that the ring gullies necessarily pre-date the early Roman period. The three vessels found smashed in the gully 4027/4120 are particularly relevant, although it is entirely possible they were deposited in an earlier, LIA, feature. Many of the other finds from gullies and features are from upper layers, and are more fragmentary. The primary fill of the pit 4328 contained the native tradition bowl no 17, and two fragments from a fine grey beaker with ring and dot decoration of late 1st to early 2nd century date.

The only later Roman stratified pottery came from 4278 (as jar no 21), including a fragment from a Nene Valley colour-coated folded funnel-necked beaker in the later 3rd-4th-century fabric, at the north end of the site, in the same area as the large quantity of slag from 4286 pit, and may be indicative of later Roman activity beyond the north end of the excavated area.

The mortaria included a mortarium from the potteries in the Verulamium region, stamped by the potter Albinus, which can be dated to c AD60-90 (from 4357), no 43. A further stamp has not been identified on a rim of 2nd century type from an unknown source (from ring ditch 4194), no 42. The fabric resembles mortaria almost certainly made in the area of Lincoln, but is not from the Technical College kilns which exported mortaria to the northern frontier in the early 2nd century. Two fragments of 2nd century mortaria from the Mancetter-Hartshill potteries in Warwickshire occurred, one a hooked type in an early fabric from unstratified material, no 44, probably of the earlier 2nd century, and the other a body sherd from 4359, machining near the linear feature 4318.

The amphora sherds were all from Dressel 20 olive oil amphorae from Baetica in Southern Spain, and all in the earlier type of fabric, current in the 1st century.

Sherds of interest for the relationship of the site with Lincoln to the west include PINK, LEG and IAGR, all fabrics found in deposits associated with the legionary fortress. The rim from a flagon, no 19, is possibly from a two-handled type, usually more common in the 1st century. Many of the cooking pots are of types well known from military and early *colonia* contexts. The LEG body sherd came from a rusticated jar, with the typical 'web' type rustication well known from Lincoln. Bowls of the types of nos 33-35 and the dish no 39 are well known in 2nd century contexts at Lincoln (see no 88 from unstratified Plot 122 for a similar dish with a potter's mark). Representing the later Roman period is a rim from an inturned bowl of a type made at the late Swanpool kilns in Lincoln which came from unstratified deposits, no 37, as did the bead-and-flange bowl, no 36, in a burnt fabric, possibly slipped, but of a type more commonly found in colour-coated versions. Also unstratified is a double lid-seated jar in VESIC fabric, no 18, a type and fabric known from the Swanpool kilns, and normally only occurring in the latest Roman deposits in Lincoln. Thus the ceramic connection with Lincoln extends throughout the Roman period.

The LIA is represented by the coarse fabrics IAGR, GROG, VESIC and medium shell-gritted SHMM, and the late GYMS fabric with minimal shell used for finer vessels. Most of the vessels are cooking pots or jars for storage. The bulk of the pottery from the site probably belongs to the Roman period, overlying the late Iron Age occupation. The occurrence of a number of South Gaulish samian vessels, including decorated bowls, the Verulamium mortarium, early Dressel 20 amphorae and sherds of fabrics known from early levels in Lincoln indicate significant 1st century activity of a higher status than would normally be found on a rural site of this period. This is an important site in an area about which little is known. How this early Roman occupation relates to the early occupation

of Lincoln, a legionary fortress, is unknown. There is no definitively early, pre-Flavian, samian, most probably belonging to the Flavian period.

Given the small size of the samian assemblage from the site, the presence of four samian vessels from the kilns at Les-Martres-de-Veyre, normally relatively rare, suggests continuous occupation from the mid- to late-1st century, into the 2nd century, to probably c AD160. The later 3rd century beaker from the Nene Valley from linear feature 4278 at the north end of the excavation, and the scatter of late 4th century pottery from unstratified deposits suggests the presence of a later Roman site in the area, perhaps to the north. This may be relevant to the finds of painted wall-plaster (from 4166 and 4155) and the slag deposit in 4286 at the north end of the site.

### PLOT 88

The 117 sherds from the features on this site broadly divide into two groups. The first to the south from features 1141, 1143, 1147, and 1166, only six sherds, all possibly of Late Iron Age or Roman date, with links formed by sherds of the same fabric/vessel from all features. Of a similar date is feature 1123, which produced a shell-gritted everted rim jar or bowl, no 55, cut by 1121 (containing two sherds which can only be dated as Roman). The second group is to the north, where 1127 contained a shattered fineware beaker from Moselle (from cxt 1154), a wide-mouthed bowl and a Nene Valley mortarium fragment, all probably of later 3rd century date, and the recut of feature 1121, cut 1151 which contained a NVCC rouletted beaker, grey wide-mouthed bowls common in the later 3rd century, as no 56, and a segmental bowl, no 57. The earliest Roman pottery consists of an abraded samian dish of Dr 31 or 31R form from Central Gaul (dated c AD160 and later), and a fragment of a carinated jar or bowl of a type well known in Lincoln and area in the mid 2nd century. The evidence for Iron Age activity is tenuous and rests solely on the shell-gritted jar or bowl, no 55, and bodysherds of a coarse fabric, possibly but not certainly hand-made.

It is possible that the enclosures are solely of Roman date, the pottery giving evidence for occupation in the area from the mid 2nd century, and extending through the 3rd century.

### PLOT 132

Only 17 sherds, eight of which were unstratified finds. The stratified sherds were all shell-gritted except for a single grey vessel, wheel-made, with cordons. The shell-gritted include fine shell-gritted wares, possibly necked bowls, and certainly another cordoned vessel. This would suggest the late Iron Age. The unstratified sherds were not closely datable, but were probably of mid to late 2nd century date, possibly later.

### PLOT 135

The pottery from the ring gullies can all be dated to the later Iron Age. The only evidence for Roman activity came from 1842, a larger curvilinear ditch, but the bodysherds cannot be dated. There were several GYMS (grey with minimal shell inclusions) sherds, common in the late Iron Age, including carinated and cordoned vessels, probably necked bowls, and most of the shell-gritted sherds appeared to be wheel-made. A post-Roman sherd came from context 18125.

### PLOT 139

As with Plot 135, virtually all the sherds are of Iron Age date, and where identifiable, of later Iron Age. A single definitely Roman bodysherd (not closely datable) came from ditch 1862, which also produced nos 59, 61, 65. The shell-gritted Iron Age pottery included both hand- and wheel-made vessels, bowls (nos 65, 67, 70), cooking vessels (nos 59-61) and a storage jar (no 64). The necked bowl no 67 is wheel-thrown in a silty grey fabric with occasional shell of a type probably confined to the latest Iron Age and continuing into the early Roman period. The small carinated bowl no 66 has

been reconstructed by reference to a late Iron Age Sleaford vessel (Elsdon 1997, fig 62, nos 141, 147) on the basis of the rim form and unusual moulded base. A body sherd from a storage vessel had combed lines, and two oxidized sherds with minimal shell inclusions (OXMS) had vertical combing, and could have come from a butt-beaker or decorated jar form. The same fabric also occurred as bodysherds from a carinated cordon bowl. The assemblage as a whole is directly comparable with Late Iron Age pottery occurring at Sleaford.

#### PLOT 144

The single grey body sherd can only be identified as Roman.

#### PLOT 145

Much of the pottery was very fragmented, and suggests there is a scatter across the site of Iron Age pottery. The largest single group came from the large ring ditch 1990 (68 sherds), and included both hand-made and wheel-thrown vessels, mostly shell-gritted, and including some GYMS (grey with minimal shell) typical of later Iron Age pottery. Two hand-made jars (nos 68-9) are illustrated from this ditch (no 68 lid-seated, no 69 with a square-cut rim type), and there were several sherds with scored lines, not clearly of the normal scored ware type. A further cooking vessel with a square-cut rim (no 70) was unstratified. No 71 decorated with a square-toothed roulette was residual in the grave fill 2326. This comes from a decorated jar or bowl well-known from Old Sleaford (Elsdon 1997, figs 59-61), and can be dated to the latest Iron Age on the basis of its stratified occurrence there with arretine pottery of the 1st quarter of the 1st century (*ibid.*, 108; see also illustrated no 79 from Plot 146). The pottery from the ring gully 1993 was similar to that from 1990. A few sherds were possibly from scored ware vessels, possibly at the end of the development of the ware, and a conservative dating for the Iron Age pottery is mid to late Iron Age.

The two square ended features 2308 and 2310 both produced pottery of Iron Age date. The rim of the vessel, no 73, in a grey fabric is slashed, echoing slashed diagonal lines on the wall below.

The large linear feature at the North end of the site (cuts 1921, 1967, 1961, 1963) produced a few indeterminate Roman sherds, including a sherd from an oxidized white-slipped closed vessel (OXWS) with lime-scale internally. A flake from a South Gaulish samian body or dish was unstratified. This is the only definitively dated Roman sherd, but other bodysherds could be later in date.

#### PLOT 146

All the pottery apart from two or three indeterminate Roman bodysherds in the subsoil was of Iron Age date, almost certainly from Late Iron Age activity. Both hand-made and wheel-thrown vessels occurred, almost all in shell-gritted fabrics. Four illustrated vessels came from curvilinear ditch cut 2456, nos 75, 76, 78 and 79. No 79 is a decorated vessel of the type well known from late Iron Age deposits in Sleaford, Ancaster and other mid-Lincolnshire sites, from 2457 and 2458, joining with sherds from the upper fill of the linear feature 2425. Vessels with this type of decoration have been found at Old Sleaford stratified with Arretine pottery, indicating a date in the first quarter of the 1st century (Elsdon 1997, 108, fig 59, no 94; fig 61). Close parallels are known from Ewerby, Sapperton and Ancaster (Elsdon 1993, C.9-10), and unpublished from West Deeping. There is also a fragment from a possible pedestal vessel from the evaluation trench, ring gully 007. As can be expected from its proximity, the pottery is very closely linked to Old Sleaford late Iron Age ceramics. *BA pot from 2428??*

#### PLOTS 147-149

Plot 147 produced just eight abraded unstratified sherds, giving a mid to late 3rd century date.

The 16 sherds from Plots 147-9, where datable, were of 3rd century or later date. The presence of a NVCC late bowl would suggest the date extends into the 4th century.

Of the 131 sherds from Plot 149, 111 were unstratified finds, included post-Roman sherds. These included later Roman types such as inturned bead-and-flange bowls, known from the latest Roman contexts in Lincoln, and produced at the late Lincoln Swanpool kilns. The secondary fill of the ditch 003 produced a single shell-gritted sherd, which could be Iron Age, but is more likely to be of Roman date. The upper fill produced 3rd century pottery. Two sherds of Central Gaulish samian are of 2nd century date.

## PLOT 150

This was the only site with significant quantities of scored ware, although a few, possibly late, scored ware sherds occurred at Plot 145. Four illustrated vessels (nos 83-86) came from the upper fill of the ditch 2516; two (nos 80-1) from the ditch 2544, one each (nos 82, 87) from the ditches 2535 and 2570. The relatively thin squared-off rims, globular and barrel forms, and scoring are all typical of the mid to late Iron Age, as at Weekley (Jackson & Dix 1987, fig 29-31, Ceramic Phase 1) of the late La Tene period. The jar no 86 is in a harder fabric and has non-joining body sherds with scoring; this type is known from Fengate (Pryor 1984, fig M106, 3) and can be paralleled from mid to late Iron Age groups (Woods 1969, fig 22, 119; Williams 1974, fig 13, 1 & 3; unpublished BUFAU A1 road widening excavations, P21.2; pers. comm. A. Hancocks). The necked bowl, no 87, is less certainly hand-made, but resembles bowls from Ingoldmells (Elsdon 1993, C7), a site which also produced fine wares paralleled at Sleaford and Dragonby, alongside MLIA coarse vessels. The group can be dated to the mid to late Iron Age, and pre-dates the groups from the other adjacent plots.

## UNSTRATIFIED

The only notable sherd from the various unstratified plots is a plate or dish with a potter's mark, no 88, from plot 122. The stamp appears to be an illiterate imitation of a name stamp. Stamped dishes of this type are widespread from Yorkshire into East Anglia, and appear to date to the latter 1st century and into the early 2nd century.

## 5 FABRICS DEFINITION

The codes used in *The National Roman Fabric Reference Collection* (Tomber & Dore 1998) which defines imported and major Romano-British coarse wares are included in brackets where applicable.

### SAMIAN

- SAMSG South Gaulish samian from La Graufesenque. 1st to early 2nd century. Apart from a single sherd from plot 145, all sherds from Plot 20. (LGF SA)
- SAMCG Central Gaulish samian from Lezoux. Early 2nd century to c AD 200. Sherds from Plots 8, 20, 88 and 149. (LEZ SA)

### MORTARIA

- MOVR Mortaria from the Verulamium region. A 1st-century stamped mortarium from Plot 20. (VER WH). Illustrated: No 43.
- MOMH Mortaria from the Mancetter-Hartshill potteries in Warwickshire. Two vessels from Plot 20 only. (MAH WH). Illustrated: No 44.
- MONV Mortaria from the Lower Nene Valley potteries. Two sherds from Plot 88 and 149. (LNV WH)
- MOOXR Mortaria from the Oxfordshire potteries, red-slipped. Single sherd from Plot 8. (OXF RS)
- MORT Mortaria unsourced. A single hooked rim mortarium from Plot 20. A light fairly fine pinkish cream fabric; common red inclusions and flecks; poor condition; no evidence of the trituration grit. This is very similar to locally made mortaria found in Lincoln and may well come from that source. Illustrated: No 42.

**AMPHORAE**

DR20 Amphorae. Dressel 20 from Baetica in Southern Spain. Imported containing olive oil. Sherds only from Plot 20. (BAT AM 1)

**OXIDIZED**

CR A fabric group of cream fabrics; usually fairly fine fabrics; commonly used for flagons. Only from Plots 20 and 150. Illustrated: Nos 19, 31, 32

PINK A pinkish-cream fabric; often fairly soft and moderately micaceous; used for flagons and other table wares. This occurs in the early Roman contexts at Lincoln and appears to be confined to the 1st century. Two sherds only from Plot 20.

OXWS A fabric group of oxidized fabrics with cream to white exterior slip, mostly used for flagons and a limited range of table wares. Sherds from Plots 145 and 149.

OXL A fabric group of oxidized fabrics; light cream-brown, usually from closed vessels; probably flagons and similar vessels. From Plots 20, 145 and 150.

OXF A fabric group of oxidized fabrics; fine textured, with few fine inclusions. Only from Plot 149.

OX Miscellaneous oxidized quartz-gritted red-brown fabrics. Illustrated: Nos 24, 36, 41.

**FINE WARES**

MOSL Imported colour-coated wares from potteries at Trier; beakers including Motto beakers. Only from Plot 88. (MOS BS)

NVCC Nene Valley colour-coated wares, from plots 20, 88, 147-9. (LNV CC)

CC Miscellaneous unsourced colour-coated wares. From Plots 20 and 149.

**REDUCED WARES**

BB1 Hand-made black-burnished ware from Dorset. (DOR BB 1) A single sherd from Plot 20.

LEG A Lincoln fabric, common in the legionary period; used for beakers, cups, jars, flagons and other table wares. Two sherds from Plot 20.

GFIN Grey fine-textured wares, sherds only from Plots 8 and 20.

IAGR Pimpily coarse fabric in an Iron Age tradition; various inclusions, often including grog. Although often termed Trent Valley ware, more than one discrete fabric is involved and its occurrence is fairly widespread. Only from Plot 20. Illustrated: Nos 12-17.

COAR Coarsely tempered fabrics, usually in an Iron Age pottery tradition, often poorly mixed clay with quartz, limestone, grog and other inclusions.

GROG Wheel-thrown grog-tempered wares, from Plots 20 and 145. Illustrated Nos 6, 7-9, 10, 11, 38, 71.

GROGOX Wheel-thrown grog-tempered oxidized wares, only at Plot 20.

GROOL Wheel-thrown grey fabric with ooliths, three sherds only from Plot 139. Illustrated No 66.

GREY Miscellaneous grey wares, usually with common sub-rounded quartz inclusions. Unsourced but usually from relatively local sources.

LCOA A coarser type of grey ware; contains ill-sorted rounded inclusions, known from the later Roman deposits in Lincoln, probably associated with the late kilns at Swanpool. Only from Plot 8. Illustrated: Nos 47-8.

**SHELL-GRITTED WARES**

GRSH Fabric containing both grog and shell inclusions, only from Plot 20.

QZSH Fabric containing shell inclusions with quartz sand, only from Plot 150.

GYMS Finer fabrics; grey with minimal often very sparse fine shell inclusions. This appears to be particularly associated with the late Iron Age and early Roman period. Illustrated Nos 25, 27, 28.

OXMS As GYMS but oxidized, only from Plot 139.

SHEL Miscellaneous unsourced shell-gritted wares, only from Plot 88, probably of Roman date. Illustrated: No 55.

DWSH Shell-gritted fabrics; hand-made but wheel-finished. Classically used for dales ware jars of 3rd century and later date. Only from Plots 147-9. (DAL SH)

SHSF Shell-gritted; sparse fine shell inclusions. Illustrated: Nos 59, 77, 79.

SHCF Shell-gritted; common fine shell inclusions. Illustrated: Nos 61, 65, 78, 87.

SHSM Shell-gritted; sparse medium shell inclusions.

SHMM Shell-gritted; moderate medium shell inclusions. Illustrated: Nos 1, 2, 60, 63, 68, 69, 70, 74-6, 83-86.

SHCM Shell-gritted; common medium shell inclusions.

SHMC	Shell-gritted; moderate coarse shell inclusions. Illustrated: No 82.
SHCC	Shell-gritted; common coarse shell inclusions. Illustrated: Nos 64, 73, 80-1.
VESIC	Coarse fabric with voids where tempering or gritting has been lost whether due to usage or depositional-leaching. The lost inclusions are likely to have been shell in this area. Illustrated: Dwgs 3, 4, 5, 18, 49, 62.

**MISCELLANEOUS**

TILE	Roman building material
FCLAY	Amorphous fired clay lumps and fragments; from domestic hearths; industrial processes or destruction deposits.
PRO	Post-Roman pottery.

**6 SAMIAN DISCUSSION****J.M. Mills and M. Darling**

Apart from 4 sherds (28g) from Plots 8, 88 and 145, the rest came from Plot 20, 42 sherds, 650g. All the South Gaulish vessels are almost certainly from La Graufesenque, and the Central Gaulish from Les-Martres-de-Veyre and Lezoux. The maximum number of vessels is 30, divided equally between South and Central Gaul. The 17 South Gaulish sherds from Plot 20 represent 3% of all pottery, the dating ranging from the less specific mid to late 1st century, to mid-late Flavian, i.e., c AD70 onwards, the dating confined to the 1st century. There are three sherds from decorated vessels, one (from unstratified) from the basal zone of a Dr 37 dated to c AD 70-85 is decorated with a crisp wavy line, with rosettes below, and fragments of larger petalled rosettes resembling propellers above, the appearance of the lower rosettes relative to the wavy line being unusual. The plain vessels include probably four plates of Dr 18 and four cups of Dr 27 form.

The 25 sherds from Central Gaulish vessels include four vessels from the Les-Martres-de-Veyre kilns, of Trajanic date, including the dish stamped by Marcellinus (no 1 below), with other sherds from the Lezoux kilns. These include sherds from three decorated vessels, but most of the sherds are from dishes of Dr 18/31 form, a possible nine separate vessels, and two Dr 33 cups. Where sherds can be dated, the emphasis is on the earlier part of the 2nd century, the Hadrianic to early Antonine period, but one vessel is of later date, a small chip of a Curle 21 form from the linear feature 4114, at the north end of the excavation. The absence of common later forms suggests a closing date of c AD 160.

The South Gaulish sherds came from the south and middle areas of the excavation, no sherds north of the linear feature 4249, while the Central Gaulish sherds were concentrated in the middle and north part of the excavation. Eight sherds came from the curving gully 4282, and a further ten were divided between the linear feature 4249 and 4266. A single Central Gaulish sherd from a dish stamped by the potter Marcellinus i of Les-Martres-de-Veyre (see report below) came from the linear feature 4128 at the south end.

The sherds from other plots include a single Central Gaulish Dr 18/31R of Hadrianic to early Antonine date from Plot 8, a Central Gaulish Dr 31 or 31R dated to c AD 160 and later from Plot 88, and a flake from a South Gaulish dish from unstratified deposits on Plot 145.

**7 SAMIAN POTTER'S STAMPS, Plot 20****Brenda Dickinson**

1 4136 Form 18/31, Central Gaulish, stamped MARC•II [I I]: Marcellinus I of Les Martres-de-Veyre, Die 1c (Terrisse 1968, pl. LIII, Column 3, 4). There are two vessels from the London Second Fire groups stamped either with the same die or a reduced version of it, after the final

letter had broken off. Five further burnt vessels from London, stamped with the complete die, are almost certainly also casualties of the same fire. This evidence, and the absence of the stamp from Antonine contexts, suggest a range *c.* A.D. 115-135.

2 4358 Form 18/31 or 31, Central Gaulish, almost certainly stamped [NAM]MI retrograde: Nammius or Nammus, Die 1a. The potter seems from his fabrics to have worked at Lezoux. There are two other examples of the stamp from Britain, one from the Rhineland, where Lezoux ware is rare after the middle of the second century, and two from the Saalburg. Hadrianic or early-Antonine.

3 4358 Form 33, Central Gaulish, with the remains of a stamp, but no letters are visible. Hadrianic-Antonine.

(underlined letters are ligatured).

## 8 CATALOGUE AND ILLUSTRATIONS

The illustrations are arranged by individual plot, starting with the largest group from Plot 20. The sequence within each plot is typological, but each entry contains the cut and context number, and the original drawing number, the latter appearing in the computer database.

The sequence of the catalogue entries is: Fabric code, details, cut number, context, original drawing number.

### Plot 20

- 1 SHMM Hand-made; dark grey fabric; flaked red-brown interior; some large shell inclusions; poor condition. 4120, 4121, 7
- 2 SHMM Hand-made; fabric as No 1; smoothed burnt exterior. 4013, 4072, 6
- 3 VESIC Probably hand-made; dark grey fabric; probably originally shell-gritted; very burnt and sooted. 4022, 4023, 2
- 4 VESIC Grey fabric; light interior; dark burnt exterior; uncertain lost temper; some shell?; poor condition. 4266, 4361, 34
- 5 VESIC Dark grey fabric; possibly some shell inclusions originally; burnt and abraded. 4255, 4256, 19
- 6 GROG Dark grey with red-brown cortex; grey grog and occasional shell inclusions. 4292, 4293, 23
- 7 GROG Grey with red-brown cortex; light brown grog; rilled and burnt. 4148, 4356, 26
- 8 GROG Light grey fabric; originally darker surfaces; grey grog. 4148, 4356, 27
- 9 GROG Fabric similar to No 8. 4148, 4356, 28
- 10 GROG Dark grey fabric; lighter brown-grey surfaces; grey grog. 4294, 4307, 24
- 11 GROG Dark grey fabric and surfaces; lighter cortex; grey grog; occasional shell. 4266, 4361, 33
- 12 IAGR Grey fabric with red-brown surfaces burnt externally; poorly mixed clay with some flint; grog; iron-ore; quartz. 4239, 4240, 13
- 13 IAGR Dark grey fabric; red-brown cortex internally; quartz; occasional shell and grog. Slash across grooves may be accidental. 4114, 4364, 36
- 14 IAGR Similar fabric to No 13; red-brown interior. 4249, 4362, 32
- 15 IAGR Similar fabric to No 13; thin red-brown cortex; more grog inclusions. 4150, 4149, 9
- 16 IAGR Dark grey fabric; vesicular with quartz inclusions; possible grog. 4282, 4282, 22
- 17 IAGR Finer grey fabric; ill-sorted quartz some rounded; occasional flint. 4328, 4329, 25
- 18 VESIC Late Roman double lid-seated jar; grey fabric; possibly originally calcite-gritted. n/a, US, 46
- 19 CR Fine pinkish fabric; red inclusions and flecks; cream surfaces. Possibly originally two-handled. 4194, 4244, 16
- 20 GREY Grey with lighter hard cortex. 4282, 4282, 21
- 21 GREY 4278, 4279, 20
- 22 GREY Grey with lighter surfaces; scatter light grey grog inclusions. 4249, 4250, 18
- 23 GREY 4370, 4371/4373, 39

- 24 OX Fairly fine textured light red-brown fabric with lighter surfaces; sparse ill-sorted quartz and iron-ore. n/a, US, 42
- 25 GYMS? Dark grey with very sparse fine shell; originally ?red-brown surfaces; burnt black. 4014, 4036, 5
- 26 GREY Much of vessel; brown fabric; sparse quartz; occasional flint; darker grey surfaces. 4027;4120, 4028;4121, 4
- 27 GYMS? Fairly coarse sandy fabric; occasional shell; ?clay pellets. Poor burnt condition. 4003, 4004/5, 1
- 28 GYMS? Similar fabric to No 28. Very poor fragmented condition. 4027, 4028, 3
- 29 GREY Dark grey fabric with thin light brown cortex; brown-grey surfaces; also a non-joining base with grooved underside. 4205, 4206, 11
- 30 GREY Light red-brown fabric; grey surfaces; ill-sorted sub-angular quartz; some flint. Non-joining body sherd with bulging cordon and traces ?rouletting or stabbing. 4178, 4178, 10
- 31 CR Greyish-cream fairly fine fabric. 4239, 4240, 12
- 32 CR Fairly micaceous fine cream fabric; usual red flecks/inclusions. Burnt exterior rim. n/a, US, 47
- 33 GREY Sandy grey fabric; grey-brown surfaces; very abraded. 4318, 4359, 31
- 34 GREY Fairly fine grey with scatter ill-sorted sub-rounded quartz. 4370, 4371, 38
- 35 GREY Dark grey cored fabric; light brown cortex; ill-sorted sub-angular quartz as No 31. n/a, US, 45
- 36 OX Sandy grey fabric with possible light-brown slip; very burnt. Form closer to colour-coated type. n/a, US, 43
- 37 GREY Light grey fabric with scatter ill-sorted quartz. A type common at the late Swanpool kilns. n/a, US, 44
- 38 GROG Light grey fabric with darker grey grog inclusions; some resemble slag particles. 4114, 4364, 37
- 39 GREY Fairly sandy dark grey fabric; lighter surfaces. 4249, 4250, 17
- 40 GREY Dark grey; common ill-sorted quartz; burnished surfaces. 4282, 4358, 30
- 41 OX Discoloured grey fabric; moderate ill-sorted quartz. 4266, 4361, 35
- 42 MORT Cream-brown fabric, lighter surfaces; ill-sorted moderate pinkish quartz, red iron-ore inclusions and flecks. The potter represented by the very abraded fragment of a stamp has not been identified. The fabric is similar to some known from Lincoln, and may derive from potters working there. n/a, 4241, 14
- 43 MOVR Rim stamped by the Verulamium area potter Albinus, (Hartley 1972), datable to c AD60-90. n/a, 4357, 29
- 44 MOMH Rim and part of spout, with grog trituration grit, sandier earlier fabric, datable to the earlier 2nd century, to c AD150. n/a, US, 40

#### Plot 8

- 45 GREY Light brown grey cored fabric; scatter quartz; darker grey surfaces. n/a, US, 56
- 46 GREY Mid-grey fabric; lighter surfaces; common sub-angular quartz; occasional large rounded quartzite. Finger-frilled cordon. Very abraded. n/a, US, 57
- 47 LCOA? Light grey fabric; scatter well rounded polished quartz; quartzite & flint; darker exterior surface. n/a, 2096, 51
- 48 LCOA Dark grey fairly dense fabric; scatter well rounded ill-sorted quartz pebbles; dark grey surfaces. n/a, 2097, 52
- 49 VESIC Grey to light red-brown vesicular fabric; probably originally shell-gritted. Burnt interior rim. 2029, 2031, 49
- 50 GREY Dark grey; red-brown cortex; common quartz. 2029, 2031, 50
- 51 GREY Dark grey fabric; common quartz; exterior ?self-slip burnished. n/a, US, 54
- 52 GREY Dark grey fabric; light brown cortex; common ill-sorted quartz; burnished. Same fabric as D55. n/a, 2098, 53
- 53 GREY Same fabric as D53; an unusual type. n/a, US, 55
- 54 GREY Dark grey; red-brown cortex; scatter quartz grains. 2011, 2016, 48

#### Plot 88

- 55 SHEL Hand-made vesicular light red-brown (partial grey core) fabric; probably originally shell-gritted. 1123, 1153, 58
- 56 GREY Light grey laminar fabric; fairly common ill-sorted quartz. Darker exterior surface. 1151, 1152, 60

- 57 GREY Fairly fine-grained grey-brown fabric; common small quartz; dark grey exterior surface. 1151, 1152, 61  
 58 GREY Grey fabric; common quartz. 1151, 1152, 59

**Plot 139**

- 59 SHSF Dark grey fabric; red-brown cortex; sparse shell; sooted. 1862/1870, 1874/1872, 66  
 60 SHMM Light red-brown fabric & interior; grey core; exterior burnt grey-brown. 1880, 1892, 68  
 61 SHCF Dark grey fabric; variable grey-brown surfaces; sooted. 1862, 1874, 65  
 62 VESIC Soft dark red-brown fabric; lighter soapy surfaces; unknown lost inclusions; possibly shell and grog. Very abraded. 1865, 1866, 63  
 63 SHMM Dark grey fabric; variable grey-brown surfaces. 18112, 18114, 70  
 64 SHCC Dark grey fabric; variable colour surfaces; red-brown burnt black. 1880, 1892, 67  
 65 SHCF Variable dark grey/red fabric; dark grey surfaces; burnished exterior. 1862, 1874, 64  
 66 GROOL Dark grey w occasional ?shell from limestone; probable clay pellets; light brown cortex; non-joining ribbed base. Cf Elsdon 1997. fig 62. nos 141; 147. 1884, 1899, 69  
 67 GREY Dark grey silty matrix fabric; sparse quartz & occasional shell fragment; grey-brown surfaces; burnt. 1867, 1868, 62

**Plot 145**

- 68 SHMM Dark grey; some red-brown. CF ELSDON 53/34? 1990, 2369, 74  
 69 SHMM Fabric as Dwg74. 1990, 2381, 75  
 70 SHMM Dark grey soapy fabric; variable size shell inclusions; burnished surfaces; vesicular exterior. n/a, US, 76  
 71 GROG? Body sherd from a shouldered vessel; dark grey fabric with light-brown grog/clay pellets; red-brown exterior; decorated square-tooth roulette. Very poor abraded condition. Poss handmade & wheel Cf D84 Plot 146. 2325, 2326, 72  
 72 GREY Dark grey fabric; moderate quartz and black iron ore. Diagonal slashes on top of rim and on wall. Very poor abraded condition. 2308, 2309, 73

**Plot 146**

- 73 SHCC Dark grey fabric; very coarse shell inclusions; sooted. 2405, 2406, 78  
 74 SHMM Dark grey fabric. 2425, 2437, 79  
 75 SHMM Dark grey fabric; grey-brown burnt surfaces; sooted. 2456, 2458, 82  
 76 SHMM Grey-cored light brown fabric; sooted. Grooved rim top. 2456, 2457, 81  
 77 SHSF Orange-brown fabric (some grey) & surfaces. 007, 006, 77  
 78 SHCF Dark grey fabric; light red-brown exterior cortex; grey-brown surfaces. 2456, 2457, 83  
 79 SHSF Dark grey fabric; red-brown cortex; burnished dark grey surfaces; square-tooth twin rouletting with triple dimples. ?Hand-made/wheel finished. cf Dwg72 Plot 145. 2425/2456, 2436;2457;2458, 84

**Plot 150**

- 80 SHCC Hand-made grey fabric with brown-grey surfaces; single ?finger-nail impression on rim top; random scoring. 2544, 2545, 87  
 81 SHCC Hand-made fabric similar to No 80; random scoring; burnt and sooted internally. 2544, 2545, 86  
 82 SHMC Hand-made fabric similar to No 80; random scoring. 2535, 2536, 85  
 83 SHMM Hand-made dark grey fabric and smoothed ?burnt exterior; partial brown interior. 2516, 2551, 89  
 84 SHMM Hand-made dark grey fabric; grey-brown surfaces. 2516, 2551, 88  
 85 SHMM Hand-made fabric similar to No 83; some coarse shell fragments; smoothed exterior. 2516, 2551, 90  
 86 SHMM Hand-made fabric similar to No 83; harder; partial brown surfaces; random scoring. 2516, 2551, 91  
 87 SHCF Not certainly hand-made dark grey fabric and surfaces; mixed fine and medium shell; soot on interior and exterior. 2570, 2573, 92

**Unstratified Plot 122**

- 88 GREY Rim and non-joining base with fragment name stamp; base from a different dish but probably of the same type; stamp appears to be an illiterate maker's mark ]VV or IV?V[? n/a, unstratified, 93

**9 BIBLIOGRAPHY**

- Elsdon, S.M, 1993 *Iron Age pottery in the East Midlands, A Handbook*, Dept of Classics and Archaeology, University of Nottingham.
- Elsdon, S.M, 1997 *Old Sleaford Revealed: A Lincolnshire settlement in Iron Age, Roman, Saxon and Medieval times: excavations 1882-1995*, Oxbow Monograph 78. Nottingham Studies in Archaeology 2.
- Hartley, K.F., 1972 The mortarium stamps, in Frere, S.S., *Verulamium Excavations Volume 1*, Report Research Committee of the Society of Antiquaries, 28.
- Jackson, D.A. & Dix, B., 1987 Late Iron Age and Roman settlement at Weekley, Northants, *Northamptonshire Archaeology*, 21, 41-94.
- Pryor, M., 1984 *Excavations at Fengate, Peterborough, England, Fourth Report*, Northamptonshire Archaeological Society, Monograph 2.
- Terrisse, J.-R., 1968 *Les Céramiques sigillées des Martres-de-Veyre (Puy-de-Dôme)*. Gallia Supplément XIX. Paris.
- Tomber, R. & Dore, J., 1998 *The National Roman Fabric Reference Collection, A Handbook*, MoLAS Monograph 2.
- Williams, J.H., 1974 *Two Iron Age sites at Northampton*, Northamptonshire Development Corporation Archaeological Monograph, 1.
- Woods, P.J., 1969 *Excavations at Hardingstone, Northants., 1967-8*, Northampton County Council

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## APPENDIX 1 FABRIC QUANTITIES BY PLOT

		SHERDS													Total
	Fabric	Code	8	20	88	132	135	139	145	146	147	147-9	149	150	Total
Samian	South Gaul	SAMSG	-	17	-	-	-	-	1	-	-	-	-	-	18
	Central Gaul	SAMCG	1	25	2	-	-	-	-	-	-	-	2	-	30
Mortaria	Verulamium area	MOVR	-	1	-	-	-	-	-	-	-	-	-	-	1
	Mancetter-Harts hill	MOMH	-	2	-	-	-	-	-	-	-	-	-	-	2
	Nene Valley	MONV	-	-	1	-	-	-	-	-	-	-	1	-	2
	Oxfordshire red slip	MOOXR	1	-	-	-	-	-	-	-	-	-	-	-	1
	Unsorted	MORT	-	1	-	-	-	-	-	-	-	-	-	-	1
Amphorae Oxidized	Dressel 20	DR20	-	8	-	-	-	-	-	-	-	-	-	-	8
	Cream	CR	-	27	-	-	-	-	-	-	-	-	-	2	29
	Pink	PINK	-	2	-	-	-	-	-	-	-	-	-	-	2
	White slip	OXWS	-	-	-	-	-	2	-	-	-	-	1	-	3
	Oxidized light	OXL	-	5	-	-	-	3	-	-	-	-	-	1	9
	Oxidized fine	OXF	-	-	-	-	-	-	-	-	-	-	2	-	2
	Oxidized	OX	1	70	-	3	9	4	13	1	1	-	15	5	122
Fine ware	Mosel colour-coat	MOSL	-	-	27	-	-	-	-	-	-	-	-	-	27
	Nene Valley colour-coat	NVCC	-	1	3	-	-	-	-	-	-	1	1	-	6
	Colour-coat	CC	-	1	-	-	-	-	-	-	-	-	1	-	2
Grog/IA type	IA tradition	IAGR	-	50	-	-	-	-	-	-	-	-	-	-	50
	Coarse	COAR	1	169	8	-	1	-	3	1	-	-	-	-	183
	Grog	GROG	-	37	-	-	-	2	-	-	-	-	-	-	39
	Grog oxidized	GROGOX	-	9	-	-	-	-	-	-	-	-	-	-	9
Reduced	BB1	BB1	-	1	-	-	-	-	-	-	-	-	-	-	1
	Lincoln early grey	LEG	-	2	-	-	-	-	-	-	-	-	-	-	2
	Grey fine	GFIN	2	2	-	-	-	-	-	-	-	-	-	-	4
	Grey & ooliths	GROOL	-	-	-	-	-	3	-	-	-	-	-	-	3
	Grey	GREY	78	317	67	5	35	8	27	2	7	6	92	1	645
	Late Lincoln grey	LCOA	5	-	-	-	-	-	-	-	-	-	-	5	
Shell mixed	Grog & shell	GRSH	-	1	-	-	-	-	-	-	-	-	-	-	1
	Sand & shell	QZSH	-	-	-	-	-	-	-	-	-	-	-	6	6
Shell minimal	Grey	GYMS	-	159	-	-	18	6	13	5	-	-	-	1	202
	Oxidized	OXMS	-	-	-	-	-	13	-	-	-	-	-	-	13
Shell-gritted	Shell-gritted	SHEL	-	-	8	-	-	-	-	-	-	-	-	-	8
	Dales ware	DWSH	-	-	-	-	-	-	-	-	-	6	-	-	6
	Sparse fine	SHSF	-	-	-	1	-	12	7	27	-	-	-	5	52
	Common fine	SHCF	-	-	-	3	8	86	2	40	-	-	-	1	140
	Sparse medium	SHSM	-	-	-	-	-	-	2	2	-	2	7	1	14
	Moderate med.	SHMM	-	71	-	3	22	76	78	59	-	1	6	67	383
	Common med.	SHCM	-	-	-	-	-	-	1	1	-	-	-	-	2
	Moderate coarse	SHMC	-	-	-	-	-	-	-	-	-	-	-	14	14
	Common coarse	SHCC	-	-	-	-	-	86	11	48	-	-	-	92	237
	Vesicular	VESIC	12	45	-	-	-	2	-	-	-	-	1	-	60
Misc	Tile	TILE	-	-	1	1	-	-	-	-	-	-	-	-	2
	Fired clay	FCLAY	-	-	-	-	6	4	6	-	-	-	-	-	16
	Post-Roman	PRO	-	-	-	1	1	-	1	-	-	-	2	-	5
	Total		101	1023	117	17	100	300	172	186	8	16	131	196	2367

			WEIGHT												
Fabric			8	20	88	132	135	139	145	146	147	147-9	149	150	Total
Samian	South Gaul	SAMSG	-	224	-	-	-	-	2	-	-	-	-	-	226
	Central Gaul	SAMCG	18	426	8	-	-	-	-	-	-	-	9	-	443
Mortaria	Verulamium area	MOVR	-	90	-	-	-	-	-	-	-	-	-	-	90
	Mancetter-Harts hill	MOMH	-	173	-	-	-	-	-	-	-	-	-	-	173
	Nene Valley	MONV	-	-	34	-	-	-	-	-	-	-	14	-	48
Amphorae Oxidized	Oxfordshire red slip	MOOXR	18	-	-	-	-	-	-	-	-	-	-	-	18
	Un sourced	MORT	-	98	-	-	-	-	-	-	-	-	-	-	98
	Dressel 20	DR20	-	468	-	-	-	-	-	-	-	-	-	-	468
Fine ware	Cream	CR	-	381	-	-	-	-	-	-	-	-	-	7	388
	Pink	PINK	-	21	-	-	-	-	-	-	-	-	-	-	21
	White slip	OXWS	-	-	-	-	-	-	13	-	-	-	6	-	19
	Oxidized light	OXL	-	23	-	-	-	-	59	-	-	-	-	-	80
	Oxidized fine	OXF	-	-	-	-	-	-	-	-	-	-	12	-	12
	Oxidized	OX	1	877	-	24	43	27	110	6	5	-	115	27	1235
	Mosel colour-coat	MOSL	-	-	50	-	-	-	-	-	-	-	-	-	50
Grog & IA type	Nene Valley colour-coat	NVCC	-	48	19	-	-	-	-	-	-	18	3	-	88
	Colour-coat	CC	-	2	-	-	-	-	-	-	-	-	14	-	16
	IA tradition	IAGR	-	1684	-	-	-	-	-	-	-	-	-	-	1684
Reduced	Coarse	COAR	24	1105	77	-	1	-	7	5	-	-	-	-	1219
	Grog	GROG	-	1490	-	-	-	-	6	-	-	-	-	-	1496
	Grog oxidized	GROGOX	-	153	-	-	-	-	-	-	-	-	-	-	153
	BB1	BB1	-	20	-	-	-	-	-	-	-	-	-	-	20
Shell mixed	Lincoln early grey	LEG	-	36	-	-	-	-	-	-	-	-	-	-	36
	Grey fine	GFIN	20	4	-	-	-	-	-	-	-	-	-	-	24
	Grey & ooliths	GROOL	-	-	-	-	-	29	-	-	-	-	-	-	29
	Grey	GREY	2339	3801	1031	104	246	48	213	33	96	141	842	2	8896
	Late Lincoln grey	LCOA	144	-	-	-	-	-	-	-	-	-	-	-	144
Shell minimal	Grog & shell	GRSH	-	8	-	-	-	-	-	-	-	-	-	-	8
	Sand & shell	QZSH	-	-	-	-	-	-	-	-	-	-	-	20	20
Shell-gritted	Grey	GYMS	-	471	-	-	115	40	63	16	-	-	-	7	712
	Oxidized	OXMS	-	-	-	-	-	115	-	-	-	-	-	-	115
	Shell-gritted Dales ware	SHEL DWSH	-	-	72	-	-	-	-	-	-	-	73	-	73
Misc	Sparse fine	SHSF	-	-	-	5	-	58	21	175	-	-	-	16	275
	Common fine	SHCF	-	-	-	18	25	1249	2	343	-	-	-	41	1678
	Sparse medium	SHSM	-	-	-	-	-	-	10	31	-	10	47	16	114
	Moderate med.	SHMM	-	555	-	6	103	941	352	852	-	24	33	600	3466
	Common med.	SHCM	-	-	-	-	-	-	9	36	-	-	-	-	45
	Moderate coarse	SHMC	-	-	-	-	-	-	-	-	-	-	-	196	196
	Common coarse	SHCC	-	-	-	-	-	2326	77	545	-	-	-	930	3878
	Vesicular	VESIC	258	394	-	-	-	15	-	-	-	-	14	-	681
	Tile	TILE	-	-	10	71	-	-	-	-	-	-	-	-	81
	Fired clay	FCLAY	-	-	-	-	12	16	9	-	-	-	-	-	37
Post-Roman	Post-Roman	PRO	-	-	-	11	3	-	19	-	-	-	55	-	88
	Total		2822	12552	1301	239	548	4864	972	2042	101	266	1164	1870	28741

# HWP POTTERY

Plot	Cxt	Cut	Details	Shs	Wt	Date	Comments; Links
008	2004	2000	Upper fill of shallow pit	1	16	ROM	
008	2132	2006	Area of natural disturbance - missed off plan - also contained modern drain frag.	2	20	M3?	
008	2015	2011	Upper fill of shallow linear feature - also contained animal bone	1	30	3C?	
008	2016	2011	Primary fill of shallow linear feature -also contained R.B roofing tile and brick.	5	219	M3	
008	2014	2013	Sole fill of linear feature at western edge of easement - same cut as 2037 &2078	2	29	ROM	
008	2025	2024	Primary fill of large pit - also contained animal bone frag.	2	31	ROM	
008	2026	2024	Furrow/disturbed upper fill of large pit -also contained fragment of R.B brick/tile	2	127	M3+	
008	2030	2029	Uppermost fill of possible well - also contained animal bone	2	37	ROM	
008	2031	2029	Later fill of possible well- also contained numerous animal bone and one tegula frag.	8	306	L3-4	
008	2032	2029	Intermediate fill of possible well	1	59	M3?	
008	2059	2029	Later fill of possible well	6	537	3-4C	
008	2038	2037	Sole fill of linear feature at centre of easement - same cut as 2013 &2079	3	52	3?	
008	2046	2045	Shallow pit/? tree bowl	3	182	3?	
008	2050	2049	Fill of furrow	1	15	ROM	
008	2077	2076	Sole fill of shallow gully	1	24	L3-4	
008	2079	2078	Primary fill of linear feature - also contained animal bone	2	19	ROM	
008	2096	n/a	Surface collection of finds over possible unexcavated pit at eastern edge of easement	3	80	M3+	
008	2097	n/a	Surface collection of finds in area of grey charcoaly silt	1	19	L4	
008	2098	n/a	Surface collection of finds over unex section of linear towards centre of easement	3	74	L3-4	
008	2099	n/a	Surface collection of finds over unex section of linear towards eastern edge of easement	6	28	L4	
008	US		UNSTRATIFIED FINDS	46	918	VL4	
				101	2822		
020	US	-	UNSTRATIFIED FINDS	44	1333	VL4	
020	US1	-	UNSTRATIFIED FINDS	3	16	1C?	
020	4004	4003	Group 1 -upper fill of small pit or fill of postpipe?	11	51	LIA/EROM?	Link to 4005 Single vessel
020	4005	4003	Grp 1 - primary fill of small pit or postpacking fill ?	1	7	LIA/EROM?	Link to 4004
020	4007	4006	Grp 1 - upper fill of possible construction slot	14	80	LIA/EROM?	VPOOR FRAG BURNT COND
020	4015	4006	Grp 1 - lower fill of possible construction slot - also contained daub	86	590	LIA/?EROM	VFRAG;POOR CONDITION
020	4016	4013	Grp 1 - fill of possible construction slot - also contained animal bone	26	113	LIA/EROM?	V FRAGMENT;VABR;BURNT
020	4072	4013	Grp 1 - same as 4016	3	51	LIA/?EROM	
020	4017	4017	Grp 1 - fill of posthole - probably contemporary with 4018	2	13	LIA/?EROM	
020	4046	4018	Grp 1 - fill of posthole - probably contemporary with 4017	7	20	LIA?	
				153	941		
020	4036	4014	Grp 1 - upper fill ring gully - also cont. animal bone & daub - contemp 4040	1	7	EROM?	
020	4023	4022	Grp 1 - fill of ring gully - re-cut of 4020 - prob contemp with 4055/4057	4	39	LIA/EROM?	
020	4077	4024	Grp 1 - upper fill of ring gully	11	68	LIA/?EROM	
020	4101	4024	Grp 1 - fill of circular enclosure ditch	2	3	LIA/?EROM	

# HWP POTTERY

Plot	Cxt	Cut	Details	Shs	Wt	Date	Comments; Links
020	4053	4038	Grp 1 - fill of ring gully - also contained animal bone	51	169	LIA/?EROM	1 FRAGMENTED VESS?
020	4042	4040	Grp 1 - upper fill of ring gully - contemp with 4014	31	100	LIA/?EROM	Link to 4028? Single bowl
020	4058	4057	Grp 1 - fill of ring gully - re-cut of 4055 - prob contemp with 4020/4022	2	5	LIA?	
020	4065	4067	Grp 1 - upper fill of ring gully terminus - also contained slag	4	94	LIA/EROM	
020	4063		Grp 1 - either fill 4155 or 4154 = fills of ring gully - also contained daub	1	5	LIA/?EROM	
				107	490		
020	4076	4074	Grp 1 - upper fill of linear feature	17	236	LIA/?EROM	1 storage jar?
20	4406	4408	Small pit between Grp 1 & main site.	10	38	LIA	
020	4028	4027	Upper fill of ring ditch - also cont. animal bone frag - prob contemp with 4120	131	360	LIA/?EROM	VFRAG;POOR CONDITION;Link 4042?
020	4030	4029	Fill of linear feature - also contains animal bone and slag	9	33	ML1	POOR SCRUBBED COND
020	4113	4112	Fill of re-cut linear 4111 (same feature as 4126) - also contains animal bone	7	45	ROM	NOT CLOSELY DATABLE
020	4156	4114	Upper fill of linear feature - also contains animal bone	4	48	ML1?	DATE=SAMIAN
020	4158	4114	Lower fill of linear feature - also contained quern frag	1	11	ML1?	
020	4364	4114	Mach. strip from surface of linear 4114 - also contains oyster	8	116	2C	
020	4121	4120	Primary fill of re-cut butt end of circular gully 4118 - prob. contemp 4027	96	583	LIA/EROM	
020	4122	4120	Upper fill of re-cut butt end of circular encl gully 4118 - also contained daub	4	5	LIA/?EROM	
020	4125	4124	Fill of pit - also contained daub	1	1	ROM	
020	4215	4126	Fill of original linear ( same as 4111) - also cont. animal bone & oyster shell	3	15	LIA/EROM	
020	4134	4127	Fill of small gully	4	13	EROM?	
020	4136	4128	Fill of re-cut linear 4126 - cont. animal bone and oyster shell - same as 4112	2	106	L1E2?	DATE=SAMIAN
020	4147	4148	Fill of re-cut of gully 4150 - also contained animal bone and oyster shell	2	37	ML1?	DATE=SAMIAN
020	4356	4148	Mach. stripping of re-cut linear 4150 - also contains burnt stone & tile	54	912	1-2C?	
020	4149	4150	Fill of original gully - poss contemporary with 4179	1	31	ML1?	
020	4173	4172	Primary fill of circular enclosure - same feature (diff. section) as 4194	1	1	LIA?	
020	4176	4175	Fill of small pit within ring gully - location not marked on plan	2	18	ROM	
020	4177	4178	Fill of curving gully - also contained daub and oyster shell - same as 4239	13	141	ML1?	Link to U/S
020	4178	4178	Fill of curving gully - also contained daub and oyster shell - same as 4239	13	93	1C	
020	4180	4179	Fill of gully - contemp with either 4150 or 4148	1	95	LIA/?EROM	
020	4185	4184	Fill of ?oven - also contained slag - same feature as 4123	3	6	LIA/?EROM	
020	4186	4187	Fill of ? enclosure gully - also contains 2 quern frags and slag	3	17	1C	
020	4196	4194	Middle fill of ring gully - section C - same feature as 4172	1	9	EROM?	
020	4222	4194	Fill of ring gully - section B_ - same feature as 4172	2	5	LIA/EROM	
020	4223	4194	Fill of ring gully - section A - same feature as 4172	3	7	LIA/EROM	
020	4244	4194	Surface collection of finds from whole ring gully 4194/4172	22	511	1C	
020	4200	4203	Upper fill of elongated feature within ring gully 4194/4172	3	305	LIA/EROM	
020	4206	4205	Fill of linear feature - also contained daub and oyster shell	9	39	ML1	
020	4232	4232	Part of linear forming enclosure @ industrial area - same feature as 4226 & 4234	3	9	ROM?	

# HWP POTTERY

Plot	Cxt	Cut	Details	Shs	Wt	Date	Comments; Links
020	4235	4234	Part of linear forming enclosure @ ind. are - same feature as 4226 & 4232	6	108	ROM	
020	4240	4239	Fill of curving gully - also cont. animal bone and slag - same feature as 4178	26	532	ML1?	
020	4243	4242	Fill of linear - also contains slag	4	26	ROM?	
020	4246	4245	Upper fill of curvilinear gully - also contains daub - poss contemp with 4282	9	125	L1-?2	
020	4367	4247	Mach. strip from surface of linear 4247	5	356	1-2C	
020	4250	4249	Fill of linear feature - also contains animal bone and oyster shell	43	661	ML1?	
020	4362	4249	Mach. strip from surface of linear 4249 - also contains tile frag	14	290	1-2C	
020	4256	4255	Upper fill of linear feature - also contains slag	5	45	ML1?	
020	4355	4255	Machine surface stripping of linear feature - also contains daub	1	2	1C	
020	4267	4266	Part of linear @ indust.area - same as 4232 & 4234 -also animal bone & Fe object	13	148	ML1?	
020	4361	4266	Mach. strip from surface of linear 4266 - ? same feature as 4318 & 4370	20	659	2C?	CHECK SAMIAN
020	4279	4278	Upper fill of linear feature - also contains animal bone	8	191	ML3	
020	4282	4282	Fill of curving gully - poss contemporary with 4245	19	431	ML1?	
020	4358	4282	Machine stripping from surface of curving gully	13	292	EM2?	NEED SAMIAN DATES
020	4293	4292	Main fill linear - cont. animal bone; daub & oyster - ?same as 4179 & 4150/4148	13	220	1C	
020	4295	4294	Main fill of linear feature	4	29	ROM	
020	4296	4294	Primary fill of linear feature - also contained a worked flint	1	7	ROM	
020	4307	4294	Uppermost fill/? machine redeposited natural of linear feature	1	197	ML1?	
020	4306	4305	Fill of shallow pit - also contained slag	1	2	ML1	SAMIAN ONLY
020	4353	4313	Machine stripping from surface of pit 4313	2	34	1C	
020	4354	4313	Uppermost fill of pit 4313	4	27	1C	
020	4359	4318	Mach.strip from top linear 4318 - ? same cut as 4370 & 4266 - also slag & oyster	13	287	M2?	
020	4329	4328	Primary fill of deep pit - also contained animal bone and daub	4	82	ML1	
020	4330	4328	Secondary fill of deep pit - also contained animal bone	1	12	ROM?	
020	4332	4328	Uppermost fill of deep pit - also contained animal bone; slag & numerous oyster	4	25	ROM	
020	4342	4341	Sole fill of small pit	2	23	1C?	
020	4345	4344	Uppermost fill of linear - not on plan - situated b/w Group 1 and main site	6	40	1C?	
020	4369	4366	Primary fill of small linear slot	1	8	ROM	
020	4371	4370	Uppermost fill of linear cutting poss pit 4375 - ? same cut as 4318 & 4266	5	111	2C	Links to 4373;4376
020	4373	4370	Mid fill of linear feature - also contained animal bone	10	248	2C	Links to 4371;4376
020	4376	4375	Sole surviving fill of poss pit cut by linear 4370 - also cont oyster shell	5	45	2C	Links to 4371;4373
020	4378	4377	Sole fill of poss. pit - also contained quern frag	6	69	ROM	
020	4241	n/a	Deposit in general depression within ring ditch 4194 - cont. daub;slag & oyster	4	140	ML1?	MORT ?DATE
020	4351	n/a	Machine stripping above area around pit 4313 & ditch 4114	3	37	ROM	
020	4352	n/a	Machine stripping from rectilinear ftr 4226; 4232 & 4234	2	27	E2 HAD +	CHECK SAMIAN
020	4357	n/a	Machine stripping from surface around circular gully 4239 & curving gully 4245	1	90	ML1	DATE X ALBINUS MORT STMP 60-90
020	4360	n/a	Mach. strip from area adjacent to linear gully 4297 - also contains slag	1	6	1C?	SAMIAN ONLY

# HWP POTTERY

Plot	Cxt	Cut	Details	Shs	Wt	Date	Comments; Links
020	4363	n/a	Mach. strip from surface of possible pit 11.00E 71.00N also cont oyater and tile	12	229	2C?	SOME ABR
020	4365	n/a	Mach. strip from surface @ linears 4127 & 4126/4128 - also cont animal bone	1	1	ROM	
020	4123		One of three poss fills of ? oven - same feature as 4184	1	15	ROM?	
020	4228	4226	Upper fill gully. No other finds	1	80	ROM	
020	4265	4257	Fill linear feature. No other finds	1	23	ROM	
				129	1402		
088	US	-	UNSTRATIFIED	1	2	ROM	
088	1122	1121	Primary fill of 'L' shaped linear - cut by linear 1151 - also contains fragment of worked sto	2	9	ROM	
088	1153	1123	Uppermost surviving fill of linear feature - cut by 1121	2	55	LIA/ROM	
088	1126	1125	Sole fill of fenceline gully	1	7	ROM	
088	1128	1127	Primary fill of linear feature	19	195	3C	
088	1154	1127	Upper fill of linear feature - also contains animal bone and R.B brick/tile frags	43	343	M3+	1 MOSL BK SHATTERED/BURNT
088	1142	1141	Sole fill of linear feature - cuts linear 1143	1	3	PREH-ROM	Same in 1144;1148;1161;1167
088	1144	1143	Sole fill if linear feature - cut by 1141; cuts pit 1145 - same as 1147	3	54	PREH-ROM	Same in 1142;1148;1161;1167
088	1148	1147	Sole fill of linear feature - same as 1143	1	9	PREH-ROM	Same in 1142;1144;1161;1167
088	1150	1151	Primary fill of re-cut of linear 1121	2	6	ROM	
088	1152	1151	Upper fill of re-cut of linear 1121 - also contains animal bone and R.B tile frag	34	479	M3?	
088	1161	1160	Sole fill of linear feature - cuts 1158 - also contains daub and a R.B brick/tile frag	7	138	3-4?	Same in 1142;1144;1148;1167
088	1167	1166	Sole fill of linear feature	1	1	LIA/ROM	Same in 1142;1144;1148;1161
				117	1301		
132	US	-	UNSTRATIFIED	8	160	ML2 OR LA	
132	1738	1737	Primary fill of linear feature - also contained burnt clay lumps	1	2	LIA	
132	1745	1741	Primary fill of original linear feature - also contained bone	2	50	LIA	1 BOWL;BLK FAB;VSPARSE QTZ
132	1743	1744	Lower fill of re-cut of linear 1741 - also contained bone	2	10	LIA	
132	1742	1746	Upper fill of re-cut of linear 1741 - also contained bone	3	15	LIA	
132	1750	n/a	Subsoil deposits above linear 1747 - also contained med pot	1	2	IA?	
				17	239		
135	1809	1808	Sole fill of possible curvilinear gully - also contained animal bone - not on plan - S. end of	5	21	LIA?	
135	1811	1810	Sole fill of substantial curvi-linear ditch possibly marking southern limit of site - not on pla	9	78	LIA	
135	1813	1812	Sole fill of ring gully - same feature as 1814;1816;1826 & 1828	1	4	IA?	
135	1815	1814	Sole fill of ring gully - see 1813	5	45	LIA	
135	1835	1833	Sole fill of re-cut of ring gully 1834 - also contained animal bone	2	5	IA?	
135	1836	1834	Sole surviving fill of original ring gully - cut by 1833 - also contained animal bone	7	17	IA	
135	1855	1840	Sole fill of linear feature - cuts 1833	14	42	LIA	
135	1843	1842	Sole fill of larger curvi-linear ditch - also contained animal bone; daub & slag	26	210	ROM	SOME LIA
135	1853	1851	Sole fill of charcoal rich pit	9	43	IA?	
135	1812	1852	Fill posthole	4	9	IA	

# HWP POTTERY

Plot	Cxt	Cut	Details	Shs	Wt	Date	Comments; Links
135	1812	n/a	Area of root disturbance	1		3	POST-ROM
135	1822	1822	Fill of eaves gully; also animal bone & fired clay	17	71		LIA
				100	548		
139	1811	1811	Sole fill of re-cut of 18111 - also contains animal bone & daub	4	54		LIA
139	1811	1811	Sole fill of gully	1	11		LIA
139	1875	1860	Mid fill of ditch - also contains animal bone	1	5		IA?
139	1873	1861	Sole fill of gully - also contains animal bone	2	2		IA-ROM?
139	1874	1862	Sole fill of ditch - also contains animal bone and daub	67	673		LIA-ROM ONLY 1 DEF ROM BS
139	1866	1865	Upper fill of linear butt-end - also contains animal bone and daub	47	589		LIA?
139	1868	1867	Sole fill of linear feature - also contains animal bone	4	40		LIA
139	1871	1869	Sole fill of possible ring gully - also contains animal bone	5	107		LIA?
139	1872	1870	Upper fill of probable refuse pit - also contains animal bone and daub	31	646		LIA?
139	1878	1876	Sole fill of poss. ring gully - also contains animal bone	1	10		IA?
139	1879	1877	Sole fill of ditch - also contains animal bone	2	18		IA
139	1891	1880	Primary fill of linear - also contains animal bone and flint	3	19		LIA
139	1892	1880	Lower fill of linear - also contains animal bone; oyster & a frag of possible R.B brick/tile	69	1799		LIA
139	1893	1880	Mid fill of linear - also contains animal bone	8	93		LIA
139	1896	1882	Upper fill of ring gully - also contains animal bone	37	654		LIA
139	1898	1884	Secondary fill of pit - also contains animal bone	5	64		LIA
139	1899	1884	Uppermost fill of pit - also contains animal bone; daub; glass & a clay loomweight	6	44		LIA
139	1810	1885	Sole fill of gully - also contains animal bone & daub	4	22		LIA
139	1888	1886	Sole fill of shallow pit - also contains animal bone	3	14		LIA
				300	4864		
145	US	-	UNSTRATIFIED (from site)	7	47		LIA
145	US/A	-	UNSTRATIFIED (from south of site)	6	43		ROM ?1C
145	1916	1915	Sole fill of post-hole - also contained flint	1	2		IA?
145	1922	1921	Fill of linear at N. end of site - also contains animal bone & med tile frag - same feature a	3	27		ROM
145	1942	1941	Sole fill of post-hole - also contained animal bone and flint	1	4		ROM?
145	1946	1945	Sloe fill of post-hole	2	9		IA?
145	1956	1955	Sole fill of post-hole	1	3		IA?
145	1962	1961	See 1921 - also contains animal bone	1	18		ROM
145	1971	1963	See 1921	1	5		IA?
145	1968	1967	See 1921 - also contains animal bone; flint and med brick frag	3	8		ROM
145	1970	1967	See 1921	1	5		IA?
145	1988	1987	Grave fill - also contained animal bone; human skeleton; flint; slag & oyster	5	11		ROM
145	1992	1990	Surface clean of ring ditch - also produced animal bone & quern stone frag	4	15		IA/ROM
145	2338	1990	Secondary fill of ring ditch 1990 - also contained animal bone; daub & flint - sect.A"	3	3		IA

# HWP POTTERY

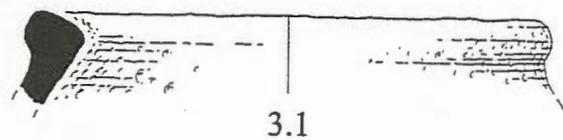
Plot	Cxt	Cut	Details	Shs	Wt	Date	Comments; Links
145	2339	1990	Possible mound material slump into ring-ditch - also cont animal bone; daub & flint - sect	5	27	IA	Same in 2353;2368;2377
145	2340	1990	Uppermost fill of ring ditch 1990 - also contains animal bone & tiny Cu alloy frags - sect.	1	1	IA	
145	2353	1990	Fill of ring ditch 1990 - also contains animal bone; daub & flint - sect C	3	27	IA	Same in 2339;2368;2377
145	2354	1990	Fill of ring ditch 1990 - also contains animal bone - sect C	5	20	IA	
145	2355	1990	Fill of ring ditch 1990 - also contains animal bone - sect C	5	39	LIA	
145	2356	1990	Primary fill of ring ditch 1990 - also contains animal bone and slag - sect C	6	36	IA	
145	2368	1990	Fill of ring ditch 1990 - also contains animal bone - sect B	4	25	MLIA?	Same in 2239;2353;2377
145	2369	1990	Fill of ring ditch 1990 - also contains animal bone - sect B	1	9	LIA	
145	2370	1990	Fill of ring ditch 1990 - also contains animal bone - sect B	2	8	IA	
145	2373	1990	Fill of ring ditch 1990 - also contains animal bone & flint - sect E	9	52	LIA	
145	2374	1990	Fill of ring ditch 1990 - also contains animal bone; daub & flint - sect E	2	10	IA	
145	2377	1990	Fill of ring ditch 1990 -also contains animal bone and human bone - sect D	4	17	MLIA	Same in 2239;2353;2368
145	2380	1990	Fill of ring ditch 1990 - also contains animal bone and flint - sect D	1	13	LIA	
145	2381	1990	Fill of ring ditch 1990 - also contains animal bone; daub & flint - sect D	10	48	LIA	
145	2382	1990	Fill of ring ditch 1990 - also contains animal bone; daub & flint - sect D	3	21	LIA	
145	1994	1993	Uppermost fill of ring ditch 1993 - also contains animal bone; daub & flint	11	46	IA	
145	2336	1993	Primary fill of ring ditch - also contains animal bone; daub & flint	5	62	LIA?	
145	1997	1996	Grave fill - also contains animal bone; flint & possible Saxon gaming counter	13	65	IA/ROM?	
145	2305	2304	Possible truncated grave fill - also contained animal bone and flint	2	11	IA?	
145	2309	2308	Fill of gully for possible rectangular dwelling or square barrow ?? - also contained daub	1	3	MLIA?	
145	2311	2310	From surface of gully for possible rectangular dwelling or square barrow ? - also cont. da	1	3	IA?	
145	2346	2310	Uppermost fill of poss rectang. dwelling or square barrow?? - also cont animal bone & w	3	7	LIA	
145	2326	2325	Grave fill - also contained animal bone; daub;flint; worked bone and skelly	5	14	LIA?	
145	2342	2341	Sole fill of posthole - also contained flint	1	2	IA	
145	1900	n/a	Topsoil across entire site	2	2	IA?	
145	1986	n/a	Medieval furrow	8	97	ROM	
145	1991	n/a	Loose surface collection of finds from area above ring ditch 1990 - same as 1999	16	37	ROM	
145	1995	n/a	Topsoil between 1990 and 1993	1	2	IA?	
145	1999	n/a	Spread of material above ring ditch 1990 - same as 1991	1	2	IA?	
145	1964	1963	Fill boundary ditch	2	66	ROM-?POS	
				172	972		
146	004	003	EVALUATION TRENCH - Principal fill of probable ring gully - same as 006 - also cont bo	8	10	LIA	Same in 006
146	006	007	EVALUATION TRENCH - Principal fill of probable ring gully - same as 004 - also cont bo	19	215	LIA	Same in 004
146	2406	2405	Sole fill of curvi-linear gully - cut by pit 2420 - also contains animal bone	41	510	LIA?	
146	2416	2407	Primary fill of linear feature - also contains animal bone & daub	2	50	LIA?	
146	2411	2413	Upper fill of re-cut of linear 2407 - also contains animal bone	1	13	IA	
146	2421	2420	Sole fill of pit cutting 2405 - also contains animal bone & daub	3	10	LIA?	

# HWP POTTERY

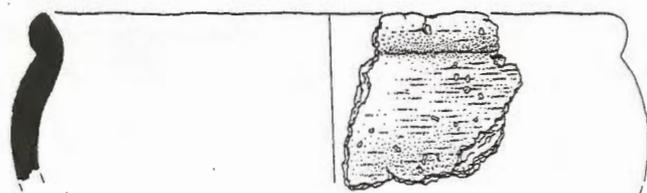
Plot	Cxt	Cut	Details	Shs	Wt	Date	Comments; Links
146	2436	2425	Upper fill of linear - poss rubbish dumping in butt-end - also contains animal bone and da	19	83	LIA	
146	2437	2425	Lower fill of linear feature	3	19	LIA?	
146	2429	2428	Upper fill of linear feature - also contained frag of B.A pot	8	40	IA	
146	2439	2438	Sole fill of shallow pit	1	36	IA	
146	2457	2456	Uppermost (4th) fill of curvi-linear ditch end - also contained large quantities of daub	30	350	LIA	
146	2458	2456	Third fill of curvi-linear ditch end - also contained animal bone and daub	33	565	LIA	
146	2459	2456	Secondary fill of curvi-linear ditch end - also contained animal bone	12	70	LIA	
146	002	n/a	EVALUATION TRENCH -Subsoil deposits	6	71	IA-ROM	
				186	2042		
147	US	-	PLOT 147 - Unstratified finds	8	101	ML3	ABRADED
147-	2024	-	Subsoil across the whole site - also contained animal bone	1	8	ROM	
147-	2007	2006	Upper fill of ditch - also contained animal bone	2	25	ROM	
147-	2011	2010	Upper fill of ditch - also contains animal bone	2	42	L3-4	
147-	2019	2018	Sole fill of ditch - no other finds	1	6	ROM	
147-	2026	2025	Upper fill of ditch - no other finds	1	1	ROM	
147-	2035	2031	Primary fill of ditch butt-end - no other finds	2	10	ROM	
147-	2038	2037	Upper fill of pit - also contained animal bone	4	142	M3?	
147-	2039	2037	Tertiary fill of pit - also contained animal bone	3	32	M3?	
				16	266		
149	002	-	EVALUATION TRENCH - Subsoil overlying archaeology - also contains animal bone	9	99	ROM	
149	US	-	PLOT 149 - Unstratified finds	111	925	ML4/POST	ABRADED
149	004	003	EVALUATION TRENCH - Upper fill of ditch - also contained animal bone	10	137	3C	MIXED DATES;POSS LIA?
149	005	003	EVALUATION TRENCH - Secondary fill of ditch - also contained animal bone	1	3	IA/ROM	
				131	1164		
150	2555	-	Subsoil layer overlying site - also contains animal bone	5	14	MLIA?	
150	US	-	UNSTRATIFIED	18	106	ROM	
150	2512	2511	Sole fill of ditch butt-end - also contained animal bone	1	2	LIA?	Same in 2514
150	2514	2513	Secondary fill of ditch - also contained animal bone	2	10	LIA?	Same in 2512
150	2517	2516	Upper fill of ditch - also contained animal bone and daub	2	42	MLIA?	Same in 2526;2536?
150	2551	2516	Upper fill of ditch - also contained animal bone; daub and shell	47	534	MIA?	
150	2553	2516	Secondary fill of ditch 2516 - also contained animal bone	1	32	IA	
150	2554	2516	Primary fill of ditch 2516 - also contains animal bone	1	2	ROM	
150	2521	2518	Upper fill of ditch - also contains animal bone	8	48	LIA	
150	2525	2522	Secondary fill of ditch - recut of ditch 2518 - also contained animal bone	1	5	MLIA	
150	2526	2522	Upper fill of ditch - recut of ditch 2518 - also contained animal bone	6	45	MLIA	Same in 2517;2536?
150	2537	2529	Upper fill of ditch - also contains animal bone	1	5	MLIA?	
150	2539	2530	Upper fill of ditch - also contains animal bone	1	21	MLIA	

# HWP POTTERY

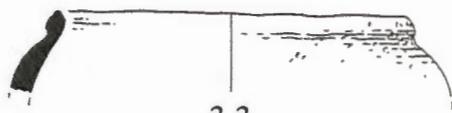
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150	2540	2530	Primary fill of ditch - also contains animal bone	2	10	MLIA	
150	2536	2535	Sole fill of ditch - cut by ditch 2529 - also contained animal bone	11	136	MLIA	same in 2517;2526?
150	2543	2542	Sole fill of ?pit - no other finds	1	21	MLIA	
150	2545	2544	Sole fill of ditch - also contains animal bone	78	719	MIA?	
150	2550	2549	Sole fill of gully - also contains animal bone and worked flint	3	22	MLIA	
150	2571	2570	Upper fill of ditch - also contained animal bone	1	2	IA	
150	2572	2570	Secondary fill of ditch - also contained animal bone; daub and shell	1	6	IA	
150	2573	2570	Primary fill of ditch - no other finds	1	41	LIA	
150	2579	2577	Secondary fill of ?pit - located in pipe trench - also contained animal bone	4	47	MLIA	
				196	1870		



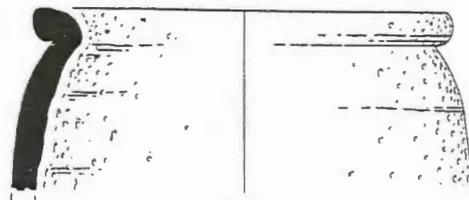
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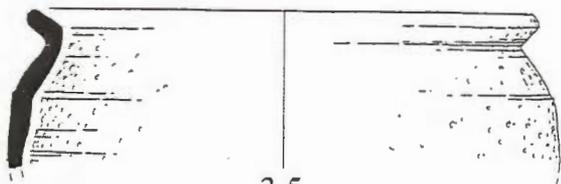
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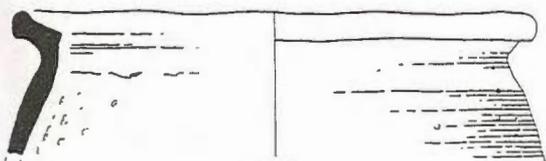
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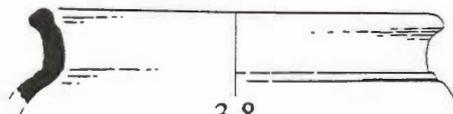
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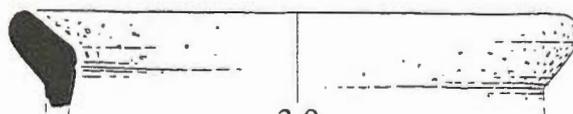
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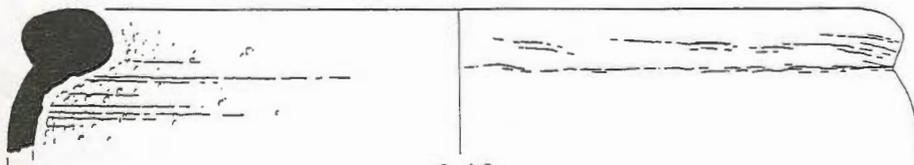
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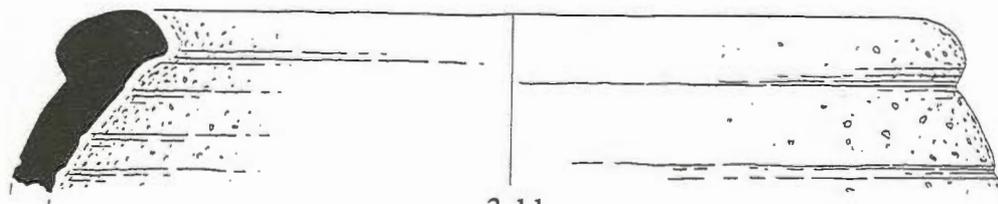
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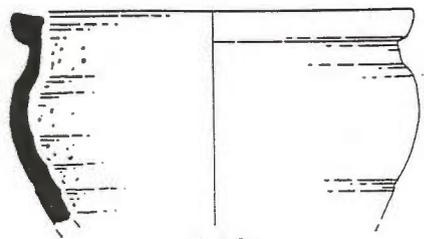
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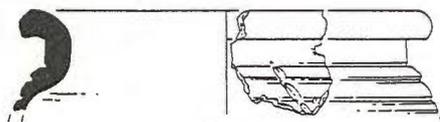
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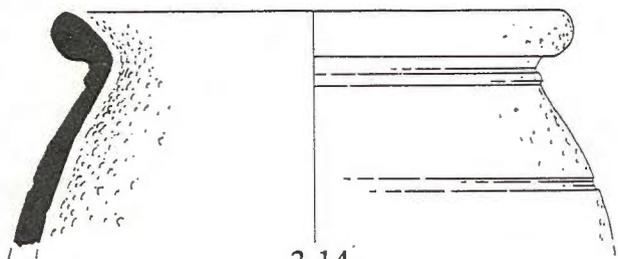
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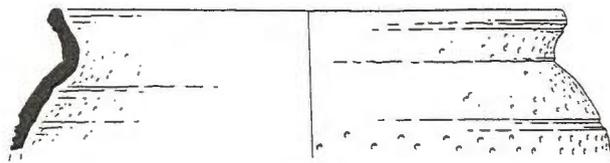
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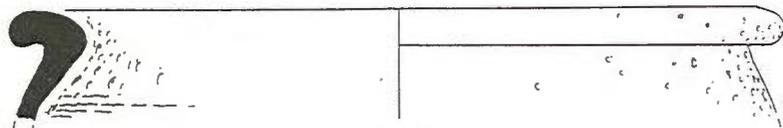
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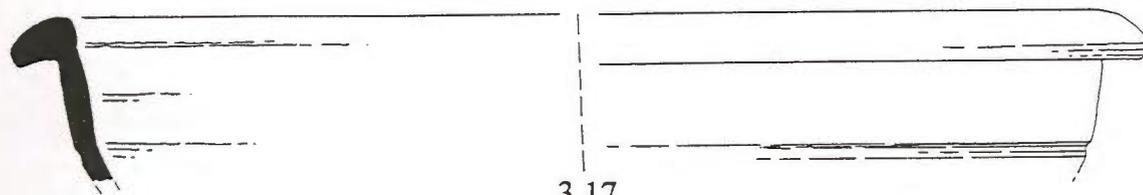
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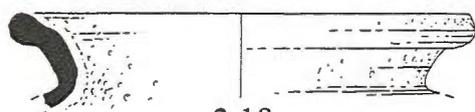
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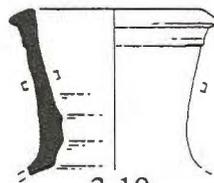
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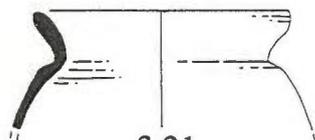
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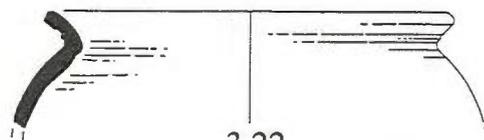
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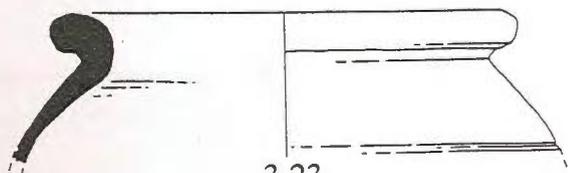
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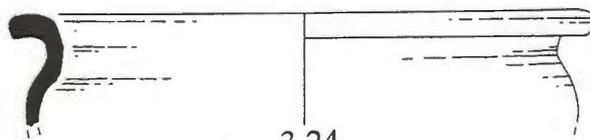
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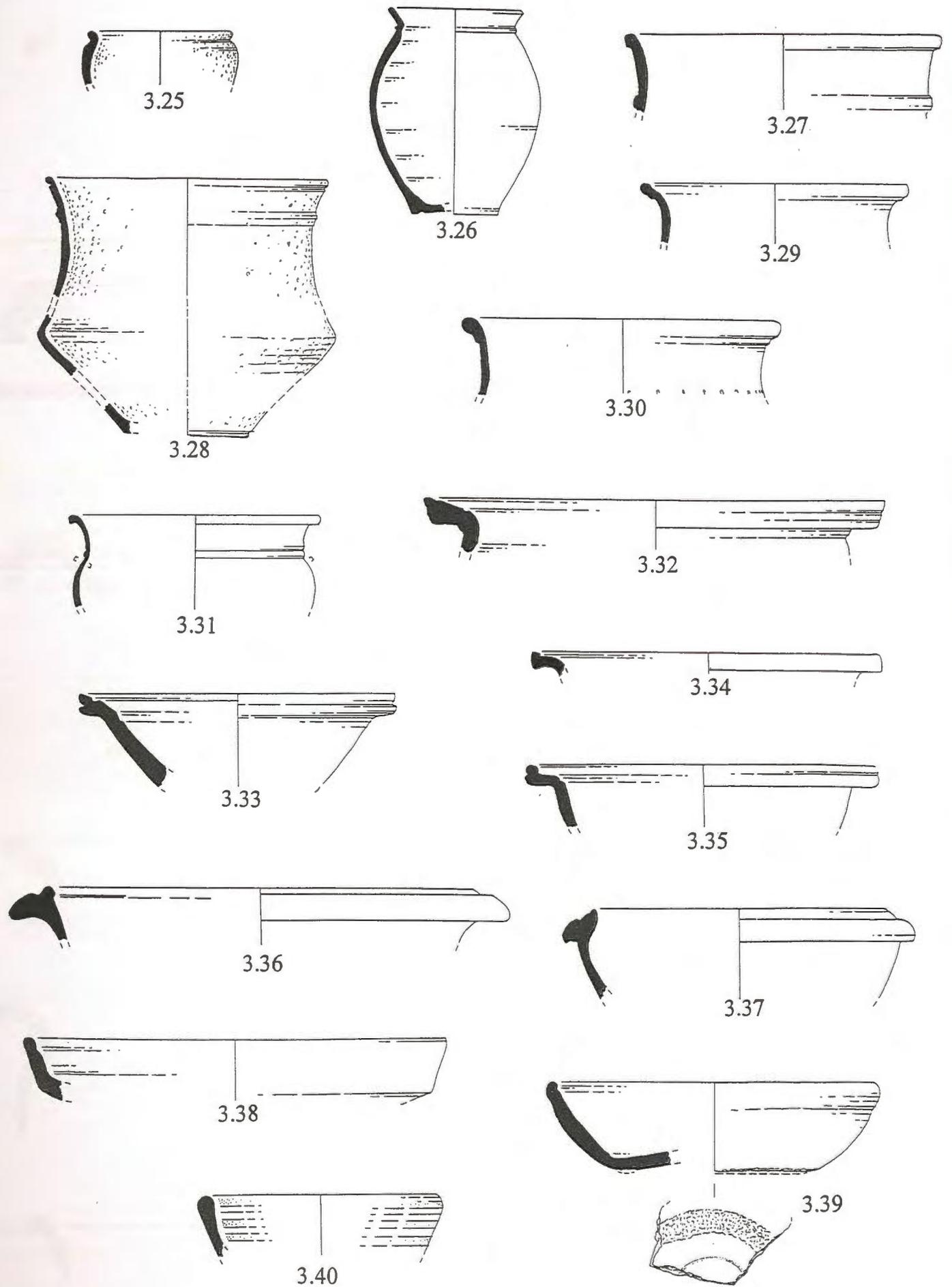
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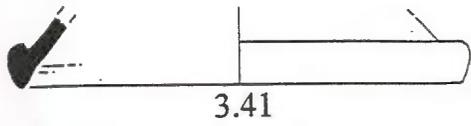
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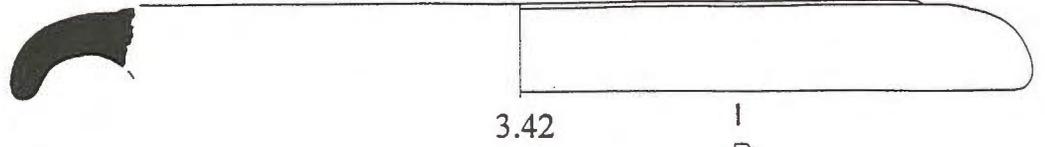
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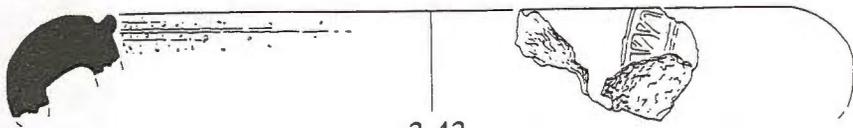
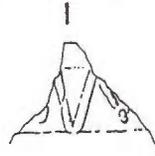
Iron Age and Romano-British Pottery Illustrations, 3.25-3.40 [Scale 1:3]



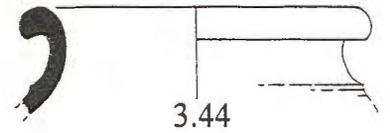
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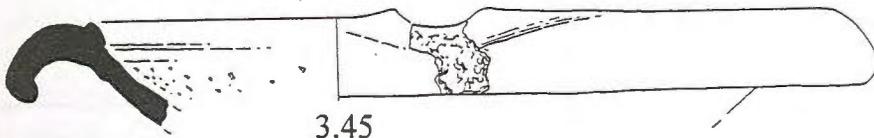
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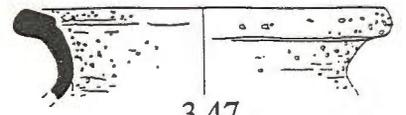
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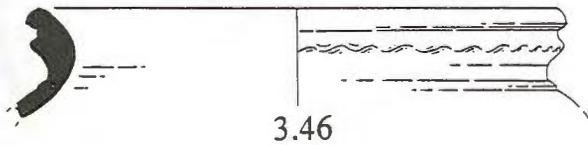
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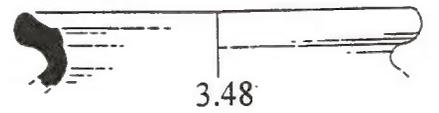
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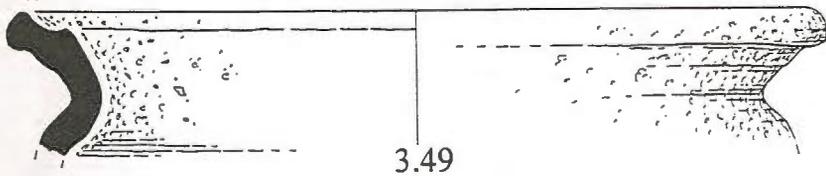
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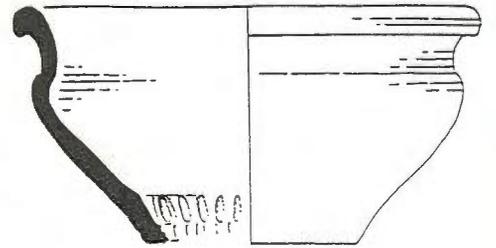
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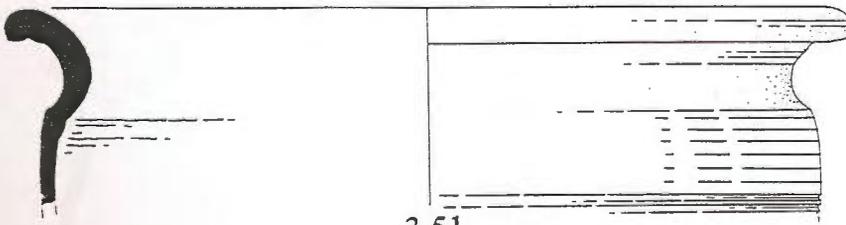
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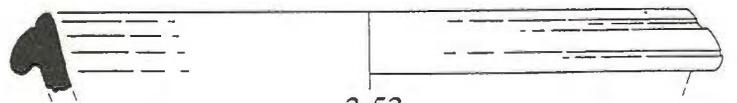
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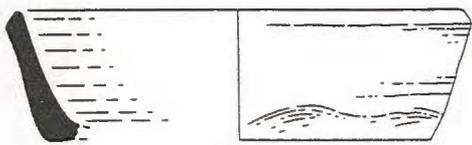


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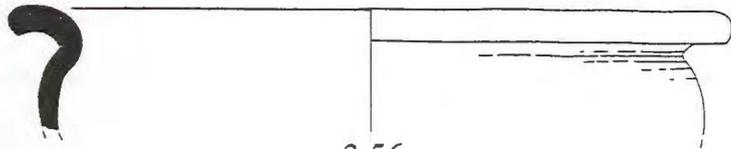
Iron Age and Romano-British Pottery Illustrations, 3.41-3.53 [Scale 1:3]



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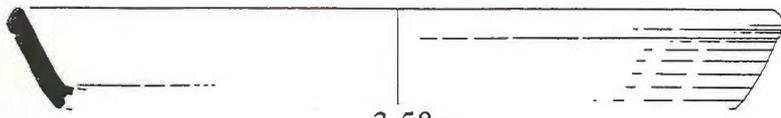
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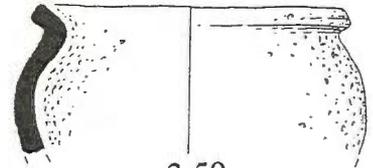
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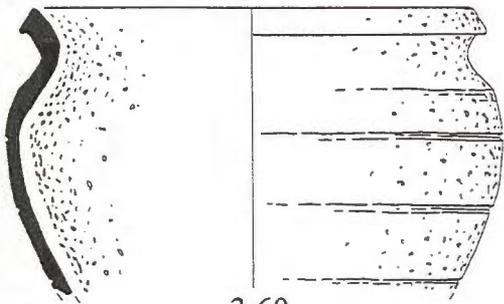
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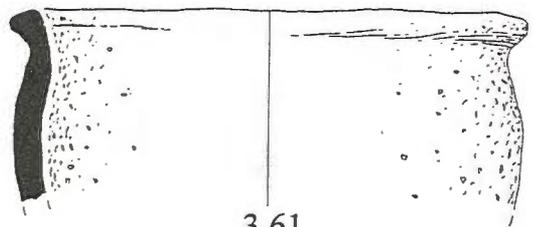
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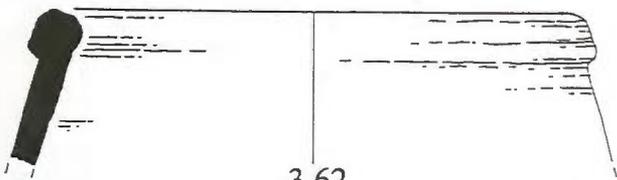
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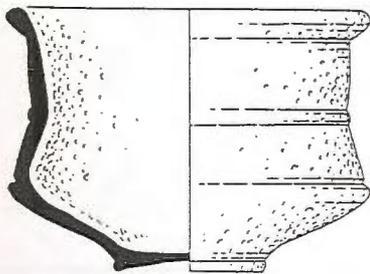
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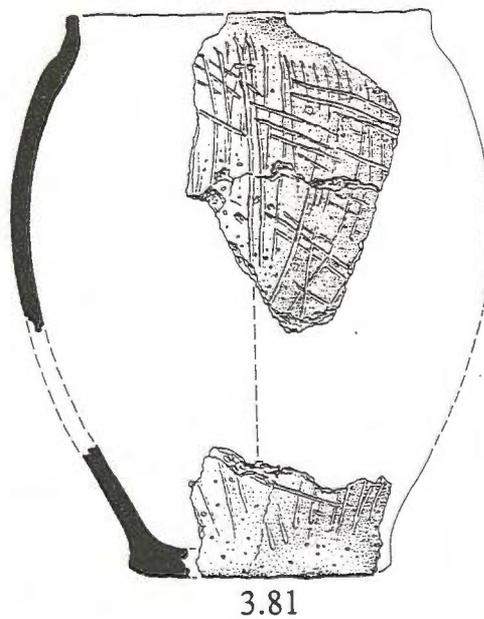
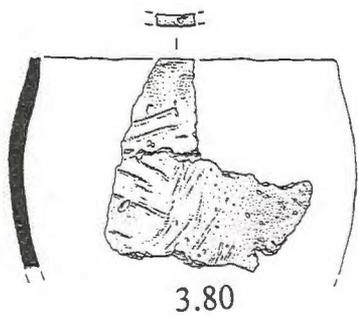
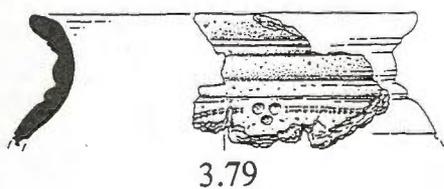
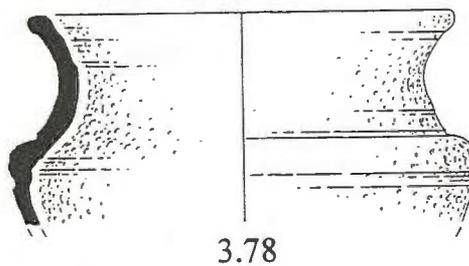
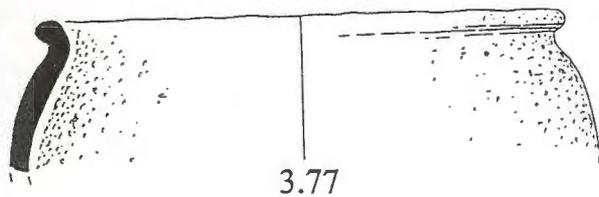
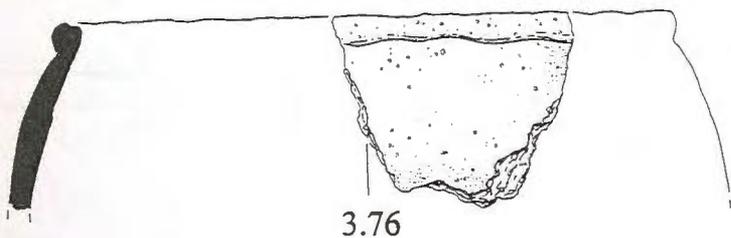
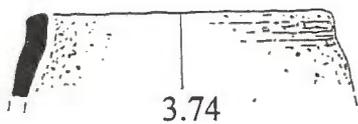
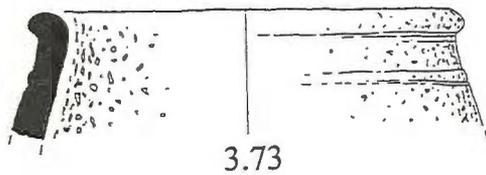
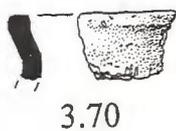
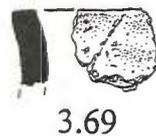
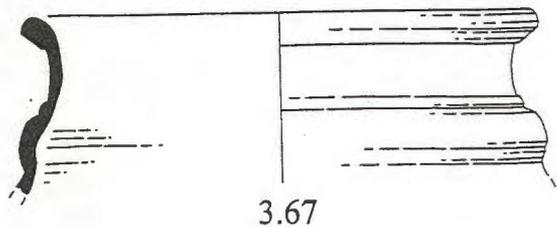
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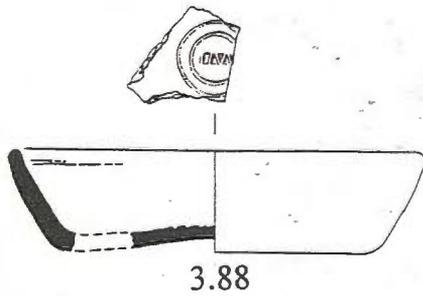
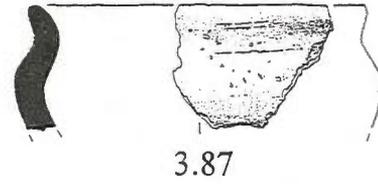
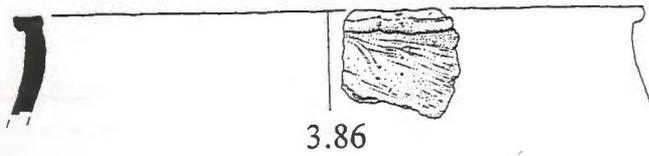
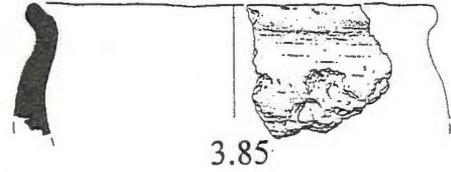
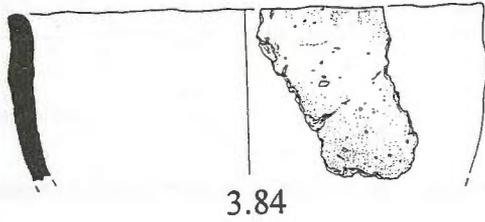
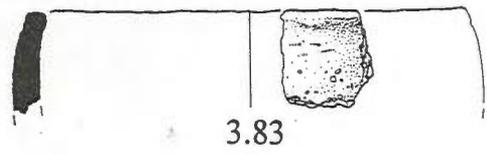
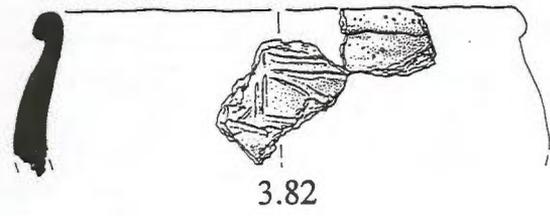


3.64



3.66





Iron Age and Romano-British Pottery Illustrations, 3.82-3.88 [Scale 1:3]

# **APPENDIX 4**

**Anglo-Saxon and Medieval Pottery**

**Dr. A. Vince**

*Pottery and Ceramic Building Material from the Hatton to  
Silk Willoughby pipeline: Assessment Report*

© Alan Vince 1998  
25 West Parade, Lincoln LN1 1NW. Tel: 01522 589992

## Pottery and Ceramic Building Material from the Hatton to Silk Willoughby pipeline: Assessment Report

**Alan Vince**

**25 West Parade, Lincoln LN1 1NW. Tel: 01522 589992**

### Introduction

One hundred and forty seven sherds of post-Roman pottery from the Hatton to Silk Willoughby pipeline (hwp98) were submitted for analysis (see App 1 - table).

### Aims and Objectives

The aims of the assessment were

- to identify and record all the material
- to provide a date-range for the finds
- to use these to infer previous land use
- to recommend and justify any further necessary work on the finds
- to identify any aspects of the site's archaeology recognisable from the ceramic finds which require further study or preservation

### Description

All items were recorded to common name and form level using the codes adopted by the City of Lincoln Archaeology Unit (Young & Vince forthcoming) and any significant details of manufacture, decoration or use were recorded as comments. Quantification was by sherd/fragment count and by weight. The data was entered into a MS Access 7 database.

### Anglo-Saxon

A single sherd of Anglo-Saxon pottery was identified, from CS19 PL145 Site 18. Early to mid Anglo-Saxon settlement is rare in Lincolnshire and this find lies close to known Anglo-Saxon settlements at Sleaford and Silk Willoughby. It was probably associated with the inhumation cemetery found in the same plot.

### Medieval

Two sherds of late 11<sup>th</sup>/12<sup>th</sup> century date were found, both from CS20 (plots 149 and 150). LFS is locally produced, handmade shell-tempered ware and ST is Stamford ware, produced at Stamford. Later 12<sup>th</sup>-century pottery was found at four sites:

HWP98 CS17  
PL128  
HWP98 CS19  
PL146  
HWP98 CS20  
PL147  
HWP98 CS21  
PL153

The sherds are all locally produced shell-tempered ware (LEMS).

Later medieval pottery was present over most of the pipeline - although remarkably rare in the Witham fens. The pottery originated in a number of centres: Lincoln itself, Potterhanworth, Toynton All Saints and Nottingham account for the majority and there were no sherds of obvious non-local origin or imports. There is a possible concentration of Nottingham products in the southern parts of the route, but given the low quantity of medieval pottery from the north this is probably not statistically valid. Toynton products occurred throughout the length of the pipeline. The lack of southern Lincolnshire products is noteworthy - there is only one sherd of Bourne medieval ware (BOUA), from CS19, and no sherds of Developed Stamford ware. The entire length of the pipeline therefore lay within the market for Lincoln products, with Nottingham products probably arriving via the Trent and possible redistribution from Newark.

The lack of Anglo-Scandinavian sherds is probably significant. This area should be within the markets of distinctive wares from Lincoln, Torksey and Stamford, although it is likely that shell-tempered wares formed the

majority of pottery used in the pipeline area. The pipeline generally avoids the sites of medieval villages, which were founded in the 9<sup>th</sup> and 10<sup>th</sup> centuries, and the pottery found is probably present as a result of manuring from these settlements and from secondary settlements - hamlets and farms, which were founded during the later 12<sup>th</sup> and 13<sup>th</sup> centuries. There is no evidence from this pipeline to indicate a decline in manuring in the later medieval period, and some of the Lincoln and Nottingham products are definitely of late medieval date.

### Post-medieval

There is a small quantity of early post-medieval pottery, dating to the 16<sup>th</sup> or early 17<sup>th</sup> centuries (44 sherds). The two main wares are Bourne D ware (BOU) and Toynton/Bolingbroke products (TB). There is a slight but definite trend in their distribution, with BOU predominating in the southern plots and TB in the northern ones. Non-local wares are mainly Midlands purple vessels, possibly from Ticknall. Some of these black-glazed wares are probably of late 17<sup>th</sup> century or later date and there is a Staffordshire slipware bowl of mid 17<sup>th</sup> century date. Only a single sherd of 16<sup>th</sup>-century Cistercian ware was present.

Later post-medieval pottery is very rare - only six sherds were recorded during the entire pipeline, all 19<sup>th</sup>-century in date. This could either indicate the enclosure and reversion to pasture of these plots in the 18<sup>th</sup> century or be a reflection of collection policy, since much later post-medieval pottery looks "modern".

### Recommendations

A single sherd, a decorated Toynton ware jug from CS19 PL145, should be drawn. The Anglo-Saxon sherd should be recorded in the county SMR.

### Acknowledgments

Jane Young identified the shell-tempered wares and confirmed the identification of a sample of sand-tempered wares.

### Bibliography

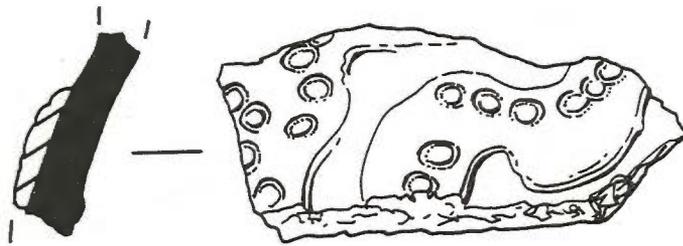
Young, Jane & Vince, Alan forthcoming *A corpus of Anglo-Saxon, Medieval and later pottery from Lincoln*.  
CLAU

TEMPHWP98

period	Sitecode	Context	cname	Form	Nosh	NoV	Action	Description	Weight
med	HWP98 CS01 PL02	U/S	NOTG	JUG	1	1		PLAIN BASE	37
med	HWP98 CS01 PL03	U/S	LSW	JUG	1	1		THIN-WALLED; OXIDIZED	1
med	HWP98 CS02 PL08	U/S	LSW	PANC	1	1			39
epmed	HWP98 CS02 PL08	U/S	BOU	BOWL	1	1			31
epmed	HWP98 CS03 PL12	U/S	BL	JAR	1	1		PROB NOT STCOAR BUT DEFINITELY COAL MEASURES VARIAGATED CLAYS	23
epmed	HWP98 CS03 PL12	U/S	TB	JUG	3	1			41
med	HWP98 CS04 PL17	U/S	MTIL	FLAT	1	1		LINCOLN?	36
epmed	HWP98 CS04 PL17	U/S	TB	BOWL	1	1			6
epmed	HWP98 CS04 PL17	U/S	TB	BOWL	1	1			17
epmed	HWP98 CS04 PL17	U/S	TB	BOWL	1	1			89
epmed	HWP98 CS04 PL17	U/S	BOU	JUG	1	1			4
med	HWP98 CS04 PL206	U/S	TOY	JUG	1	1		INTERMITTENTLY THUMBED	15
epmed	HWP98 CS05 PL22	U/S	TB	CP	1	1		SOOTED	10
med	HWP98 CS05 PL22	U/S	LSW	JUG	1	1		STRAP/OVAL HANDLE; REDUCED CORE/INT	144
lpmed	HWP98 CS07 PL44	012	DERBS	JAR	1	1		BLACK-LEADING BOTTLE OR INK WELL	4
pmed	HWP98 CS08 PL43	U/S	LSTON	FLAG	1	1		HANDLE	43
lmed	HWP98 CS09 PL71	U/S	LSW3	JUG	1	1			3
epmed	HWP98 CS09 PL72	919	BL	BOWL	1	1		STCOAR	5
lpmed	HWP98 CS09 PL72	919	MISC SY	PLATE	1	1		PRESS-MOULDED COMBED-SLIP DISH; NOT STAFFS BUT POSSIBLY COAL MEASURES	26
epmed	HWP98 CS09 PL72	920	TB?	CAUL?	1	1		CIRCULAR-SECTIONED FOOT? WHITE SLIPPED CU GLAZED	71
med	HWP98 CS09 PL78	U/S	NOTG	JUG	1	1			6
med	HWP98 CS09 PL80	U/S TOPSOIL	NOTG	JUG	1	1			4
med	HWP98 CS11 PL88	U/S	LSW?	PANC	1	1		ROUNDED BAND BELOW RIM	17
med	HWP98 CS11 PL89	U/S	NOTG?	JUG?	1	1		ID?	6
epmed	HWP98 CS15 PL116	U/S	TB	JUG	5	1		FOOTRING BASE; R/H WITH THUMBING ON EITHER SIDE	126
emed	HWP98 CS17 PL128	U/S	LEMS	CP	2	1			36
med	HWP98 CS17 PL128	U/S	POTT	CP	1	1			37
med	HWP98 CS17 PL131	U/S	POTT	BOWL	2	1			30
epmed	HWP98 CS17 PL131	U/S	TB	BOWL	1	1			23
med	HWP98 CS17 PL131	U/S	NOTG?	DJ	1	1		ROD HANDLE LUTED TO RIM; THUMBED ON EITHER SIDE OF R/H	17
med	HWP98 CS17 PL131	U/S	NOTG?	JUG	1	1			6
med	HWP98 CS17 PL132	U/S	POTT	CP	1	1			24
med	HWP98 CS17 PL132	U/S	MEDLOC	CP	1	1		SHELL-TEMPERED	1
epmed	HWP98 CS17 PL132	U/S	BL	JAR	1	1		MIDLANDS PURPLE; TICKNALL?	10
epmed	HWP98 CS17 PL132	U/S	BOU	JUG	1	1		STRAP HANDLE; ROUNDED RIM	30
med	HWP98 CS17 PL132	U/S	NOTG	JUG	1	1			5
med	HWP98 CS17 PL132	U/S	NOTG	JUG	1	1			3
med	HWP98 CS17 PL132	U/S	NOTG	JUG	1	1			4
epmed	HWP98 CS17 PL133	U/S	TB	JUG	1	1		OVAL HANDLE 4 GROOVES	54
epmed	HWP98 CS18 PL136	U/S	BL	JAR	1	1		STCOAR BUTTER POT	25
med	HWP98 CS18 PL136	U/S	LSW	JUG	1	1		WHITE SLIPPED CU GLAZE	3
med	HWP98 CS18 PL136	U/S	LSW	CP	1	1		SOOTED BASE	16
epmed	HWP98 CS18 PL138	U/S	TB	BOWL	1	1			11
med	HWP98 CS19 PL142	U/S	MISC HSGNW	JUG	1	1		GLAZE MIGHT NOT HAVE COPPER INCLUSIONS; SPARSE SHELL FRAGS	7
epmed	HWP98 CS19 PL143	U/S	BOU	JUG	1	1		SQUARED RIM	6
esax	hwp98 CS19 PL145	U/S S OF SITE	CHARN	JAR	1	1			3
lmed	hwp98 CS19 PL145	1900	LSW3	JUG	1	1		OVAL HANDLE 4-GROOVES	39
med	hwp98 CS19 PL145	U/S	LSW	JUG	1	1		PLAIN BASE	12
epmed	hwp98 CS19 PL145	1986	CIST	CUP	1	1			9
med	hwp98 CS19 PL145	1986	TOY	JUG	1	1 DR		APPLIED STRIPS WITH RING STAMPED DEC	19
med	hwp98 CS19 PL145	1986	TOY	JUG	1	1			20
epmed	hwp98 CS19 PL145	1986	TB	BOWL	1	1			34
epmed	hwp98 CS19 PL145	U/S	BOU	JUG	1	1			6
med	hwp98 CS19 PL145	U/S	BOUA	JUG	1	1		STRAP HANDLE 3 WIDE GROOVES	34
emed	HWP98 CS19 PL146	U/S	LEMS?	CP	1	1			7
emed	HWP98 CS20 PL147	U/S	LEMS	CP	1	1			8
med	HWP98 CS20 PL147	U/S	NOTG?	JUG	1	1		ROD HANDLE 7+ GROOVED	50
med	HWP98 CS20 PL147	U/S	LSW?	JUG	1	1			6
epmed	HWP98 CS20 PL147	U/S	TB	JUG	1	1		WHITE SLIPPED?	5
sn	hwp98 cs20 pl149	u/s	LFS	CP	1	1			2
med	hwp98 cs20 pl149	u/s	POTT	BOWL	1	1			7
med	hwp98 cs20 pl149	u/s	POTT	CP	1	1			8
med	hwp98 cs20 pl149	u/s	NOTG	JUG	1	1			7
med	hwp98 cs20 pl149	u/s	MEDX	JUG	2	2			21
med	hwp98 cs20 pl149	u/s	LSW2	JUG	1	1		SQUARED	6

TEMPHWP98

period	Sitecode	Context	cname	Form	Nosh	NoV	Action	Description	Weight
epmed	hwp98 cs20 pl149	u/s	BL	JAR	1	1		STCOAR	11
lmed	hwp98 cs20 pl149	u/s	HUM	JUG	3	3			18
epmed	hwp98 cs20 pl149	u/s	RGRE	BOWL	1	1			57
epmed	hwp98 cs20 pl149	u/s	BOU	BOWL	2	2			20
epmed	hwp98 cs20 pl149	u/s	BOU	BOWL	1	1			14
epmed	hwp98 cs20 pl149	u/s	BOU	JUG	2	2			9
epmed	hwp98 cs20 pl149	u/s	TB	JUG	2	2			11
epmed	hwp98 cs20 pl149	u/s	TB	JUG	1	1		OVAL HANDLE WITH 7 NARROW GROOVES AND TWO ROWS OF STABBING	57
med	hwp98 cs20 pl149	u/s	NOTG	JUG	2	1		PLAIN BASE WITH SLIGHT FOOTRING	37
med	hwp98 cs20 pl149	u/s	NOTG	JUG	1	1		BALUSTER BASE	25
med	hwp98 cs20 pl149	u/s	NOTG	JUG	1	1		NARROW STRAP HANDLE TAPERING - MIGHT BE FROM PIP?	34
med	hwp98 cs20 pl149	u/s	NOTG	JUG	1	1			11
med	hwp98 cs20 pl149	u/s	NOTG	JUG	5	5			17
sn	HWP98 CS20 PL150 U/S		ST	PTCH	1	1		THIN GLAZE OVER KT; L11/E12	4
epmed	HWP98 CS20 PL150 U/S		BL	JAR	1	1		MIDLANDS PURPLE - TICKNALL?	22
epmed	HWP98 CS20 PL150 U/S		BOU	JUG	1	1		FOOTRING BASE	54
med	HWP98 CS20 PL150 U/S		NOTG	JUG	2	2			11
epmed	HWP98 CS21 PL151 U/S		BOU	JUG	1	1			15
epmed	HWP98 CS21 PL151 U/S		TB	JUG	1	1			4
med	HWP98 CS21 PL151 U/S		LSW	JUG	2	2			11
med	HWP98 CS21 PL151		LSW	BOWL	1	1			3
med	HWP98 CS21 PL151		NOTG	JUG	1	1			19
med	HWP98 CS21 PL151		TOY	JUG	1	1		APPLIED STRIP TRIANG SECTIONED WITH ONE THUMBED IMPRESSION	19
med	HWP98 CS21 PL151		TOY	JUG	2	1			11
med	HWP98 CS21 PL151		MISC SGNW	JUG	1	1			24
emed	HWP98 CS21 PL153 U/S		LEMS	CP	1	1			7
med	HWP98 CS21 PL153 U/S		NOTG	JUG	1	1		PLAIN BASE; CF GEORGE STREET WASTE	35
epmed	HWP98 CS21 PL153 U/S		TB	BOWL	1	1			15
epmed	HWP98 CS21 PL154 U/S		TB	BOWL	1	1			84
med	HWP98 CS21 PL154 U/S		LSW	JUG	1	1			58
med	HWP98 CS22 PL157 U/S		NOTG	JUG	1	1			13
med	HWP98 CS22 PL157 U/S		NOTG	JUG	1	1			9



Medieval Pottery Illustration, 4.1 [Scale 1:1]  
Toynton Ware Sherd (1986), from Medieval Furrow [2384], Site 18

# **APPENDIX 5**

**Brick and Tile  
M.Allen**

## Hatton to Silk Willoughby Gas Pipeline Brick and Tile

Mark Allen

### Summary

*A small assemblage of brick and tile was recovered from a number of sites along the Hatton to Silk Willoughby gas pipeline route. The majority of the dateable material was found in features dating to the Romano-British period, mostly from sites in Plots 8, 20 & 88. The assemblage appears to be a fairly typical Romano-British assemblage.*

### Introduction

A total of 58 fragments of Romano-British tile were recovered from six sites along the pipeline route, mainly from ditch fills, although a large number were unstratified. Two of these tiles were recovered during the evaluation phase and a further eight tiles were found as isolated find spots. The material has been classified in terms of tile type (*Tables 1 & 2*) and fabric (*Table 3*). The term 'tile' is used generally throughout the text to refer to all brick and tile, except when the tile type 'brick' is being discussed. The following fabric analysis and tile identification is used exclusively for the Romano-British tile assemblage (*Tables 1 & 2*). The Medieval & later tile will be covered at the end of the report (*Table 5*).

### Fabrics

The identification of fabrics was carried out by eye, based on the following criteria:

*Texture* (smooth, fairly smooth, fairly coarse). Reflects nature of original clay body and of inclusions;

*Hardness* (soft, fairly hard, hard, very hard). Identified with use of finger nail. Reflects degree of baking and nature of original clay body and of inclusions;

*Porosity* (fairly dense/porous - occasional voids; dense - no or very occasional voids). Recognised in section. Reflects the quality and thoroughness of clay preparation;

*Homogeneity* (homogeneous - absence of clay folds and/or even distribution of inclusions; fairly homogeneous - occasional clay folds and/or some unevenness in distribution of inclusions; non-homogeneous - occasional/abundant clay folds and/or uneven distribution of inclusions). Recognised in section. Reflects quality and thoroughness of clay preparation;

*Inclusions* (**quantity**: very few, few, some; **type**: quartzite, calcareous, stone, ironstone, shell; **size**: range in mm). Recognised in section. Reflects nature of clay preparation and nature of original clay body;

*Surface colour* (orange, red, pink, brown, buff, grey). Reflects conditions of baking, nature of original clay body, and post-depositional processes.

### Tile Categories

The Romano-British tile has been divided into six separate categories based on form:

**Tegulae**: roofing tile; **Brick**: flat tiles of any thickness normally used in the construction of floors in heated building systems, but also as bonding courses in walls and the construction of wall arches; **Tegulae/brick**: flat tiles of uncertain type, either *tegulae* or *brick*; **Imbrices**: curved roofing tile; **Box-flue tile**: used in heated building systems; **Unidentified**.

## Site Assemblages

### Plot 08, Site 2

Overall, 17 pieces of Romano-British tile were recovered from Plot 08 (*Table 1*). Almost half the tiles came from one ditch fill (2016) to the north of the site, the remaining tiles were found in a number of contexts across the site.

Due to the good state of preservation only 2 (11.8% by number) of the tiles have not been identified. The majority of the assemblage consisted of fairly large fragments, the average weight for each piece being 112.6g. If one considers the average weight of nearly six kilograms for a complete *tegula* (Brodribb, 1979, 140) however, the majority of the fragments from Plot 08, at perhaps only 1.87% of their original size, can be regarded as being small.

Seven *tegula* fragments were identified from 13 contexts. Four of the tiles were unstratified, two came from a ditch fill (2016) and one came from the fill of a well (2031). There is little variation in thickness with all seven *tegula* fragments being between 20mm and 23mm thick. Flanges were present on all the identified *tegula*, although they are of a more varied size (37mm - 54mm deep, 20mm - 28mm wide). There is evidence of cut-offs on two of the tiles, these are sections cut away from the top and bottom of the flange before firing to enable the tiles to slot into each other and thus form a solid and secure block.

Two of the tile fragments were identified as being either *tegulae* or *brick* fragments. The tiles were 19mm and 20 mm thick and came from ditch fill 2016.

Five tiles were identified as *imbrices* at Plot 08. Four came from 2 ditch fills (2016 & 2071) and the remaining tile was unstratified. The tiles showed little variation in thickness (14mm - 17mm).

A single *box-flue* tile was recovered from a pit fill (2096). This would suggest that there was no heating system on site, but that there was one somewhere reasonably nearby.

Few of the tiles from Plot 08 (17.6%) showed evidence of grey cores, suggesting that firing conditions were reasonably good.

Overall, very little can be said of the Plot 08 tile group as the assemblage is so small. This is probably not to do with weathering for a long period of time prior to burial, as the condition of the tile fragments was generally good (*see Table 1*). There is no direct evidence of re-use of material (e.g. mortar on broken surfaces), which could also have explained the small number of tiles. The lack of artefacts from across the whole site suggests that the main emphasis for the Romano-British activity is not within the study corridor. The majority of the identified tiles were *tegula* and *imbrices*, which indicates that a Romano-British structure with a tiled-roof existed in the vicinity. The lack of *bricks* from the site would normally suggest that construction work of a limited scale was occurring although as the excavated site appears to be away from the main centre of activity it is not possible to verify this. A single *box flue* tile from the site suggests that a hypocaust system existed somewhere nearby.

### Plot 20, Site 6

In total, 24 pieces of tile were recovered from Plot 20 (*Table 1*). Eight of the tiles came from four ditch fills (4235, 4356, 4358 & 4362), two from a pit fill (4363), one from the fill of a gully (4191), one from a post hole fill (4368) and twelve were unstratified.

Due to the poor state of preservation of the tile assemblage at Plot 20, nine (36.4% by number) of the tiles were not identified. As the average weight for each piece is only 95.2g it is likely that, on average, less than 2% of each tile is represented.

Four tiles from Plot 20, identified as *tegula*, were all unstratified. The tiles varied in thickness from 20 mm to 30mm, which is fairly thin for *tegula*. Flanges were present on three of the tiles (47mm - 54mm thick, and 23mm - 33mm wide) although no cut-offs could be seen.

Four *brick* fragments were found from two contexts, two came from a ditch fill (4356) and one came from a possible post hole (4368). The remaining *brick* fragment was unstratified. The tiles were 33mm - 42mm thick, with two pieces requiring further attention. One *brick* from ditch fill 4358 appears to have shattered during firing causing an uneven spread of the grey core. This waster tile also seemed to show slight evidence of a makers mark. The other *brick* fragment (unstratified) which was over fired, has an indentation on the upper surface which was probably a makers mark. The presence of over fired and waster *brick* fragments within the assemblage suggests that the tiles were probably manufactured at or near to the site.

Three tiles, identified as being either *tegula* or *brick*, were recovered from two ditch fills (4356 & 4358). Two were 18mm thick and the other was 22mm thick. The thicker tile also had a slight indentation on its upper surface, probably a makers mark, and a pre-firing void caused by a finger that would have left a large indentation in the soft clay prior to firing.

Three *imbrex* tiles have been identified within the assemblage, all of which were unstratified. They showed little variation in thickness, from 17mm to 19mm, which may suggest that they were from the same period of manufacturing, although there is no other evidence to support this suggestion.

There were two *box flue* tile fragments within the assemblage, both from pit fill 4363. They are from the same tile, were 20 mm thick, and had a fairly thick, crude, wavy combing pattern. The lack of *box flue* tiles suggest that it is unlikely that a heating system existed within the excavated area but that there was one somewhere reasonably nearby.

A large number of the tiles recovered from Plot 20 contained grey cores (41.7%) which suggests that firing conditions were relatively poor.

Although the assemblage is very small it is fairly informative, as sixteen of the tiles (66.6% of the total number) were identifiable. The majority of the pieces identified were *tegula* or *imbrices*, which indicates that a Romano-British structure with a tiled roof existed in the vicinity. Within the study area several curvilinear gullies were located although these were probably associated with wooden structures that would not be able to support a tiled roof. It is likely therefore, that the remains of a stone structure exists outside the area of excavation. The presence of two *box flue* tile fragments suggest that a hypocaust system existed nearby.

The fabrics identified within the Plot 20 assemblage are similar to those from the site at Plot 08 which indicates that the clay sources and production methods are similar, suggesting that at least some of the tiles from both sites may have been manufactured at the same location.

#### Plot 88, Site 9

Only seven tile fragments were recovered from Plot 88. These all came from four ditch fills (1152, 1154, 1161 & 1173) except for one piece that was unstratified.

Four of the tiles were identified as either *tegula* or *bricks*. These varied in thickness from 29mm - 34mm.

The remaining three tiles were unidentifiable.

Three tiles (all *tegula/brick* fragments) had grey cores which would suggest poor firing conditions although the size of the assemblage meant that it was not possible to make such an assumption for the whole site.

Very little can be said of this assemblage as it is so small and none of the pieces could be accurately identified. The presence of *tegula* and/or *brick* fragments in the artefact assemblage for Plot 88 may indicate that a structure with a tiled roof existed as part of the Romano-British activity, although this was probably at some distance from the area of excavation.

#### **Plot 139, Site 17**

A single unidentifiable fragment of Romano-British tile was recovered from a ditch fill (1892). This tile was probably intrusive from ploughing, and should not be used to date the fill.

#### **Plot 145, Site 18**

One unidentifiable fragment that is probably Romano-British in date was recovered from ring ditch fill 2354. The tile was probably intrusive (from ploughing) and should not be used to date the fill.

#### **Plots 147-9, Site 21**

Six fragments of unstratified Romano-British tile were found at the site located in Plots 147-9 during the watching brief phase.

The majority of the pieces (4, 66.6% by number) were identifiable as either *tegula* or *brick* and vary in thickness from 17mm - 24mm.

The remaining two fragments of Romano-British tile are *imbrex* tiles. Their thickness' were very similar (15mm & 16mm), although the lack of examples makes it impossible to draw any conclusions from this.

The presence of *imbrex* tiles indicates that there was probably a Romano-British roofed structure in the vicinity, although the archaeological and artefactual evidence both suggest that this was not in the excavated area.

Two further tiles had earlier been found during the evaluation phase in Plot 149. One was identified as a *tegula or brick*, and the other was an unidentifiable fragment.

#### **Other Isolated Finds**

##### **Plot 03**

Two unstratified tiles were identified as either *tegula* or *brick*. The tiles were 23mm & 27mm thick, and both have grey cores. The tiles have been identified as Fabric 2 which was present at the Sites in Plots 08 and 20, suggesting possible parallels between the sites.

##### **Plot 74**

One piece of Romano-British tile was found from the fill of a ditch (916) from Ditch [914]. This was identified as a fragment of *tegula*, 19mm thick, which consisted of Fabric 8. This tile may suggest that a Romano-British stone-built structure existed nearby.

##### **Plot 157**

Four fragments from a single *imbrex* tile were found very close to the Silk Willoughby AGI. The tile was 18mm thick and was Fabric 10 which was the same as some of the tile fragments from Plots 147-9, suggesting that the tile from the two areas may have come from the same location. Plot 157 is located next to a Roman road (Mareham Lane) and it is likely that this tile is associated with Romano-British activity in the vicinity of the Roman road.

### Later Sites

Medieval and post-Medieval brick and tile fragments were recovered from a number of areas along the pipeline (*Table 5*).

Plot 08 contained 4 tiles, three from ditch fill 2071 and one from the fill of post hole 2006. The three tiles from the ditch were all post-medieval tiles and the remaining piece was from a post-medieval horseshoe land drain.

Two unstratified tiles of unknown date or function were found in Plot 71.

Two tiles were recovered from Plot 88, from ditch fills 1152 & 1154. One was a post-medieval brick fragment and the other was unidentifiable. Both are likely to have been ploughed into the features.

Plot 145 contained four tiles; two from ditch fills 1922 & 1963, one from hollow fill 1968 and one from furrow 1986. Two medieval tiles and a medieval brick fragment were identifiable. The remaining piece was identified as a medieval or post-medieval tile.

Plots 147-9 contained the largest assemblage of post-Roman tile (17 fragments), all of which were unstratified. Six of the tiles were post-medieval land drains, five were either medieval or post-medieval tiles, and the remaining six were unidentifiable and undatable.

Only two tiles (unstratified) were found at Plot 150. One tile is a medieval or post-medieval tile and the other was a fragment of post-medieval land drain.

Of the remaining tile fragments in the post-Roman assemblage only two were worthy of further mention.

One tile from Plot 79 was a 'nibbed' medieval tile. The nib is a small lip towards the end of a tile which allows the tile to be fixed on the roof without the need of nails, etc.

The other piece requiring special mention was an unstratified tile from Plot 131. This tile appears to have been chipped into a circular shape indicating reuse, possibly as a gaming piece?

Mark Allen 24.09.98

### References

Brodribb, G., 1979. A survey of tile from the Roman Bath House at Beaufort Park, Battle, E. Sussex. *Britannia*, 1979, vol. 10, 139-156.

Table 1: HWP 98 - Romano-British brick and tile from sites

Section	Plot	Context	Description	Tile Count	Max No Tiles	Count Ident	Weight (g)	Weight Ident	Gen Cond	No Tegula	No Brick	No Teg/Brick	No Imbrex	No Boxtile	No Unident	Fabric Nos
02	08	2016	Ditch fill	7	5	6	455	455	g	2	0	2	2	0	1	1, 2
02	08	2026	Furrow fill	1	1	0	75	0	g	0	0	0	0	0	1	2
02	08	2031	Well fill	1	1	1	295	295	g	1	0	0	0	0	0	1
02	08	2071	Ditch fill	2	1	2	75	75	f	0	0	0	2	0	0	2
02	08	2096	Pit fill	1	1	1	220	220	g	0	0	0	0	1	0	3
02	08	U/S	Unstratified	5	5	5	795	795	f-g	4	0	0	1	0	0	1, 2
04	20	4191	Gulley fill	1	1	0	5	0	p	0	0	0	0	0	1	2
04	20	4235	Ditch fill	1	1	0	25	0	p-f	0	0	0	0	0	1	3
04	20	4356	Ditch fill	5	5	4	400	385	f-g	0	2	2	0	0	1	1, 4
04	20	4358	Ditch fill	1	1	1	10	10	f	0	0	1	0	0	0	1
04	20	4362	Ditch fill	1	1	0	5	0	p	0	0	0	0	0	1	5
04	20	4363	Pit fill	2	1	2	230	230	f	0	0	0	0	2	0	1
04	20	4368	Posthole fill	1	1	1	170	170	p	0	1	0	0	0	0	1
04	20	U/S	Unstratified	12	12	8	1,250	1,120	f-g	4	1	0	3	0	4	1, 2
11	88	1152	Ditch fill	1	1	0	30	0	f	0	0	0	0	0	1	6
11	88	1154	Ditch fill	3	3	1	80	60	f-g	0	0	1	0	0	2	7, 8
11	88	1161	Ditch fill	1	1	1	45	45	p-f	0	0	1	0	0	0	9
11	88	1173	Ditch fill	1	1	1	380	380	g	0	0	1	0	0	0	6
11	88	U/S	Unstratified	1	1	1	65	65	p-f	0	0	1	0	0	0	9
18	139	1892	Ditch fill	1	1	0	5	0	p	0	0	0	0	0	1	12
19	145	2354	Ditch fill	1	1	0	10	0	p	0	0	0	0	0	1	10
20	147	U/S	Unstratified	1	1	1	45	45	f	0	0	1	0	0	0	11
20	149	004	Ditch fill	1	1	1	25	25	f	0	0	1	0	0	0	10
20	149	Tr. 01	Subsoil	1	1	0	15	0	f	0	0	0	0	0	1	10
20	149	U/S	Unstratified	5	5	5	135	135	f	0	0	3	2	0	0	10, 11

Table 2: HWP 98 - Isolated findspots of Romano-British brick and tile by context

Section	Plot	Context	Description	Tile Count	Max No Tiles	Count Ident	Weight (g)	Weight Ident	Gen Cond	No Tegula	No Brick	No Teg/brick	No Imbrex	No Boxtile	No Unident	Fabric Nos
01	03	U/S	Unstratified	2	2	2	220	220	f	0	0	2	0	0	0	2
09	74	916	Ditch fill	1	1	1	225	225	g	1	0	0	0	0	0	8
21	157	U/S	Unstratified	4	1	4	360	360	g	0	0	0	4	0	0	10

Table 3: HWP 98 - Romano-British brick and tile: Fabrics

Fabric	Type	Texture	Hardness	Porosity	Homogeneity	No of inclusions	Type of Inclusions	Size of inclusions	Surface colour
1	Clayey	Smooth	F. Hard	F. Dense	Non-homog	Few	qu, fl, ir	0.5-3	pinkorange, grey
2	Sandy	F. Coarse	F. Hard	F. Dense	F. Homog	Some	qu, ca, grog	0.5-15	bufforange, redbrown
3	S. Soapy	F. Smooth	V. Hard	Porous	Non-homog	Few	ir, qu	0.5-15	redorange
4	Soapy	Smooth	F. Hard	Porous	Non-homog	Some	grog, qu	0.5-5	buffpink
5	S. Soapy	F. Coarse	Hard	Porous	Non-homog	V. Few	grog	0.5-2	pinkbrown
6	Sandy	F. Coarse	Hard	Dense	F. Homog	Some	qu, ca	0.5-1	pinkbrown
7	Clayey	F. Coarse	V. Hard	F. Dense	F. Homog	Few	org, qu	0.5-1	orangepink
8	Sandy	F. Coarse	Hard	Dense	Non-homog	Some	grog, qu, ca	0.5-3	orange, pinkorange
9	Soapy	Smooth	V. Hard	Dense	Homog	V. Few	qu	0.5-1	pinkorange
10	S. Soapy	Smooth	Hard	Dense	Non-homog	Some	grog, qu, ir	0.5-5	orangepink, buffpink
11	Soapy	Smooth	F. Hard	F. Dense	F. Homog	V. Few	qu	0.5-1	pinkorange
12	S. Sandy	F. Coarse	F. Hard	Dense	F. Homog	Some	ch, qu	0.5-3	orangebrown

Table 4: HWP 98 - Romano-British brick and tile: tile type by fabric

Fabric No	Tile Count	Count %	Weight (g)	Grey Core	No of Tegula	No of Brick	No of Teg/Brick	No of Imbrex	No of Boxtile	No of Unid	Contexts
1	22	33.3	2,400	5	8	2	5	2	2	3	2016, 2031, 4356, 4358, 4363, 4368, 8u/s, 20u/s
2	17	25.7	1,510	5	3	1	2	6	0	5	2016, 2026, 2071, 4191, 3u/s, 8u/s, 20u/s
3	2	3.1	245	1	0	0	0	0	1	1	2096, 4235
4	1	1.5	70	1	0	1	0	0	0	0	4356
5	1	1.5	5	0	0	0	0	0	0	1	4362
6	2	3.1	410	1	0	0	1	0	0	1	1152, 1173
7	2	3.1	20	0	0	0	0	0	0	2	1154
8	2	4.5	490	0	1	0	1	0	0	0	916, 1154
9	2	3.1	110	2	0	0	2	0	0	0	1161, 88u/s
10	10	15.1	490	2	0	0	3	5	0	2	2354, 004(pl149), Tr.01(pl149), 149u/s, 157u/s
11	3	4.5	100	1	0	0	2	1	0	0	147u/s, 149u/s
12	1	1.5	5	0	0	0	0	0	0	1	1892

Table 5: HWP 98 - Posr-Roman brick and tile by context

Section	Plot	Context	Context Description	Tile Count	Count Ident	Weight (g)	Weight Ident	Gen Cond	Comments
01	03	U/S	Unstratified	1	1	125	125	g	p-med land drain
02	08	2071	Ditch fill	3	3	195	195	g	p-med tile
02	08	2132	Posthole fill	1	1	65	65	g	p-med horseshoe land drain
04	17	U/S	Unstratified	5	4	470	470	f-g	2 med tiles, 2 p-med land drain, 1 overfired tile of unknown function
04	19	U/S	Unstratified	1	1	55	55	f	1 med tile
07	44	7012	Ditch fill	1	0	5	0	f	unknown date or function
09	71	U/S	Unstratified	2	0	20	0	f	unknown date or function
09	79	U/S	Unstratified	1	1	70	70	g	'nibbed' med tile
09	80	U/S	Unstratified	2	2	85	85	f	1 med tile, 1 med/p-med brick
11	88	1152	Ditch fill	1	0	5	0	f	unknown date or function
11	88	1154	Ditch fill	1	1	15	15	g	post-med brick
17	129	U/S	Topsoil	1	1	80	80	g	very overfired p-med tile
17	131	U/S	Unstratified	4	4	75	75	p-f	med/p-med tiles, 1 tile has been chipped into a circle - reuse as a gaming piece?
17	133	U/S	Unstratified	7	6	235	205	f-g	6 med tiles, 1 piece of unknown date or function
19	145	1922	Ditch fill	1	1	145	145	f	med tile
19	145	1964	Ditch fill	1	1	35	35	f	med tile
19	145	1968	Hollow fill	1	1	100	100	g	med brick
19	145	1986	Furrow fill	1	1	25	25	f	med/p-med tile
20	147	U/S	Unstratified	8	5	640	545	p-f	5 med/p-med tiles
20	149	U/S	Unstratified	9	6	395	270	f-g	6 p-med land drains, 3 pieces of unknown date or function
20	150	U/S	Unstratified	2	2	70	70	f-g	1 med/p-med tile, 1 p-med land drain
20	151	U/S	Unstratified	1	0	5	0	p	unknown date or function

# **APPENDIX 6**

**Burnt and Fired Clay**

**Dr. A. Vince**

# **Burnt and fired clay from Site HWP98**

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## Burnt and fired clay from site HWP98

### **Alan Vince**

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### Introduction

The burnt and fired clay from site HWP98 was examined. Most was unidentifiable and could be the remains of any one of numerous processes or artefacts. Seven distinct fabrics were present, although most of the inclusions noted could be found locally and there is no evidence for the trade or long-distance movement of resources. Wattle and daub was positively identified and much of the material may be from this source. Triangular loom weights of Iron Age type with a distinctive fabric containing sparse large lumps of shelly limestone and some ?grass stems were also positively identified in two or three instances and may be another major source of the burnt clay fragments, some of which might have been deliberately fired.

No other artefacts or processes were positively identified although each fragment was considered to see whether or not it had evidence for human working and, if so, of what character.

### Aims and Objectives

The aims of the assessment were

- to identify and record all the material
- to provide a date-range for the finds
- to use these to infer previous land use
- to recommend and justify any further necessary work on the finds
- to identify any aspects of the site's archaeology recognisable from the ceramic finds which require further study or preservation

### Description

#### **Fabrics**

Seven fabric types were defined (Table 1). However, there appears to be some merging of one fabric group to the next, nor is there any evidence to suggest that there is a correlation of fabric and function (although only two of the groups are common).

Fabric Code	Firing/burning	Inclusions	Interpretation	Products
BCSAND	Both completely oxidized and black-cored examples	Abundant quartzose sand	Probably deliberately-fired	Daub Loom weights
BCFINE	Both completely oxidized and black-cored examples	None	?	?
BCFINEL	Both completely oxidized and black-cored examples	Sparse rounded limestone	Probably deliberately fired	Loom weights?
BCCHAF	Oxidized throughout (but only scraps present)	Abundant chaff	?	?
BCSANDC	Oxidized	Moderate quartzose sand and abundant	Deliberately fired	Loom weights?

	throughout.	chaff		
BCFINELS	Oxidized margin with grey (ie reduced, not carbon-rich) core	Abundant rounded limestone sand	Probably deliberately fired	Daub or loom weight. Firing suggests loom weight
BCMIXED	Both completely oxidized and black-cored examples	Sparse rounded shelly limestone and moderate quartzose sand	Deliberately fired	Loom weights
BCIGNE	Oxidized margin with black core	Coarse granitic rock fragments in a fabric otherwise identical to BCMIXED	Might be accidental burying or deliberately firing	?

Sitecode	samples	BCCHAF	BCFINE	BCFINEL	BCFINELS	BCIGNE	BCMIXED	BCSAND	BCSANDC	Total
HWP98 CS? PL?	50						11	50		111
HWP98 CS11 PL88								5		5
HWP98 CS17 PL132				9			188	13		210
HWP98 CS18 PL135						16	30	60		106
HWP98 CS18 PL139				43			49	3	64	159
HWP98 CS19 PL145	5	6	71	41			26	229		378
HWP98 CS19 PL146			350				710			1060
HWP98 CS2 PL146							200			200
HWP98 CS20 PL150			6	39	19		120	26		210
HWP98 CS4 PL20			2				117	124		243
Grand Total	55	6	429	132	19	16	1451	510	64	2682

sitecode	BURNT CLAY?	DAUB	DAUB?	LOOM??	TRILOOM	TRILOOM?	TRILOOM??	Grand Total
HWP98 CS? PL?	50							111
HWP98 CS11 PL88								5
HWP98 CS17 PL132	64	7			124			210
HWP98 CS18 PL135				7	48	5		106
HWP98 CS18 PL139					64	83		159
HWP98 CS19 PL145		26	15		196	20		378
HWP98 CS19 PL146					1021			1060
HWP98 CS2 PL146							200	200
HWP98 CS20 PL150					39	139	6	210
HWP98 CS4 PL20					99		10	243
Grand Total	114	33	15	7	1591	247	216	2682

### Wattle and daub

Only one definite fragment of daub was present, from CS19 PL145 (2339). This fragment was in fabric BCSAND and was burnt dark grey throughout. Impressions of two horizontal members of c. 10mm diameter were present, separated vertically by 8mm. Their relative angle suggests that if one assumes that the vertical members were slightly thicker (say, 25mm diameter) then the vertical members would have been 400-500mm apart. One possible daub fragment (BCFINEL), from CS19 PL145 (2337) appears to have the impression of a vertical member of 25-30mm diameter.

### Triangular loom weights

At least four triangular loom weights were present. The best preserved is from CS4 P20, context 4177. The weight is 65mm thick but of unknown height and width. A single horizontal hole (diameter 9mm) runs through the weight, about 40mm below its top.

Using this well-preserved fragment as a model, it can be seen that much of the collection most likely consists of the broken remains of similar weights. Table 2 lists these weights and grades them in terms of likelihood.

CS Number	PL Number	Context	Fabric	Comments
2	146	006	BCMIXED	Possible (very, very fragmented with one piece retaining hole impression)
4	20	4048	BCSAND	Definite
4	20	4177	BCMIXED	Definite
17	132	1738	BCMIXED	Definite
18	135	1855	BCSAND	Probable (corner piece)
18	139	1866	BCSAND	Possible (flat face only, but too thick for daub, and no evidence for wattles)
18	139	18108	BCSANDC	Probable. Fragments with two faces and chamfered angle between them.
19	145	1930	BCSAND	Might be the base of a loom weight with bevelled angles and rougher base
19	146	002	BCMIXED	Definite. Hole and face.
19	146	006	BCFINE	Probable. The surfaces appear to be completely spalled, as if by exposure to the elements, whereas the surface of the hole remains well-preserved
19	146	2457		Definite. Possibly reconstructable fragments including hole and two faces.
19	146	2458	BCFINE	Probable. No hole impression and no evidence for more than one face but very thick fragments and highly unlikely to be daub.
20	150	U/s	BCFINELS	Possible. Single hole.
20	150	2517	BCFINEL	Possible. Moderate sized black-cored lump with single hole. with oxidized surfaces
20	150	2551	BCMIXED	Possible. One piece has two faces. Others rather thick for daub.

Given that only two fragments in the entire collection are definitely or possibly from wattle and daub and the large number of loom weight fragments, it is likely that most of the remaining scraps also come from loom weights rather than daub or accidental fired clay.

### Recommendations

Two loom weights (CS4 P20, context 4177 and CS19 PL146, context 2457) should be reconstructed, photographed and illustrated.

### *Postscript*

Two additional wattle impressed daub fragments were recovered and have not been included in this report as they were away at the illustrators and are been illustrated at the end of this report. They consist:

Construction Section 19, Plot 145, Site 18  
(2337) from primary fill of Ring Ditch [1990], 20 grammes  
(2301), unstratified from cleaning layer, 25 grammes

Appendix One: Catalogue of burnt and fired clay from HWP98

csno	plno	sitecode	context	Cname	form	weight	description
2	146	HWP98 CS2 PL146	6	BCMIXED	TRILOOM??	200	ONLY ONE HOLE IMPRESSION IN A BIG BAG OF FRAGS. THEREFORE LIKELY TO BE WEIGHT RATHER THAN DAUB
4	20	HWP98 CS4 PL20	4015	BCSAND	?	12	
4	20	HWP98 CS4 PL20	4036	BCSAND	?	12	FLAT FACE
4	20	HWP98 CS4 PL20	4048	BCMIXED	TRILOOM	99	ANGLE BETWEEN TWO FACES AND ONE 'HORN' FROM TOP OF WEIGHT
4	20	HWP98 CS4 PL20	4063	BCSAND	?	11	
4	20	HWP98 CS4 PL20	4081	BCSAND	?	15	
4	20	HWP98 CS4 PL20	4122	BCSAND	?	7	
4	20	HWP98 CS4 PL20	4125	BCFINE	?	2	
4	20	HWP98 CS4 PL20	4177	BCMIXED	TRILOOM	208	TOP HALF OF WEIGHT WITH TWO 'HORNS' HORIZ HOLE
4	20	HWP98 CS4 PL20	4206	BCMIXED	?	18	FLAT FACE
4	20	HWP98 CS4 PL20	4241	BCSAND	?	18	
4	20	HWP98 CS4 PL20	4246	BCSAND	?	4	
4	20	HWP98 CS4 PL20	4293	BCSAND	?	22	
4	20	HWP98 CS4 PL20	4329	BCSAND	TRILOOM??	10	POSSIBLY ANGLE BETWEEN TWO FACES
4	20	HWP98 CS4 PL20	4355	BCSAND	?	6	FLAT FACE
4	20	HWP98 CS4 PL20	4406	BCSAND	?	7	
11	88	HWP98 CS11 PL88	1161	BCSAND	?	5	
17	132	HWP98 CS17 PL132	1738	BCMIXED	TRILOOM	124	ANGLE BETWEEN TWO FACES
17	132	HWP98 CS17 PL132	1738	BCMIXED	BURNT CLAY?	64	
17	132	HWP98 CS17 PL132	1742	BCFINEL	?	2	
17	132	HWP98 CS17 PL132	1742	BCFINEL	DAUB	7	TWO HORIZ IMPRESSIONS
17	132	HWP98 CS17 PL132	1743	BCSAND	?	13	
18	135	HWP98 CS18 PL135	1804	BCSAND	LOOM??	7	CURVED SPALLED SHERDS
18	135	HWP98 CS18 PL135	1806	BCIGNE	?	16	FLAT FACE
18	135	HWP98 CS18 PL135	1832	BCSAND	?	4	
18	135	HWP98 CS18 PL135	1843	BCSAND	?	26	
18	135	HWP98 CS18 PL135	1843	BCSAND	TRILOOM?	5	POSSIBLY ANGLE BETWEEN TWO FACES

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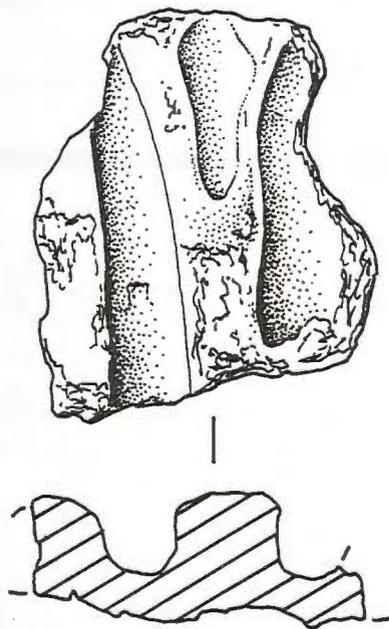
csno	plno	sitecode	context	Cname	form	weight	description
18	135	HWP98 CS18 PL135	1849	BCSAND	TRILOOM	18	ONE FACE WITH HOLE
18	135	HWP98 CS18 PL135	1855	BCMIXED	TRILOOM	30	CHAMFERED ANGLE BETWEEN TWO FACES
18	139	HWP98 CS18 PL139	1866	BCMIXED	TRILOOM?	49	ONE FLAT FACE; TOO CHUNKY FOR DAUB
18	139	HWP98 CS18 PL139	1874	BCFINEL	?	9	
18	139	HWP98 CS18 PL139	1899	BCSAND	?	3	
18	139	HWP98 CS18 PL139	18108	BCSANDC	TRILOOM	64	ONE ROUGH FACE (BASE?) AND ONE SMOOTHER
18	139	HWP98 CS18 PL139	18114	BCFINEL	TRILOOM?	34	TOO CHUNKY FOR DAUB BUT NO DEFINITE FACES OR HOLE
19	145	HWP98 CS19 PL145	1911	BCSAND	?	3	
19	145	HWP98 CS19 PL145	1930	BCSAND	TRILOOM	196	BASE AND CHAMFERED ANGLES
19	145	HWP98 CS19 PL145	1940	BCCHAF	?	3	
19	145	HWP98 CS19 PL145	1986	BCFINEL	TRILOOM?	20	FLAT FACE
19	145	HWP98 CS19 PL145	1994	BCFINE	?	22	FLAT FACE
19	145	HWP98 CS19 PL145	1994	BCFINE	DAUB?	7	OXID SURFACE BLACK CORE;ONE IMPRESSION C.20MM DIAM
19	145	HWP98 CS19 PL145	2309	BCCHAF	?	3	
19	145	HWP98 CS19 PL145	2311	BCFINE	DAUB?	8	ONE FACE WITH POSSIBLE IMPRESSION
19	145	HWP98 CS19 PL145	2324	BCFINE	?	25	FEATURELESS LUMP
19	145	HWP98 CS19 PL145	2326	BCMIXED	?	26	
19	145	HWP98 CS19 PL145	2336	BCSAND	?	4	
19	145	HWP98 CS19 PL145	2337	BCFINEL	DAUB	19	25-30MM DIAM IMPRESSION. VERTICAL ROD
19	145	HWP98 CS19 PL145	2338	BCFINE	?	7	
19	145	HWP98 CS19 PL145	2339	BCSAND	DAUB	7	TWO HORIZ IMPRESSIONS

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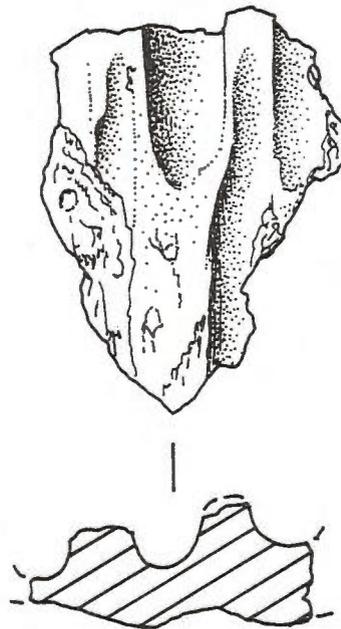
csno	plno	sitecode	context	Cname	form	weight	description
19	145	HWP98 CS19 PL145	2352	BCSAND	?	11	
19	145	HWP98 CS19 PL145	2353	BCFINEL	?	2	
19	145	HWP98 CS19 PL145	2374	BCFINE	?	2	
19	145	HWP98 CS19 PL145	2381	?	?	5	FACE HAS IRREGULAR THUMB/FINGER IMPRESSIONS. COULD BE POT?
19	145	HWP98 CS19 PL145	2382	BCSAND	?	8	FLAT FACE
19	146	HWP98 CS19 PL146	2	BCMIXED	TRILOOM	103	HOLE AND ONE FACE
19	146	HWP98 CS19 PL146	2	BCFINE	?	18	
19	146	HWP98 CS19 PL146	6	BCFINE	TRILOOM	320	ONE HOLE IN A LARGE BAG OF FRAGMENTS
19	146	HWP98 CS19 PL146	2416	BCFINE	?	2	FLAT FACE
19	146	HWP98 CS19 PL146	2421	BCMIXED	?	9	FLAT FACE
19	146	HWP98 CS19 PL146	2436	BCFINE	?	3	
19	146	HWP98 CS19 PL146	2457	BCMIXED	TRILOOM	428	AT LEAST TWO WEIGHTS PRESENT WITH DIFFERENT DIAMETER HOLES
19	146	HWP98 CS19 PL146	2458	BCMIXED	TRILOOM	104	PART OF HOLE AND FLAT FACE
19	146	HWP98 CS19 PL146	2458	BCMIXED	TRILOOM	66	FLAT FACE
19	146	HWP98 CS19 PL146	2466	BCFINE	?	7	FLAT FACE
20	150	HWP98 CS20 PL150	2517	BCFINEL	TRILOOM	39	HOLE;GRASS/STRAW INCLUSIONS
20	150	HWP98 CS20 PL150	2551	BCMIXED	TRILOOM?	120	FLAT FACE
20	150	HWP98 CS20 PL150	2572	BCSAND	?	26	FLAT FACE
20	150	HWP98 CS20 PL150	U/S	BCFINELS	TRILOOM?	19	HOLE
20	150	HWP98 CS20 PL150	U/S	BCFINE	TRILOOM??	6	POSSIBLY ANGLE BETWEEN TWO FACES
11	88	HWP98 CS11 PL88	1152	?	BURNT CLAY?	50	SAMPLE 39;SOFT GREY CLAY
18	135	HWP98 CS18 PL135	1804	BCSAND	?	1	SAMPLE 41

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csno	plno	sitecode	context	Cname	form	weight	description
18	135	HWP98 CS18 PL135	1806	BCSAND	?	16	SAMPLE 42
19	146	HWP98 CS19 PL146	2458	BCSAND	?	13	SAMPLE 19
4	20	HWP98 CS4 PL20	4016	BCMIXED	?	11	SAMPLE 23
4	20	HWP98 CS4 PL20	4291	BCSAND		20	SAMPLE 27



6.1 Unstratified daub from cleaning layer (2301)



6.2 Daub from ring ditch (2337)

Iron Age Daub Illustrations, 6.1-6.2 [Scale 1:1]  
Displaying horizontal wattle impressions from Site 18

# **APPENDIX 7**

**Animal Bone  
Dr. R. Moore**

## Hatton to Silk Willoughby Pipeline (HWP98): Animal Bone

*Richard Moore*

### Introduction

Over 22 kg of animal bone was collected during the course of the evaluation and watching brief phases of the project. Three sites, in plots 139, 145 and 150 contributed the bulk of the bone, but there were also significant amounts in plots 8, 20, 72, 109, 129/130, 146 and 149. Six other sites yielded small amounts. A list of all the bone recovered is given in Appendix 2.

### Species

The bulk of the assemblage is made up of the common livestock species, cattle (*Bos taurus*), sheep (*Ovis aries*), pig (*Sus scrofa*) and horse (*Equus caballus*). Distinguishing sheep from goats (*Capra hircus*) presents difficulties. One horn-core fragment could have been from a goat, but otherwise, where distinction can be made, only forms typical of sheep were noted. However, most bones cannot be readily told apart and the figures for sheep may also include goats. Dogs (*Canis familiaris*) were present on two sites. The assemblage includes antler fragments, probably from both red deer (*Cervus elephas*) and roe deer (*Capreolus capreolus*). Of two bird bones, one probably came from a duck (?*Anas sp.*) and the other possibly from a wader. An amphibian bone (*Rana* or *Bufo*) and a long-bone shaft from an unidentified small mammal were also noted. The assemblage included thirteen stray human bones, mostly from the site at plot 145, construction section 19. These have been dealt with separately, in an addendum to the human bone report.

### Numbers

Each of the sites or find-spots where bone was recovered is discussed separately below. For the larger sites, the numbers of bones or bone fragments positively identified for each species are tabulated below. Re-fitting fragments are listed as single bones and, in the bone-counts, groups of articulating bones are also regarded as single bones.

By comparing the most commonly occurring bones or bone elements for each species, a minimum number of individuals (MNI) represented in the assemblage can be worked out for each site.

### Condition and State of Preservation

The state of preservation of bone is highly dependent on localised soil conditions, and varied from site to site. In general, the material was very fragmentary and often badly eroded, with flaky surfaces.

Small amounts of burnt fragments were recovered throughout the route, but with no particular concentrations. Disposal of waste from butchery or food preparation could account for all the burnt fragments found.

### Discussion by Site:

#### Construction Section 2, Plot 8

Animal	Bones	MNI
Cattle	13	3
Horse	2	1
Pig	3	1
Dog	1	1
Deer	1	1

This site was unusual for its lack of sheep. There were no identified sheep bones and of the unidentified material, only two fragments, of rib and long-bone shaft from context (2031), are likely to have been from sheep. Differential preservation and collection rates may in part be responsible for this shortage; preservation was poor and the more robust cattle bones may have survived better. The presence of pig bones, however, suggests that any sheep bones originally present might have survived, and their absence may suggest that little or no sheep farming took place on this site. Given the very small size of the assemblage, any such conclusion would be very tentative.

Among the cattle bone, an articulating skeleton of calf in context (2036) was noteworthy. As recovered, the fore-limbs, much of the spinal column and ribs and some of the left hind-limb were present. The bones were all very small, and none of the long-bone epiphyses were fused. In addition, the arches of the vertebrae were not ossified, so that the centrum were separate from the neural spines. This implies that the animal was very young, either new-born or in its first months of life. A calf dying by injury or disease at this age would have little value, and is likely to have been buried as a convenient method of disposal.

The presence of teeth allows age estimates to be made for two cattle in context (2031). The considerable wear to the molars indicates that they were both mature individuals, probably five years or more old.

The end of a tine from an antler in context (2015) had been severed by a neat saw cut. It was rather small and may have been from a roe deer. Antler is easily sawn when fresh and was widely utilised in antiquity as a raw material for the production of small items such as combs, dress fittings and gaming pieces.

An articulating group of bones from the right fore-leg of a horse were present in context (2031). They showed slight charring of their surfaces, indicating that they had been subject to heating. This effect is unlikely to have been produced by cooking and probably indicates that the bones were disposed of as a group, and not used for food. Cultural prohibitions on the consumption of horse-meat are common, but old animals or those dying through injury or disease could also be rejected as food.

The dog skull in 2030 was well mineralized, with teeth fairly heavily worn, indicating that it came from a fairly old individual. It was of small to medium size, perhaps comparable to a modern fox terrier or foxhound.

***Construction Section 4, Plot 20***

Animal	Bones	MNI
Cattle	12	4
Sheep	6	3
Horse	3	1
Pig	1	1

All the bone from this site was in particularly poor condition. Age estimates of cattle are possible where teeth are present. The mandibles in context (4136) both had heavy tooth wear to the third molars, indicating that they came from old animals. By contrast, the third molar of the mandible in context (4293) had not yet come into wear, and would have been from an animal of around two to three years old.

***Construction Section 8, Plot 61***

Context (8004) had a number of pieces of very heavily eroded bone. Most of this was not readily identifiable, but possibly included fragments of a cattle mandible.

***Construction Section 9, Plot 71***

Part of a third metacarpal bone from a horse were found in context (932), together with a splint metacarpal. The region of the bone where these would articulate was not present on the major metacarpal, so it is not possible to say if they came from the same animal, but it would be a reasonable assumption. Horse or cattle skull fragments were also present in the same context.

**Construction Section 9, Plot 72**

<b>Animal</b>	<b>Bones</b>	<b>MNI</b>
Cattle	5	2
Sheep	7	3

The size and robustness of two very large cattle femurs suggested that they may be from modern breeds. The same was true of at least four of the sheep bones that were present. Skull and vertebra fragments, probably from cattle, show butchery cuts, and a cattle femur shaft and a rib blade both have neat saw-cuts at either end. Although saws have been used in bone working at least since Roman times, there appears to be little or no evidence for their use in butchery before the late eighteenth century (MacGregor, 1985, p 55). The overall impression from this assemblage is that it consists of recent material.

**Construction Section 11, Plot 88**

Fragments of a molar tooth in context (1142) and a shoulder blade in context (1152) provide evidence for cattle. A sheep mandible was also present in the latter context. This had a newly erupted permanent fourth pre-molar, indicating that the animal was relatively young, perhaps around two to three years old. A horse cheek-tooth was retrieved from context (1173).

**Construction Section 12, Plot 103**

A single tooth, a horse incisor, was recovered from context (1204).

**Construction Section 14, Plot 109**

Part of an articulated cattle skeleton from context (1409), were found at this site. It consisted of most of the right fore-leg of the animal, together with part of the right hind-leg, vertebral column and pelvic girdle. Although fairly small, comparable in size with much prehistoric stock, this animal was probably a male, being quite robustly built. A shaft fragment from a smaller sheep-sized animal was recovered from the same context. Context (1405) yielded a molar tooth of a sheep.

**Construction Section 17, Plots 129 and 130**

A small group of articulating sheep bones was recovered from context (1703). This consisted of the lower part of the left hind-leg. Other limb bones of similar appearance probably came from the same animal. These bones are all large and robust, comparable in size to modern, 'improved' breeds of sheep. Two isolated sheep teeth included a fairly well worn third molar, from a mature animal. Fragments of bone from a larger animal, possibly a cattle tibia, were also present in the same context.

**Construction Section 17, Plot 132**

<b>Animal</b>	<b>Bones</b>	<b>MNI</b>
Cattle	8	2
Sheep	6	1
Pig	2	1

A pig mandible from context (1738) has the third and fourth deciduous pre-molars still in place, although these are fairly well worn. These teeth are shed quite early in pigs, typically around one year to eighteen months of age, so this mandible would have come from an animal younger than this, perhaps slaughtered at the start of its first or second winter.

At least two animals are represented by four cattle foot bones in context (1743) and two bones in (1745). The epiphysis of one of these bones was not yet fused, indicating that it came from an animal under eighteen months to two years of age. The other bones, one of which was partly burnt, could all have come from the same individual. They were very small, falling within the range of size typical of Iron Age or of medieval stock. Sheep limb bones were present in contexts (1743) and (1742).

*Construction Section 18, Plot 135*

Animal	Bones	MNI
Cattle	10	1
Sheep	5	2
Horse	1	1

A number of upper and lower cattle teeth, mandible and skull fragments in context (1843) may all have come from a single animal. The teeth show heavy wear, showing that they came from an old individual, near to the end of its natural lifespan. Small quantities of cattle bones or teeth were also found in contexts (1823), (1827), (1835), (1836) and (1857), all fragmentary and poorly preserved.

Three horn-core fragments found in context (1857) represented at least two animals. They were sheep-sized, but one had a cross-section which more typical of goat rather than sheep horns. Sheep teeth, a deciduous pre-molar in context (1843) and a well-worn third molar in context (1849) were also present, along with two limb bones.

The single horse bone from this plot was an almost complete atlas vertebra from context (1859).

*Construction Section 18, Plot 139*

Animal	Bones	MNI
Cattle	30	3
Sheep	25	4
Horse	3	1
Pig	8	2

This site had one of the larger assemblages of animal bone. The cattle bone included nineteen skull fragments in context (1866). These were all similar in appearance and probably all came from the same animal. Upper teeth with fragments of maxilla bones were present in two contexts. In (1866), the teeth were all fairly heavily worn, indicating that they came from a mature animal, while those in (1892) included deciduous third and fourth pre-molars, which are normally lost during the animal's third year of life. From the same context, a heavily worn third molar would have come from an old animal, nearing the end of its natural lifespan. Context (1891) also had a loose cattle tooth, an upper fourth deciduous pre-molar.

Cattle limb bones were present in a number of other contexts including (1868), (1875), (1878), (1891), (1893) and (1899). A talus from context (1898) shows deep butchery cuts. There is also evidence of butchery also on an unidentified fragment in context (1874).

In all, there were seven sheep mandibles or sets of lower teeth, counting left and right sides separately. Left and right mandibles in context (1866) have slightly different degrees of wear, but both have deciduous third and fourth pre-molars still in place. Matching first and second molars in the same context are from a slightly older animal. A fragment of mandible in context (1873) had a newly erupted third molar not yet in wear, while a matching set of teeth in the same context included heavily worn deciduous pre-molars, together with the newly forming crown of the permanent fourth pre-molar. A loose sheep molar in the same context could have been the third molar of this set, but only two cusps were present. There is considerable variation in the third cusp of sheep third molars, and it is possible that this was an unusual individual. However, matching up sets of teeth which are no longer in place in the jaw can never be done with certainty, and it may be that this tooth was a second molar from a different animal which coincidentally appeared to fit with the rest of the set. Loose lower molars were present in contexts (1864) and (1872), both showing moderate wear. All of these sheep mandibles and teeth seem to fall within a fairly narrow age range, with deciduous pre-molars still in place, or recently replaced, and moderate wear to the first and second molars. This suggests that the animals were around two to three years old at death. The absence of animals outside this range could be a statistical quirk, but possibly indicates that relatively mature lambs bred elsewhere were imported into the site for fattening, slaughter and consumption.

Pig limb-bones were present in contexts (1872) and (1899), together with a loose incisor in (1866) and a female canine in (1879). A mandible in context (1866) had lightly worn first and second molars with no third molar,

indicating that the animal was younger than around eighteen months, the age at which this tooth commonly erupts in pigs. The upper molars in context (1983) showed quite heavy wear and were from a much older animal.

*Construction Section 19, Plot 145*

Animal	Bones	MNI
Cattle	40	3
Sheep	32	5
Horse	9	1
Pig	21	3
Deer	1	1
Dog	1	1
Amphibian	1	1
Bird	1	1

Of the sheep mandibles and sets of contiguous teeth present, at least three, in contexts (1997), (2373) and (2374) still had deciduous pre-molars, though with a moderate amount of wear in each case. These teeth are normally shed at around two to three years of age, so these animals are likely to have been fairly mature lambs, probably slaughtered during their second winter. Another set in context (2355) had an unworn permanent pre-molar and would have been from a slightly older animal. Moderately worn third molars in contexts (1991), (2355) and (2377) must have come from mature sheep three years or more old.

Pig bones were present in fifteen contexts. A canine tooth in context (1988) was from a female while those in (1997) and (2354) were male tusks. There was also an upper deciduous pre-molar in (1997). Mandibles in contexts (2368) and (1991) had permanent pre-molars and moderate wear to the molars, and would have come from relatively mature animals. The same is probably true for the molars in contexts (1991) and (2374).

There were relatively few cattle on this site. This may be a reflection of the conditions of preservation which could have caused larger bones to survive less well than. It may be significant that a three large fragments of mandible, in contexts (1944), (1991) and (2381) were without teeth, suggesting that they may have been subject to a degree of post-depositional disturbance. Loose teeth in contexts (1986), (1994) and (2355) were damaged or split.

A fragment of antler was present in context (2301). This had a small cross-section, suggesting that it came from a roe deer. A tibia shaft in context (2380) was larger and more robust than the sheep bones from this site, and may also be from a deer.

A horse atlas bone was present in the grave fill (2326). Its positioning in relation to the burial suggests the possibility that it could have been deliberately placed, as part of a funerary rite. The presence of the large, 'boxy' cervical vertebra of horses as grave-goods has been noted from other sites, and it seems likely that these bones were held to be of some special significance. Two other vertebrae in this context were too fragmentary to be positively identified as horse, and do not appear to have been part of an articulated group. If these bones were deliberately placed within a grave, it is probable that they were deposited as separate bones rather than, say, as a joint of meat. A pair of matching dog mandibles were found in the same grave fill. They were very small, comparable in size to a typical cat jaw, and still had milk-teeth throughout. Replacement of milk teeth in dogs normally begins at less than six months old (Hillson 1985, p 217), and the small size suggests that these bones came from a puppy much younger than this.

Part of a bird carpo-metacarpal bone was recovered from context (2381). It has not been positively identified, but it is closest to either a gull or a wader. It may be from a game bird used as food, or a wild bird accidentally incorporated with this fill. A limb bone of an amphibian, probably a frog tibio-fibula, was present in context (1997). A long-bone shaft in context (1979) was from an animal the size of a small dog or cat.

Hard, dense fragments of mineralized or fossilized bone was present in contexts (2338) and (2326). Localised chemical conditions within these fills may have caused this mineralization, but it is probably more likely that these have been incorporated into the soil from the underlying rocks.

A number of bones show evidence of butchery. A partially split sheep metatarsal bone in context (2381) has a number of lateral cut marks. A fragment of a cattle or horse mandible has diagonal cut marks across its angle region. The tibia shaft in context (2373), mentioned above as a possible deer bone, also has signs of knife cuts.

**Construction Section 19, Plot 146**

Animal	Bones	MNI
Cattle	11	3
Sheep	5	1
Horse	3	1
Pig	4	2

Contiguous cattle pre-molars in context (2431) are moderately worn deciduous teeth, with the newly-formed crown of the permanent fourth pre-molar also present. They would be from a young animal, probably in its second year. A fragment of cattle mandible in context (2406) is probably associated with a first molar, deciduous fourth pre-molar and permanent fourth molar crown in the same context, and would also come from a second-year calf. A third molar in context (2411) is from an older animal, but damage to the crown and roots make estimates of the degree of wear impossible. Also in poor condition, fragments of a deciduous pre-molar in context (2421) appear to have little wear, and would be from a very young, perhaps newly-born, calf.

There were relatively few sheep-bones from this site. Lower molar teeth in contexts (2421) and (2436) both showed moderate wear, probably coming from animals of around two to three years old. A lower third molar in context (002) was damaged, with an eroded occlusal surface which prevented the degree of wear from being assessed. It may have been associated with a small fragment of mandible from the same context.

Left and right pig mandibles in context (2458) were similar in appearance and are likely to have come from a single animal. This would have been around 1 year to 18 months old, based on the evidence of the heavily worn deciduous pre-molars, which are typically lost at about this age. A loose upper pre-molar in context (2421) would have come from an older animal. There was also a pig limb-bone in context (2426).

Three horse bones, a radius in context (2404) and a scapula and metacarpal in (2458) were all notably small. They would have come from a lightly-built pony-sized animal.

There was a piece of unidentified hard, dense, mineralized bone in context (2459). Similar material was also found at the site in plot 145. It is possible that this was fossilized bone derived from the underlying bedrock.

**Construction Section 20, Plot 147**

The remains of at least two cow-sized cervical vertebrae and a rib from a similar-sized animal were present among thirteen fragments from context (2015).

**Construction Section 20, Plot 148**

A sawn section of an antler shaft was found in context (2007). This came from a large antler, suggesting that it was probably from a red deer. Fragments of rib and heavily eroded lumps of cancellous bone, probably from the end of a horse or cattle long-bone, were found in the same context.

**Construction Section 20, Plot 149**

Animal	Bones	MNI
Cattle	11	3
Sheep	5	2
Horse	1	1
Pig	1	1

At least three cattle radius bones were present within this relatively small assemblage. Over-representation of a particular bone can, of course, arise by random variation, especially where the overall numbers of bones are low. However, the occurrence of bones on a particular site is normally the result of some form of cultural activity and it is quite possible that some degree of selection is operating. This could take the form of, say, preferential consumption of a particular joint of meat, or secondary use a particular bone for a specific purpose.

Two cattle radius bones in context (2038) both came from young animals. The unfused epiphyses were missing from both ends of one of these bones, implying that the animal it came from was less than one year to eighteen months old, the age when the proximal end normally fuses. The epiphysis of the distal end fuses much later, at around three to four years. This gives an upper age limit for the other radius from this context, which was found with its unfused distal epiphysis.

A cattle metatarsal bone found in context (2038) showed excessive bone-growth on one side and especially around the articular surface. This abnormality is quite commonly seen, normally developing as a result of excessive mechanical stress. Until relatively recently, cattle were used extensively as draught animals, especially for ploughing.

Evidence for sheep at this site came from a limb-bone in contexts (2024), and two teeth. A lower third molar in context (005) shown fairly heavy wear, indicating that it came from a relatively old individual.

#### *Construction Section 20, Plot 150*

Animal	Bones	MNI
Cattle	37	3
Sheep	34	5
Horse	5	2
Pig	16	2
Deer	1	1
Bird	1	1

A cattle skull in context (2551) survived lifting and cleaning only in a fragmentary state, due to the fragile and brittle condition of the bone, but was complete as found. The upper dentition was present, with the third upper molars newly erupted and not yet in wear. This would suggest that the animal was around two years old when it died. It is difficult to assess the size of an animal based on only the teeth and skull fragments, but it seems to have been relatively large.

This context was particularly rich in bone and included the remains of another cattle skull. Several of the other cattle bones, such as two, non-matching hip-bones, are notably small. A humerus with an unfused epiphysis came from an immature individual, but it seems to be generally the case that these bones are from small stock.

Sheep bone was well represented in this context, with limb bones mandible and teeth. Bone from other species included a horse cheek-tooth and a pig scapula. Part of a bird femur was similar, although not identical, to a mallard femur. It probably came from a medium-sized species of duck.

Although context (2551) was rich in bone, there was no particular pattern to suggest that this represented anything other than the normal disposal of food waste. This was also true of the comparatively large amount of bone in context (2545). Fragments of pig skull included part of the upper dentition with an emerging third molar, indicating that it came from an animal approximately eighteen months to two years old. A pig mandible in the same context still had deciduous pre-molars, only moderately worn, and would have come from a younger animal, probably less than one year old.

The ages of sheep can be estimated on the basis of tooth emergence and wear. The mandibles in contexts (2526) and (2545) both have deciduous pre-molars, and would come from animals less than 2 years old. The same is true of the loose deciduous pre-molar in context (2514). The permanent fourth pre-molar is just emerging in a mandible from context (2526) indicating that this came from a slightly older animal. A set of contiguous molars in context (2551), and a loose molar in (2545) show light to moderate wear, and would also be from relatively young animals. By contrast, the mandibles in contexts (2545) and (2551) have fairly heavy wear, and would be

from mature sheep, at least three years old. Another mandible from (2545) shows heavy tooth wear and would be from a relatively old individual.

This age distribution is consistent with the normal pattern of sheep husbandry, where a breeding flock of mature ewes is maintained, with surplus lambs being raised for meat. The younger animals on this site seem to be around two years old or less, suggesting that lambs were slaughtered before their second winter. Lambs normally give a maximum meat yield when kept for rather longer than this, but the availability of winter feed would have been an important consideration.

Context (2532) contained a fragment of metatarsal bone which appeared to come from a deer. If so, its size would indicate that it is most likely to be a red deer, but was in poor condition, and could not be identified with complete confidence.

A horse thoracic vertebra found in context (2526) shows a pathological abnormality. The small foramen through which the blood vessel supplying the spinal membranes passes to the ventral surface of the bone is considerably enlarged. This could perhaps have resulted from an infection in the blood vessel or from an abscess within the neural channel.

A sheep radius in context (2551) showed butchery cuts, as did a sheep tibia in context (2534). Unusually, this bone had survived more or less complete. Commonly, the leg is broken near the middle of the tibia when a sheep is butchered, as there is little meat beyond this point.

#### References

- Cohen A and Serjeantson D, 1996 *A manual for the identification of Bird Bones from Archaeological Sites*, Archetype Publications, London
- Grant A, 1982 'The use of tooth wear as a guide to the age of domestic animals' in Wilson, Grigson and Payne, 91-108.
- Hillson S, 1986 *Teeth*, Cambridge Manuals in Archaeology, Cambridge University Press.
- MacGregor, Arthur 1985 *Bone Antler Ivory & Horn, The Technology of Skeletal Materials Since the Roman Period*, Croom-Helm, London
- Schmid E, 1972 *Atlas of Animal Bones*, Elsevier, Amsterdam
- Wilson B, Grigson C and Payne S 1982, 'Ageing and sexing animal bones from archaeological sites' *British Archaeological Reports*, British Series 109, Oxford.

## HWP98: Bone Catalogue

The table lists all the bone found. The species of animal has been given where there is reasonable confidence about its identification. An indication of the general size and robustness of bones is given in uncertain cases, as, for instance, 'sheep-sized' or 'cow-sized'. Small fragments that defy even this level of identification are listed as 'unid.' Uncertain identifications are generally indicated in the comments column. The comments column is also used to record the completeness of the bone, its condition if different from rest of assemblage, particularly where it is notably bad, its size where this is significant, and also whether there are signs of burning or of butchery marks. In some cases, the labels on the bags had additional locational information besides the context number and this has been included in the comments column ('thus').

Teeth, including those in place in mandibles and maxillae, are listed using the following abbreviations: i - incisor, c - canine, pm - pre-molar, m - molar, d - deciduous or 'milk tooth'. The degree of wear of mandibular cattle, sheep and pig teeth is indicated by a letter, based on those given in Hillson (1986, pages 327-330, after Grant, 1982). For example, 'dpm4g' should be read as fourth deciduous pre-molar with wear to stage g.

### Plot 8

Context	Animal	Bone	Side	Comments
2015	Cattle	Femur	Left	Distal end, recently fused.
2015	Cattle	Femur	Left	Proximal end of shaft, missing head and trochanter; ?same as above.
2015	Cow-sized			Shaft fragment, may be same bone as above.
2015	Deer	Antler		Sawn-off tine, saw marks.
2015	Cow-sized			2 fragments of ?iliac crest.
2015	Cow-sized	Rib		2 blade fragments.
2015	Cow-sized	Humerus	Right	Fragment of lateral side, distal end of shaft.
Weight (2015): 370g				
2025	Horse	Ulna	Right	Small, articular region damaged, unfused epiphysis missing.
Weight (2025): 35g				
2030	Cattle	Frontal	Right	Fragments including base of horn-core.
2030	Dog	Skull		Front part with right pm4, m1, m2, left pm4, fairly heavy wear.
2030	Cattle	Talus	Right	Complete.
2030	Horse	Calcaneum	Right	Damage to articular region, unfused epiphysis missing; soft, flaky.
2030	Cow-sized			Fragment of proximal end of metapodial.
Weight (2030): 370g				
2031	Horse	Radius	Right	Proximal end, ?burnt.
2031	Horse	Ulna	Right	Articular region, articulates with above, ?burnt.

Context	Animal	Bone	Side	Comments
2031	Horse	Radius	Right	Distal end, with unfused epiphysis, probably same bone, ?burnt.
2031	?Horse			10 small shaft fragments, probably from above, ?burnt.
2031	Cattle	Scapula	Right	Glenoid, neck and parts of blade.
2031	Cattle	1st phalanx		Complete.
2031	Cattle	3rd phalanx		Complete, similar size and appearance to above.
2031	Cattle	Mandible	Left	3 fragments including diastema and symphyseal region.
2031	Cattle	Teeth	Left	Lower m1(f), ?m2, ?m3 both fragmentary; probably with above.
2031	Cattle	Tooth	Left	Upper m1, heavy wear; not with above.
2031	Pig	Mandible	Right	Includes anterior part of left mandible, pm3, pm4(h), root of left i2.
2031	Horse	Femur	Right	Distal end.
2031	?Deer	Femur	Right	Proximal end, head and fossa.
2031	Cow-sized	Sacrum		Fragments of anterior part.
2031	Cow-sized	Radius		Part of shaft of ?right radius.
2031	Cattle	Axis		Centrum and anterior end.
2031	Cow-sized	Vertebra		2 fragments including base of neural spine.
2031	Cow-sized			2 shaft fragments.
2031	Cow-sized			Fragment of ?innominate.
2031	Sheep-sized			Fragment of ?tibia shaft.
2031	Sheep-sized			Rib fragment.
2031	unid.			?skull fragment.
2031	unid.			3 small shaft fragments.
Weight (2031): 1340g				
2033	Cow-sized			?Metapodial shaft fragment.
Weight (2033): 5g				
2036	Cattle	Scapula	Left	Very small, incompletely mineralised, part of articulating skeleton.
2036	Cattle	Humerus	Left	Very small, unfused, articulates with above.
2036	Cattle	Radius	Left	Very small, unfused, articulates with above.
2036	Cattle	Ulna	Left	Very small, unfused, articulates with above.
2036	Cattle	Scapula	Right	Very small, part of articulating skeleton.

Context	Animal	Bone	Side	Comments
2036	Cattle	Humerus	Right	Very small, unfused, articulates with above.
2036	Cattle	Radius	Right	Very small, unfused, articulates with above.
2036	Cattle	Ulna	Right	Very small, unfused, articulates with above.
2036	Cattle	Vertebrae		20 unfused vertebral centrums, with 29 unfused epiphyses.
2036	Cattle	Vertebrae		19 neural arch fragments, 7 neural spines, all unfused.
2036	Cattle	Ribs		40 ribs or rib fragments.
2036	Cattle	Sternum		Manubrial segment.
2036	Cattle	1st phalanx		Small, unfused.
2036	Cattle	Tibia	Left	Unfused epiphysis from proximal end, very small.
2036	Cattle			5 unidentified rather amorphous lumps, possibly unfused epiphyses.
Weight (2036): 330g				
2062	Cattle	Scapula	Left	Glenoid, and distal end of blade, probably from same bone.
Weight (2062): 160g				
2065	Cattle	Radius	Right	Distal end missing, very small.
2065	Pig	Scapula	Right	Neck and part of blade.
Weight (2065): 170g				
2071	Cow-sized			Rib fragment.
Weight (2071): <5g				
2079	Pig	Innominate	Right	Acetabulum and part of iliac crest.
2079	unid.			Shaft fragment.
Weight (2079): 35g				
2100	Cow-sized			Shaft fragment, badly eroded.
Weight (2100): 5g; Total weight (Construction section 2, Plot 8): 2825g				

## Plot 20

Context	Animal	Bone	Side	Comments
4016	Horse	Teeth	Left	Upper pm4, m1, m3 not in wear, fragments ?m2; high crowns, no roots.
4016	Cattle	Horn core		Fragment.
Weight (4016): 155g				
4028	unid.			2 shaft fragments, very eroded.
Weight (4028): <5g				
4030	unid.			9 small fragments.
Weight (4030): 5g				
4036	Horse	Teeth	Left	Lower pm2, pm3, pm4, m1, m2.
4036	Cow-sized			Rib fragment.

Context	Animal	Bone	Side	Comments
Weight (4036): 70g				
4053	Cattle	Talus	Left	Eroded edges, otherwise complete.
Weight (4053): 20g				
4113	Cattle	Tooth	Left	m3(g), two broken molar fragments.
4113	?Cattle	Tibia	Left	Shaft.
4113	Cow-sized			5 fragments, probably all from same bone.
Weight (4113): 70g				
4134	Cow-sized			Shaft fragment, ?radius, butchery cuts.
4134	Cow-sized			3 shaft fragments; 2 shaft end fragments.
Weight (4134): 15g				
4136	Cattle	Mandible	Right	pm4(h), m1(l), m2(k), m3(k), to angle, no diastema or ramus regions.
4136	Cattle	Mandible	Right	pm2, pm3, and diastema region.
4136	Cattle	Mandible	Left	pm2, pm3, pm4(g), m1(m), m2(k), m3(l), and diastema region.
4136	Cattle	Mandible	Left	Anterior region with symphysis, may be part of above.
4136	Sheep	1st phalanx		Complete
4136	Sheep	Humerus	Left	Distal end of shaft.
4136	Sheep-sized			Scapula fragment.
4136	Sheep-sized			2 shaft fragments.
Weight (4136): 640g				
4147	Cattle	Innominate	Right	Part of acetabulum with neck of ilium.
4147	Cow-sized			Shaft fragment.
Weight (4147): 15g				
4215	unid.			Mandible fragment.
Weight (4215): <5g				
4240	Sheep-sized			4 fragments.
4240	Sheep-sized			5 fragments, burnt, calcined.
Weight (4240): <5g				
4250	Cow-sized			2 rib fragments.
4250	Sheep-sized			Rib fragment.
4250	Sheep-sized			Shaft fragment.
4250	unid.			2 fragments.
Weight (4250): 5g				
4267	unid.			7 fragments, long bone shaft and ends, ?same bone, badly eroded.
Weight (4267): 5g				
4279	Horse	Tooth	Right	Lower molar.
4279	Cow-sized			Shaft fragment, ?humerus.
4279	Cow-sized			Shaft fragment; 3 unidentified fragments.

Context	Animal	Bone	Side	Comments
Weight (4279): 95g				
4293	Cattle	Tibia	Right	Fragmentary, but substantially complete.
4293	Cattle	Mandible	Left	m1(g), m2(b), m3(a) broken, part of diastema to angle of ramus.
4293	Cattle	Humerus	Right	Eroded and fragmentary, some of shaft missing.
4293	Cow-sized			5 shaft fragments, probably from one of above.
4293	Cow-sized			3 eroded shaft-end fragments.
4293	unid.			Shaft fragment, burnt, calcined
Weight (4293): 1110g				
4329	Cattle	Tooth		Lower molar fragments.
4329	Pig	Tooth		Upper m3.
4329	Sheep	Humerus	Left	Distal end of shaft and lateral condyle.
4329	Sheep-sized			Shaft fragment.
4329	Sheep-sized			Fragment, burnt, calcined.
4329	unid.			2 ?skull fragments.
Weight (4329): 30g				
4330	Cow-sized			Rib fragment.
4330	unid.			3 small fragments.
4330	unid.			2 small burnt fragments, calcined.
Weight (4330): <5g				
4331	Cattle	Tooth	Left	Lower m3(g).
4331	Sheep	Femur	Left	Head.
4331	Sheep	Humerus	Left	Distal part of shaft.
4331	Cow-sized	Rib		Fragment.
4331	Cow-sized			Shaft fragment.
Weight (5331): 40g				
4332	Sheep	Mandible	Left	Fragment of diastema region.
4332	Sheep	Tooth	Left	Lower m3(g).
4332	Cow-sized			12 rib fragments.
4332	unid.			2 skull fragments.
Weight (4332): 50g				
4365	unid			Shaft fragment, burnt, calcined.
Weight (4365): <5g				
4373	Horse	Radius	Right	Distal end, part of articular surface and shaft.
4373	Cow-sized			2 skull fragments.
Weight (4373): 75g; Total weight (Construction section 4, Plot 20): 2410g				

Plot 61

Context	Animal	Bone	Side	Comments
8004	Cow-sized			Mandible fragment; all bone in this context heavily eroded.
8004	Sheep-sized			2 shaft fragments.
8004	unid.			15 fragments.
Weight (8004): 15g; Total weight (Construction Section 8, Plot 61): 15g				

## Plot 71

Context	Animal	Bone	Side	Comments
932	Horse	Metacarpal	Right	Distal end and part of shaft.
932	Horse	Splint	Right	Metacarpal IV, proximal end, probably with above.
932	Cow-sized			5 ?Skull fragments.
Weight (932): 100g; Total weight (Construction section 9, Plot 71): 100g				

## Plot 72

Context	Animal	Bone	Side	Comments
918	Cattle	Femur	Left	Distal end, medial side damaged, large.
918	Cattle	Femur	Left	Distal end, medial condyle, larger than above.
918	Cattle	Femur	Left	Proximal part of shaft, sawn at both ends, large.
918	Cattle	Tibia	Left	Fragment of medial side of distal end.
918	Cattle	Tooth	Left	Upper m2.
918	Cow-sized			Scapula fragment; 7 shaft fragments.
918	Cow-sized	Rib		Sternal end.
918	Sheep	Tibia	Left	Distal end and shaft.
918	Sheep	Tibia	Left	Distal end and part of shaft, large.
918	Sheep	Tibia	Right	Distal end, large, not matching above.
918	Sheep	Talus	Right	Complete, articulates with above.
918	Sheep	Humerus	Right	Distal end.
918	Sheep	Innominate	Right	Neck of ilium and part of acetabulum.
918	Sheep-sized			Proximal end of ?sheep ?radius shaft.
918	Sheep-sized	Scapula		Blade fragment.
918	Sheep-sized			4 shaft fragments.
Weight (918): 990g				
919	Sheep	Tibia	Right	Distal end, large.
919	Sheep	Innominate	Right	Part of ischium.
919	Cow-sized			3 ?skull fragments, butchery marks; vertebra fragment, butchery marks.
919	Cow-sized			Shaft fragment, unidentified tabular bone fragment.
919	Sheep-sized			Shaft fragment.

Context	Animal	Bone	Side	Comments
919	Cow-sized	Rib		Large fragment of blade, sawn at either end.
Weight (919): 155g; Total weight (Construction Section 9, Plot 72): 1145g				

## Plot 88

Context	Animal	Bone	Side	Comments
1142	Cattle	Tooth		?Lower molar fragments.
1142	unid.			Shaft fragments, badly eroded.
Weight (1142): <5g				
1152	Sheep	Mandible	Left	Fragment with pm4(a), m1(g), m2(e).
1152	Cattle	Scapula	Left	Fragments including olecranon and parts of blade.
1152	Cow-sized			3 rib fragments.
1152	unid.			2 fragments.
Weight (1152): 90g				
1154	unid.			7 small eroded fragments.
Weight (1154): <5g				
1173	Horse	Tooth	Right	Lower molar.
Weight (1173): 15g; Total weight (Construction Section 11, Plot 88): 110g				

## Plot 103

Context	Animal	Bone	Side	Comments
1204	Horse	Tooth		Incisor.
Total weight (Construction Section 12, Plot 103): <5g				

## Plot 109

Context	Animal	Bone	Side	Comments
1405	Cow-sized			2 fragments, badly eroded, ?ribs.
1405	Sheep	Tooth	Right	Upper m2.
Weight (1405): 10g				
1409	Cattle	Metacarpal	Right	Complete, part of articulating skeleton with below.
1409	Cattle	Carpal bone	Right	Part of articulating group.
1409	Cattle	1st phalanx	Right	Medial, complete, part of articulating group.
1409	Cattle	1st phalanx	Right	Lateral, complete, part of articulating group.
1409	Cattle	2nd phalanx	Right	Medial, complete, part of articulating group.
1409	Cattle	2nd phalanx	Right	Lateral, complete, part of articulating group.
1409	Cattle	3rd phalanx	Right	Medial, complete, part of articulating group.
1409	Cattle	3rd phalanx	Right	Lateral, complete, part of articulating group.
1409	Cattle	Humerus	Right	Part of shaft.
1409	Cattle	Metatarsal	Right	Lateral side of proximal end and part of shaft.
1409	Cow-sized	Scapula		2 blade fragments.
1409	Cow-sized	Innominate		2 fragments of ?iliac crest.
1409	Cow-sized	Vertebrae		2 fragments of centrums.

Context	Animal	Bone	Side	Comments
1409	Cow-sized			17 fragments, probably all from same animal as above.
1409	Sheep-sized			Shaft fragment.
Weight (1409): 715g (unwashed); Total weight (Construction section 14, Plot 109): 725g				

## Plots 129 and 130

Context	Animal	Bone	Side	Comments
1703	Cow-sized			7 shaft fragments, probably all from same bone, ?tibia shaft.
1703	Sheep	Tibia	Left	Damage to ends, otherwise complete, large.
1703	Sheep	Talus	Left	Complete, articulates with above.
1703	Sheep	Calcaneum	Left	Damage to extremities, articulates with above.
1703	Sheep	Femur	Left	Shaft.
1703	Sheep	Femur	Right	Shaft and part of distal end.
1703	Sheep	Innominate	Right	Neck of ilium.
1703	Sheep	Tibia	Right	Proximal part of shaft; probably same animal as all sheep above.
1703	Sheep	Tooth	Right	Lower m3(e).
1703	Sheep	Tooth	Left	Upper m2.
1703	Sheep-sized	Vertebrae		3 Centrum fragments.
Weight (1703): 220g; Total weight (Construction Section 17, Plots 129 and 130): 220g				

## Plot 132

Context	Animal	Bone	Side	Comments
1738	Pig	Mandible	Left	Fragment with dpm3, dpm4(g), m1(e).
1738	Sheep-sized			Shaft fragment.
Weight (1738): 15g				
1742	Sheep	Humerus	Right	Proximal end and part of shaft.
1742	Sheep	1st phalanx		One side of proximal end missing.
1742	Sheep-sized			5 shaft fragments.
1742	Sheep-sized			Shaft of ?femur, possibly from smaller than sheep-sized.
1742	Cow-sized			2 rib fragments.
1742	unid.			6 fragments including ?mandible, ?skull.
1742	unid.			Small burnt fragment.
Weight (1742): 60g				
1743	Sheep	Femur	Right	Distal end.
1743	Sheep	Calcaneum	Right	Articular process missing.
1743	Sheep	Talus	Left	Complete.
1743	Sheep	Metatarsal	Right	Proximal end and part of shaft.
1743	Pig	Humerus	Right	Distal end of shaft.
1743	Cattle	2nd phalanx		Complete, small.

Context	Animal	Bone	Side	Comments
1743	Cattle	2nd phalanx		Complete, small.
1743	Cattle	2nd phalanx		Fragment, burnt.
1743	Cattle	2nd phalanx		Very small, missing unfused epiphysis.
1743	Cattle	Mandible	Left	Angle region.
1743	Cattle	Tooth		Lower molar fragment including part of crown, not in wear.
1743	Cow-sized	Vertebra		Neural spine of thoracic vertebra.
1743	Cow-sized			Rib fragment.
1743	Sheep-sized			3 rib fragments; 1 shaft fragment.
1743	unid.			2 small fragments.
Weight (1743): 190g				
1745	Cattle	1st phalanx		Complete, small.
1745	Cattle	Metatarsal	Right	Proximal end and part of shaft.
1745	unid.			Small shaft fragment.
1745	unid.			?Sesamoid or small ?carpal/tarsal bone.
Weight (1745): 75g				
1749	Cow-sized			Shaft fragment, burnt, partially carbonized and calcined.
Weight (1749): 5g; Total weight (Construction section 17, plot 132): 345g				

## Plot 135

Context	Animal	Bone	Side	Comments
1809	Cow-sized			8 long-bone end fragments, possibly all from same bone.
Weight (1807): 15g				
1823	Cattle	Tooth		2 fragments of molar.
1823	Sheep-sized			Rib fragment, burnt, calcined.
Weight (1823): <5g				
1827	Cattle	Metacarpal	Left	Part of proximal end and shaft, very fragmentary.
Weight (1827): 30g				
1835	Cattle	Radius		Fragment of distal end, burnt, surface calcined.
Weight (1835): 10g				
1836	Cattle	Tooth		Fragment of lower molar, not in wear.
1836	Cow-sized			Fragment of long-bone shaft, burnt, carbonized and partly calcined.
Weight (1836): 5g				
1843	Cattle	Radius	Right	Fragment of medial side of proximal end.
1843	Cow-sized			Fragment of ?iliac crest.
1843	Cow-sized			Shaft fragment; rib fragment.

Context	Animal	Bone	Side	Comments
1843	Cow-sized			2 shaft fragments, including ?metapodial shaft ('10 cms').
1843	Cow-sized			Rib fragment, ('10 cms').
1843	unid.			2 fragments, partially burnt, ('10 cms').
1843	unid.			Fragment, ('10 cms').
1843	Cattle	Radius	Left	Distal end, ('20 cms').
1843	Cattle	Teeth	Left	Fragments of upper m1, ?m2, ('20 cms').
1843	Cattle	Tooth	Right	Upper pre-molar, probably same animal as above, ('20 cms').
1843	Sheep	Tibia	Left	Distal end and shaft, ('20 cms').
1843	Sheep	Tooth	Left	Lower dpm4, ('20 cms').
1843	Sheep	Radius	Right	Shaft fragment, ('20 cms').
1843	Cow-sized			7 shaft fragments, ('20 cms').
1843	Cow-sized			Vertebra fragment; rib fragment ('20 cms').
1843	unid.			Cranium fragment, ('20 cms').
1843	Cattle	Teeth	Right	Upper m1 (matches left m1 in 20 cm spit), m2, ('30 cms').
1843	Cattle	Teeth	Right	Lower m1(l), m2(k), m3(k), probably with above, ('30 cms').
1843	Cattle	Mandible	Right	Articular region, ('30 cms').
1843	Cow-sized			18 fragments of mandible, probably same bone as above, ('30 cms').
1843	Cattle	Innominate	Left	Ischial neck and part of acetabulum, ('30 cms').
1843	Cow-sized			2 shaft fragments, ('30 cms').
Weight (1843): 430g				
1849	Sheep	Tooth	Right	Lower m3(g).
Weight (1849): <5g				
1857	Cattle	Tooth	Left	Lower pm4(f).
1857	Sheep	Horn-core	Right	Or possibly goat.
1857	Sheep-sized	Horn-core		2 fragments, not with above.
1857	Cow-sized			?Metapodial shaft fragment.
1857	Cow-sized			3 shaft fragments.
1857	Sheep-sized			Shaft fragment.
1857	unid.			4 cranial fragments, may be with horn-cores above.
Weight (1857): 95g				
1859	Horse	Atlas		Damage to posterior end but largely complete.

Context	Animal	Bone	Side	Comments
1859	Cow-sized			2 vertebra fragments; 1 shaft fragment.
Weight (1859): 145g; Total weight (Construction section 18, plot 135): 725g				

## Plot 139

Context	Animal	Bone	Side	Comments
1864	Sheep	Tooth	Left	Lower m?2(e), with small fragment of mandible.
1864	Sheep	Radius		Shaft fragment.
1864	Sheep-sized			2 fragments possibly from sheep radius above.
1864	Cow-sized			Shaft fragment; rib fragment.
1864	unid.			3 skull fragments.
Weight (1864): 35g				
1866	Cattle	Maxilla	Left	Fragment with pm4, m1, 2, m3, all with fairly heavy wear.
1866	Sheep	Mandible	Left	Diastema region and dpm3, dpm4(g), m1(d).
1866	Sheep	Mandible	Right	Fragment with dpm2, dpm3, dpm4(f), m1(b).
1866	Sheep	Teeth	Right	Lower m1(g), m2(d).
1866	Pig	Mandible	Left	Part of ramus and m1(d), m2(b), m3 not yet showing.
1866	?Pig			8 skull fragments, similar appearance to pig mandible above.
1866	Horse	Radius	Right	Distal end.
1866	Sheep	Tibia	Right	Shaft.
1866	Cattle	Metacarpal		2 condyles from ?same bone, probably right metacarpal.
1866	Sheep-sized			Shaft fragment, ?tibia distal part of shaft, not with tibia above.
1866	Sheep-sized	Rib		Fairly large fragment.
1866	Cow-sized			3 shaft fragments; 7 rib fragments.
1866	Sheep-sized			Shaft fragment.
1866	Cow-sized			Shaft fragment, burnt, carbonized; long-bone end fragment, calcined.
1866	Sheep-sized			3 burnt shaft fragments, partly calcined.
1866	unid.			5 small fragments.
1866	Cattle	Skull		19 fragments including occipital region, probably all from same skull.
1866	Cattle	Tibia	Left	Distal end.
1866	Pig	Tooth	Right	Lower first incisor.
1866	Sheep	Metatarsal	Right	Proximal end and part of shaft.
1866	Sheep	Metatarsal	Right	Proximal end and part of shaft.
1866	Sheep	Metatarsal	Right	Distal end, probably same bone as above.

Context	Animal	Bone	Side	Comments
1866	Cow-sized			Rib fragment.
1866	Cow-sized			Skull fragment, different appearance to cattle skull above.
1866	unid.			Small fragment of ?mandible.
Weight (1866): 740g				
1868	Cattle	Radius	Right	Medial side of distal end.
1868	Cattle	Tooth		Lower ?left molar, damaged crown.
1868	Cow-sized			Shaft fragment.
1868	Sheep-sized			Shaft fragment.
Weight (1868): 55g				
1871	Cow-sized			Rib fragment.
1871	Sheep-sized			Shaft fragment.
Weight (1871): <5g				
1872	Cattle	Tooth	Right	Upper dpm3, dpm4, m1 with small fragment of maxilla.
1872	Cattle	Ulna	Left	Missing tuberosity and shaft.
1872	Cattle	3rd phalanx		Complete.
1872	Cattle	Metacarpal	Left	Small fragment of medial side of proximal end.
1872	Sheep	Tooth	Right	Lower m1(e).
1872	Sheep	Tooth	Right	Part of upper molar.
1872	Pig	Tibia	Left	Shaft.
1872	Pig	Humerus	Right	Distal end and shaft.
1872	Cow-sized			Rib fragment; 3 shaft fragments including ?cattle metapodial.
1872	unid.			2 small fragments of ?scapula or ?mandible.
Weight (1872): 215g				
1873	Sheep	Humerus	Left	Distal end and part of shaft
1873	Sheep	Teeth	Left	Lower m1(g), m2(f), m3(a) not in occlusal plain, fragments of mandible.
1873	Sheep	Mandible	Left	Fragment from articular region, probably with above.
1873	Sheep	Teeth	Left	Lower dpm3, dpm4(n) and fragment pm4, m1(g), m2(e).
1873	Sheep	Teeth	Left	Lower m?2(a), may be m3 from set above but only 2 cusps developed.
1873	Sheep-sized			Shaft fragment.
Weight (1873): 30g				
1874	Horse	Innominate	Right	Fragmentary, pubis missing, otherwise mostly complete.
1874	Sheep	Teeth	Right	Upper m?2, ?dpm4.

Context	Animal	Bone	Side	Comments
1874	Sheep	Radius	Right	Distal end and part of shaft.
1874	?Pig			Shaft of ?left femur.
1874	Cow-sized			Fragment of proximal end of metapodial, ?horse metacarpal.
1874	Sheep-sized			Shaft, ?left tibia of sheep.
1874	Cow-sized			Metapodial shaft fragment.
1874	Cow-sized			Shaft fragment.
1874	Sheep-sized			Shaft fragment.
1874	unid.			Part of ?long-bone end; butchery cuts.
1874	unid.			7 small fragments, one burnt, partly calcined.
Weight (1874): 385g				
1875	Cattle	Metapodial		Fragment of condyle.
1875	Cow-sized	Vertebrae		4 fragments of at least 2 bones, together with unfused epiphyses.
1875	Cow-sized			Rib fragment; 2 shaft fragments.
1875	unid.			Fragments, possibly from vertebra above.
Weight (1875): 55g				
1878	Cattle	Radius	Left	Lateral side of proximal end of shaft.
1878	Cow-sized			Shaft fragment; rib fragment.
Weight (1878): 100g				
1879	Pig	Tooth		Lower canine, female.
1879	Cow-sized			Metapodial shaft fragment.
Weight (1879): 5g				
1888	Sheep	Radius	Right	Shaft.
1888	Sheep	Mandible	Right	Coronoid process.
1888	Sheep-sized			?Metapodial shaft.
1888	Sheep-sized			Shaft fragment.
1888	Cow-sized			Part of ?femoral trochanter, burnt, carbonized, surface partly calcined.
Weight (1888): 30g				
1891	Cattle	Tooth	Right	Upper dpm4.
1891	Cattle	Tooth		Fragment of ?upper pre-molar.
1891	Cow-sized			Skull fragment.
1891	Cow-sized			?skull fragment.
Weight (1891): 25g				
1892	Cattle	Maxilla	Left	Fragment with m1, m2, m3 not fully erupted, and loose dpm3, dpm4.
1892	Cattle	Tooth		Fragment of molar crown, not in wear, or ?pm4 from set above.
1892	Cattle	Tooth	Left	Upper m3, heavy wear.

Context	Animal	Bone	Side	Comments
1892	Cattle	Tooth		Fragment of ?upper left molar.
1892	Cattle	Horn-core	Right	Small.
1892	Cow-sized			6 cranial fragments, might be with horn-core above.
1892	Cattle	Mandible	Right	Articular region.
1892	Cattle	Mandible	Right	Fragment of coronoid, different to above.
1892	Cattle	Scapula	Left	Glenoid and neck.
1892	Cattle	Calcaneum	Left	Tuberosity missing.
1892	Cattle	2nd phalanx		Complete.
1892	Cow-sized			3 shaft fragments; 2 rib fragments.
1892	Sheep-sized			Shaft fragment, ?sheep left humerus.
1892	Sheep-sized			Unfused long-bone end, ?left tibia proximal end, very small.
1892	Sheep-sized			Rib fragment.
Weight (1892): 410g				
1893	Pig	Teeth	Right	Upper m2, m3 with fragment of maxilla
1893	Cattle	Humerus	Right	Distal end, fragmentary, poor condition.
1893	Cattle	Mandible	Left	Articular region.
1893	Cow-sized			5 long-bone end fragments; 3 shaft fragments, may be single bone.
1893	Cow-sized			2 rib fragments.
Weight (1893): 205g				
1895	Cattle	1st phalanx		Complete.
Weight (1895): 15g				
1896	Sheep	Metatarsal	Left	Proximal end and part of shaft.
Weight (1896): 5g				
1898	Cattle	Talus	Right	Complete; butchery cuts.
1898	Cattle	Femur	Right	Fragment of upper end of shaft.
1898	Cattle	Mandible		Small fragment of molar region.
1898	Cow-sized			?Mandible fragment, may be part of above.
1898	Cow-sized			Rib fragment; shaft fragment.
1898	Sheep-sized			Shaft fragment.
Weight (1898): 105g				
1899	Pig	Ulna	Right	2 fragments of articular region and shaft, probably same bone.
1899	Pig	Ulna	Right	Shaft fragment, different bone to above.

Context	Animal	Bone	Side	Comments
1899	Pig	Calcaneum	Right	Missing unfused epiphysis, otherwise complete.
1899	Horse	Tooth		Upper m3.
1899	unid.	Tooth		Very small but similar appearance to above, horse ?pm1.
1899	Sheep	Tooth	Right	Lower m1(g).
1899	Sheep	Metacarpal	Right	Fragmentary but complete, small.
1899	Sheep	Humerus	Right	Distal end of shaft, small.
1899	Sheep	Metatarsal		Shaft.
1899	?Pig			Shaft, ?femur.
1899	Cow-sized	Mandible		2 fragments, including lower part of ramus;.
1899	Cow-sized			3 rib fragments; 3 shaft fragments.
1899	Cow-sized			Shaft fragment, ?tibia, burnt, edges carbonized.
1899	Cattle	Talus		Fragment of ?left talus, burnt, carbonized and partly calcined.
1899	Sheep-sized			5 rib fragments.
1899	unid.			2 skull fragments.
Weight (1899): 195g				
18108	Cow-sized			Fragment of ?scapula blade or ? mandible.
Weight (18108): <5g				
18114	Sheep	Tibia	Left	Shaft.
18114	Sheep-sized			Shaft fragment.
Weight (18114): 25g; Total weight (Construction section 18, plot 139): 2640g				

## Plot 145

Context	Animal	Bone	Side	Comments
1900	Horse	2nd phalanx		Badly eroded surface, but substantially complete.
1900	Cow-sized			Rib fragment; 2 shaft fragments; 1 unidentified fragment.
Weight (1900): 45g				
1905	Cow-sized			9 skull fragments, including cranial fragment with butchery cut.
1905	Cow-sized			Unidentified fragment.
Weight (1904): 40g				
1922	Cow-sized			?Carpal or tarsal bone, fragmented, part missing.
Weight (1922): 5g				
1926	Cattle	Talus	Left	Complete.
Weight (1926): 35g				
1930	Cow-sized			10 skull fragments.
1930	Cow-sized			2 rib fragment, one unusually large.

Context	Animal	Bone	Side	Comments
1930	unid.			2 small fragments.
1930	unid.			Small shaft fragment, burnt, calcined on inner surface.
Weight (1930): 60g				
1942	Cattle	Scapula	Left	Olecranon and neck, very large.
Weight (1942): 110g				
1944	Cattle	Mandible	Left	Fragment from pre-molar/molar region, no teeth present.
Weight (1944): 60g				
1948	Cow-sized			?Cranium fragment, burnt, carbonized.
Weight (1948): <5g				
1962	Cow-sized			Shaft fragment, ?radius.
1962	unid.			2 small fragments.
Weight (1962): 5g				
1968	Sheep	Radius	Right	Lateral side proximal end, with part of shaft including fused ulna shaft.
Weight (1968): 5g				
1979	Sheep	Tooth	Left	Lower m?1(g).
1979	Pig	Ulna	Right	Articular region and part of shaft.
1979	Horse	Humerus	Left	Distal end.
1979	Cow-sized			7 shaft fragments.
1979	Sheep-sized			Rib fragment.
1979	Small mam.			Shaft, ?small dog-sized mammal.
1979	unid.			?Skull fragment; 2 small unidentified fragments.
Weight (1979): 20g				
1986	Sheep	Tooth	Right	Upper m?2.
1986	Sheep	Tooth		2 fragments including ?lower molar.
1986	Cattle	Tooth		Fragment of lower molar.
1986	Cattle	Scapula	Right	Fragment of glenoid.
1986	Cow-sized	Vertebrae		4 fragments, at least 3 bones.
1986	Cow-sized			8 rib fragments; 8 shaft fragments; 2 scapula blade fragments.
1986	Cow-sized			?Ulna shaft fragment.
1986	Sheep	Horn-core		Fragment.
1986	Sheep-sized			2 rib fragments.
1986	Sheep-sized			2 shaft fragments, burnt, calcined.
1986	Cow-sized			8 unidentified fragments.
1986	unid.			7 small fragments.
1986	unid.			?metapodial proximal end.

Context	Animal	Bone	Side	Comments
Weight (1986): 190g				
1988	Pig	Tooth	Right	Upper canine, female.
1988	Cattle	Tooth		Canine.
1988	Cattle	1st phalanx		Very small, unfused proximal epiphysis missing.
1988	Sheep	Metatarsal	Left	Fragment of medial side of proximal end.
1988	Cow-sized			3 shaft fragments.
1988	Sheep-sized			2 rib fragments; 3 shaft fragments.
1988	Sheep-sized			Long-bone end fragment, unfused ?distal end of tibia.
1988	unid.			5 fragments.
Weight (1988): 40g				
1991	Cattle	Tooth	Left	Lower m?1(l).
1991	Cattle	1st phalanx		Complete.
1991	Cattle	Mandible	Left	Base of coronoid process and part of ramus.
1991	Cattle	Metacarpal	Left	Distal end.
1991	Cattle	Metacarpal	Left	Lateral side of distal end.
1991	Cattle	Radius	Left	Medial side of proximal end.
1991	Cattle	Mandible	Right	Fragment of pre-molar, m1 region, no teeth present.
1991	Cattle	Mandible		2 fragments, similar appearance to above.
1991	Horse	Tooth	Left	Lower molar.
1991	Pig	Mandible	Right	Fragment with pm4(e), m1(j), roots of m2, loose pm3.
1991	Pig	Mandible	Right	Fragment with m3(d), very different appearance to above.
1991	Sheep	Tooth	Right	Lower m3(g).
1991	Cattle	Calcaneum	Left	Part of tuberosity and articular end missing.
1991	Sheep	Radius	Right	Shaft.
1991	Sheep	Tibia	Right	Distal end of shaft.
1991	Pig	Humerus	Right	Distal part of shaft.
1991	Cow-sized	Vertebra		Thoracic vertebra, part of neural arch and base of spine.
1991	Cow-sized			15 shaft fragments; 2 rib fragments, one with butchery marks.
1991	Sheep-sized			11 shaft fragments.
1991	Cow-sized			?Scapula blade fragment.
1991	Cow-sized			Shaft fragment, burnt, carbonized.
1991	unid.			2 skull fragments; 2 unidentified fragments.

Context	Animal	Bone	Side	Comments
1991	unid.			2 small burnt fragments, carbonized, outer surface calcined.
Weight (1991): 475g				
1992	Sheep-sized			Shaft fragment.
Weight (1992): <5g				
1994	Cattle	Tooth		Fragment of lower molar.
1994	unid.	Tooth		Canine, worn, may be ?human.
1994	Cattle	2nd phalanx		Lateral fragment.
1994	Cow-sized			2 shaft fragments; 1 rib fragment.
1994	Sheep-sized			Fragment of ?sheep, ?radius.
1994	Sheep-sized			Rib fragment; 5 shaft fragments.
1994	unid.			11 fragments.
1994	unid.			4 small burnt fragments, partially calcined.
Weight (1994): 45g				
1997	Sheep	Tooth		Upper ?right molar, broken, part missing.
1997	Sheep	Teeth	Right	Lower dpm3, dpm4(g), ml(g).
1997	Pig	Tooth	Right	Lower canine, male.
1997	Pig	Teeth		Upper ?right dpm4, upper incisor.
1997	Cattle	Tooth		Incisor.
1997	Pig	Tibia	Right	Distal end.
1997	?Pig			Fragment of metapodial, proximal end.
1997	Cattle	Femur	Left	Head, unfused, very small.
1997	Cow-sized			9 shaft fragments; 1 rib fragment.
1997	Sheep-sized			5 shaft fragments; 4 ?mandible fragments; 2 rib fragments.
1997	?Pig			?Metapodial, unfused proximal end, burnt, partially carbonized.
1997	unid.			13 fragments.
1997	unid.			3 burnt fragments, all calcined.
1997	Amphibian			Shaft, ?frog tibio-fibula.
Weight (1997): 120g				
2301	Deer	Antler		Fragment of small antler, ?roe deer.
2301	unid.			Tiny fragment.
Weight (2301): <5g				
2303	Sheep-sized			7 skull fragments.
Weight (2303): 15g				
2305	Cattle	Mandible	Right	Symphysial region.
2305	Cattle	Tooth	Left	Upper pm4.

Context	Animal	Bone	Side	Comments
2305	Cow-sized	Vertebra		Fragments of neural arch and part of neural spine.
2305	Cow-sized			3 skull fragments; 2 shaft fragments.
2305	Cow-sized			3 fragments of long-bone end.
2305	Sheep-sized			2 rib fragments.
2305	unid.			7 fragments. All bone from this context very heavily eroded.
Weight (2305): 65g				
2311	Cow-sized			7 shaft fragments, all possibly from the same bone.
2311	Cow-sized			Shaft fragment.
2311	unid.			?shaft fragment.
2311	Sheep-sized			Shaft fragment burnt, carbonised; rib fragment, burnt, calcined.
2311	unid.			Very eroded fragment of spongy bone from ?shaft end.
Weight (2311): 20g				
2312	Sheep-sized			Shaft fragment.
Weight (2312): <5g				
2321	?Sheep	Tooth		Fragment of ?molar.
2321	Cow-sized			Shaft fragment.
2321	unid.			Fragment.
Weight (2321): <5g				
2324	?Sheep	Tooth		Incisor.
2324	Cow-sized			Shaft fragment.
Weight (2324): <5g				
2326	Dog	Mandible	Left	Very small, dc, dpm2, dpm3, dpm4.
2326	Dog	Mandible	Right	Very small, dc, dpm2, dpm3, dpm4, matches above.
2326	Cow-sized			2 long-bone end fragments.
2326	Horse	Vertebra		8 fragments of vertebra, possibly two bones including one cervical.
2326	Cow-sized			3 rib fragments; one shaft fragments.
2326	Sheep-sized			4 rib fragments; 9 skull fragments.
2326	Cow-sized			Shaft fragment, mineralized or fossilized.
2326	unid.			2 shaft small fragments, mineralized or fossilized.
Weight (2326): 120g				

Context	Animal	Bone	Side	Comments
2327	Horse	Cervical vert.		Centrum and neural arch, top of arch and right side processes missing.
Weight (2327): 75g				
2333	Cattle	Humerus	Right	Distal end and part of shaft.
Weight (2333): 295g				
2336	Horse	Mandible		2 fragments from molar region.
2336	Cow-sized			Shaft fragment, ?tibia.
2336	Cow-sized			3 shaft fragments.
2336	Sheep-sized			3 shaft fragments.
2336	Sheep-sized			Shaft fragment, burnt, partially calcined.
2336	unid.			8 small fragments.
Weight (2336): 60g				
2338	Sheep	Tooth	Left	Upper m2, see (2339).
2338	Sheep	Teeth	Left	Lower m2(g), fragment of ?m3, matching above.
2338	Sheep-sized			4 shaft fragments.
2338	Sheep-sized			?Shaft fragment, burnt, calcined.
2338	Cow-sized			Small unidentified fragment, mineralized or fossilized.
Weight (2338): 10g				
2339	Sheep	Tooth	Right	Upper m2, matches left m2 in (2338).
2339	Cattle	Tooth		Canine.
2339	Cow-sized			Shaft fragment, very eroded.
2339	unid.			Small fragment.
2339	unid.			Shaft fragment, burnt, calcined.
Weight (2339): 5g				
2340	Pig	Scapula	Left	Part of blade.
2340	Sheep	Tooth	?Left	Fragment of lower dpm4.
2340	Cattle	Talus	Right	Complete.
2340	Horse	Innominate	Right	Pubis and part of acetabulum.
2340	?Cattle	Tibia	?Left	Shaft fragment.
2340	Cow-sized			3 long-bone end fragments; 2 rib fragments; one shaft fragment.
2340	Sheep-sized			2 shaft fragments; one rib fragment.
2340	unid.			2 ?scapula fragments.
Weight (2340): 140g				
2346	Horse	Tibia	Left	Distal end.
Weight (2346): 80g				
2348	Cow-sized			14 rib fragments, all eroded, may be smaller animal.
2348	unid.			Shaft fragments.
Weight (2348): 5g				

Context	Animal	Bone	Side	Comments
2351	unid.			Fragment.
Weight (2351): <5g				
2353	Sheep	Tooth	Right	Upper m2.
2353	Cow-sized			Mandible fragment from angle region.
2353	Cow-sized			Shaft fragment.
2353	Sheep-sized			Shaft fragment.
2353	unid.			2 shaft fragments; 4 rib fragments.
2353	Cow-sized			Shaft fragment, burnt, carbonised.
2353	unid			?sheep-sized ?mandible angle fragment, burnt, partly carbonised.
Weight (2353): 50g				
2354	Pig	Tooth	Right	Lower canine, male.
2354	Pig	Scapula	Right	Olecranon and part of neck region, very eroded.
2354	Sheep	Metatarsal	Right	Shaft and part of proximal end.
2354	Sheep	Mandible	Right	Articular region.
2354	Cattle	Tibia	Left	Distal part of shaft.
2354	Cow-sized			Shaft fragment.
2354	Sheep-sized			?Tibia shaft fragment.
2354	Sheep-sized			?Tibia shaft fragment.
2354	Sheep-sized			2 unidentified shaft fragments.
2354	Sheep-sized			2 rib fragments.
2354	Sheep-sized			Shaft fragment, burnt, calcined.
2354	?Bird			Small shaft fragment.
Weight (2354): 155g				
2355	Cattle	Tooth	Right	Upper m?2.
2355	Cattle	Tooth	Left	Lower dpm4, not in wear.
2355	Cattle	Tooth		2 fragments of molar.
2355	Sheep	Mandible	Right	Fragment with pm4(a), m1(e).
2355	Sheep	Teeth	Right	Lower m2 (g), m3(e).
2355	Pig	Maxilla	Right	Fragment with pm3, pm4, m1, m2.
2355	Pig	Humerus	Right	Distal end of shaft.
2355	Cattle	Mandible	Right	Fragment of symphyseal and diastema region.
2355	Cow-sized			7 ?mandible fragments.
2355	Cow-sized			Scapula fragment; ?tibia shaft fragment.
2355	Sheep-sized			5 shaft fragments.
2355	?Pig			Shaft fragment.
2355	Sheep	Metatarsal		Shaft.
2355	Sheep-sized			?Tibia shaft.
2355	Sheep	Metapodial		Shaft fragment.
2355	Sheep	Radius	Right	Shaft.

Context	Animal	Bone	Side	Comments
2355	unid.			6 fragments.
Weight (2355): 245g				
2356	Sheep	Radius	Right	Shaft.
2356	Sheep-sized			Shaft of ?left tibia.
2356	Sheep-sized			?Tibia shaft fragment.
Weight (2356): 5g				
2368	Pig	Mandible	Right	Fragment with pm4(c), m1(e), m2(e).
2368	Pig	Tooth	Right	Upper m2, matches above.
2368	Cattle	Phalanx		Proximal phalanx, complete
2368	Sheep	Tibia	Right	Central part of shaft.
2368	Sheep-sized			2 shaft fragments, one rib fragment.
2368	Cow-sized			2 shaft fragments.
2368	unid.			2 ?scapula fragments, one unidentified fragment.
2368	unid.			Unidentified fragment, burnt, partly calcined.
Weight (2368): 80g				
2369	Horse	Mandible		2 fragments from pre-molar or molar region.
2369	Sheep	Tooth	Right	Lower m?2(g).
2369	Sheep	Tooth	Right	Upper m2, may be same animal as above.
2369	Cow-sized			?Left tibia shaft fragment.
2369	?Sheep			?Metapodial shaft fragment.
2369	Pig	Scapula	Right	Blade fragment.
2369	Cow-sized			2 shaft fragments.
2369	Sheep-sized			Shaft fragment.
2369	unid.			Fragment.
Weight (2369): 70g				
2370	Pig	Ulna	Right	Articular region and part of shaft.
Weight (2370): 15g				
2373	Sheep	Mandible	Left	Diastema to angle region, with dpm3, dpm4 (k), m1(f), m2(b); '- 10'.
2373	Sheep	Mandible	Left	Articular region, possibly same bone as above; '- 10'.
2373	Sheep-sized			?Mandible fragment from angle region; '- 10'.
2373	Pig	Tooth		Lower first incisor; '- 10'.
2373	Sheep-sized			Shaft fragment; '- 10'.
2373	Cattle	Phalanx		Proximal phalanx, complete apart from damage to distal end; '- 20'.
2373	Sheep	Radius	Right	Shaft; '- 20'.

Context	Animal	Bone	Side	Comments
2373	Cow-sized			3 ?mandible fragments, one with butchery marks; '- 20'.
2373	Sheep-sized			4 shaft fragments; 3 rib fragments; '- 20'.
2373	Cow-sized			Shaft fragment; '- 20'.
2373	Cattle	Talus	Right	Mostly complete, but some damage and erosion of bone surface; '0'.
2373	Pig	Humerus	Right	Distal end of shaft; '0'.
2373	Pig	Tooth		?Right lower incisor, with tiny fragment of mandible; '0'.
2373	Sheep	Radius		Shaft; '0'.
2373	Cow-sized			2 rib fragments; '0'.
2373	Sheep-sized			Shaft fragment, may be pig tibia; '0'.
2373	Sheep-sized			Shaft fragment; '0'.
2373	unid.			Fragment; '0'.
2373	unid.			Fragment, burnt, calcined; '0'.
Weight (2373): 160g				
2374	Pig	Mandible	Left	Fragment with m2(e), m3(e) and part of ramus; '- 10'.
2374	Sheep	Mandible	Right	Fragment with dpm2, dpm3, dpm4(f) and diastema region; '- 10'.
2374	unid.			?Rib or mandible fragment, burnt, carbonised; '0'.
Weight (2374): 50g				
2377	Sheep	Tooth	Right	Lower m3(g), roots and third cusp broken off.
2377	Cattle	Radius	Left	Part of shaft with ulna scar.
2377	Pig	Ulna	Right	Lower part of articular region and part of shaft.
2377	Cow-sized	Vertebra		Fragment of thoracic neural spine.
2377	Cow-sized			Rib fragment; shaft fragment.
2377	Sheep-sized			Shaft fragment.
2377	unid.			?Cranium fragment.
2377	Cow-sized			Shaft fragment, burnt, carbonised, outer surface partly calcined.
Weight (2377): 60g				
2380	Cattle	Tooth	Left	Upper m?1.
2380	Sheep	Ulna	Right	Tuberosity and part of shaft missing, otherwise complete.

Context	Animal	Bone	Side	Comments
2380	?Sheep	Tibia	Right	Shaft, butchery marks; large could be ?deer.
2380	Cow-sized			3 shaft fragments including ?right tibia.
2380	Cow-sized			3 rib fragments; 2 rib or mandible fragments.
2380	Cow-sized	Rib		Fragment of articular end.
Weight (2380): 95g				
2381	Cattle	Radius	Left	Shaft fragment with part of fused ulna shaft.
2381	Cattle	Tooth	Right	Upper pm4.
2381	Cattle	Mandible	Left	Pre-molar and molar region, no teeth present.
2381	Cow-sized	Mandible		Fragment, probably from same bone as above.
2381	Cow-sized			2 skull fragments.
2381	Cattle	Innominate	Right	Part of acetabulum and ischial neck.
2381	Cattle	Metatarsal		Shaft fragment.
2381	Sheep	Metatarsal	Left	Shaft and anterior part of proximal end, butchery cuts.
2381	Sheep-sized			4 shaft or rib fragments.
2381	Cow-sized			?Tibia proximal end fragment, unfused.
2381	Cow-sized			Rib fragment.
2381	Cow-sized			Shaft fragment, burnt, partly carbonised.
2381	Bird	Carpo- metacarpus	Left	Proximal end and part of major metacarpal shaft of ?gull or ?wader.
Weight (2381): 195g				
2382	Sheep	Tooth	Left	Upper m3.
2382	Sheep-sized			3 ?scapula fragments; 2 shaft fragments; one rib fragment.
2382	Cow-sized			?Tibia, proximal end fragment; scapula fragment.
2382	Sheep-sized			10 tiny fragments, burnt, calcined.
Weight (2382): 30g				
2383	Cattle	Tibia	Right	Fragment of medial part of distal end.
2383	Cow-sized			Shaft fragment.
2383	Sheep-sized			Small fragment, burnt, calcined.
Weight (2383): 5g; Total weight (Construction Section 19, Plot 145): 3420g				

## Plot 146

Context	Animal	Bone	Side	Comments
002	Sheep	Tooth	Right	Lower m3, heavily eroded surface.

Context	Animal	Bone	Side	Comments
002	Cow-sized			4 shaft or rib fragments, burnt, partly carbonised.
002	Cow-sized			2 ?skull fragments, very eroded.
Weight (002): 10g				
004	Sheep	Radius		Shaft fragment.
004	unid.			3 burnt fragments, burnt, partly carbonised.
004	Cattle	Mandible	Left	Fragments including articular region and ramus, 'small find 1'.
004	Cattle	Teeth	Left	Lower m2(a), burnt on crown, fragments of more molars, ?with above.
Weight (004): 50g				
006	Sheep	Tibia	Right	Central part of shaft.
006	unid.			Tiny unidentified fragment, burnt, part calcined.
006	Cow-sized			Badly eroded ?rib blade fragment.
006	Sheep-sized			?Sheep metapodial shaft fragment.
006	unid.			2 shaft fragments, burnt, calcined; ?skull fragment, burnt, calcined.
Weight (006): 20g				
2404	Cattle	Mandible	Right	Diastema and symphysial region.
2404	Cattle	Mandible		Fragments of ramus and coronoid process, possibly same bone as above.
2404	Horse	Radius	Left	Complete apart from lateral side of proximal end.
Weight (2404): 425g				
2406	Cattle	Teeth	Right	Lower m1(g), fragment of dpm4 with unerupted pm4, ?d incisor.
2404	Cattle	Mandible	Right	Fragments of diastema region, ?all from same bone ?with teeth above.
Weight (2404): 40g				
2407	unid.			Fragment.
Weight (2407): <5g				
2411	Cattle	Tooth	Left	Lower m3, crown damaged, no roots.
2411	Cattle	Mandible	Left	Articular region.
2411	Cattle	Humerus	Right	Distal end, very fragmentary, but probably all part of same bone.
2411	Cow-sized			2 shaft fragments.
Weight (2411): 120g				

Context	Animal	Bone	Side	Comments
2416	?Pig	Scapula		6 blade fragments, probably all from same bone.
2416	unid.			Small, burnt, calcined fragment.
Weight (2416): 10g				
2421	Sheep	Tooth	Right	Lower m1(g).
2421	Sheep	Tibia	Right	Shaft.
2421	Cattle	Tooth	Left	Upper m?2.
2421	Cattle	Tooth		Fragments of lower dpm4, not in wear, no roots.
2421	Pig	Tooth	Left	Upper pm3.
2421	Cattle	Metapodial		Condyle, badly eroded surface.
2421	Cow-sized	Rib		Blade fragment.
2421	Sheep-sized			Shaft, ?right tibia, more robust than tibia shaft above.
2421	Sheep-sized			Shaft fragment.
2421	unid.			5 fragments including ?mandible.
Weight (2421): 80g				
2426	Pig	Radius	Left	Proximal end.
2426	Sheep-sized			Shaft fragment.
Weight (2426): <5g				
2429	Cow-sized			?Radius shaft, fragment from central region.
Weight (2429): 20g				
2431	Cattle	Teeth	Right	Lower dpm2, dpm3, dpm4(g), crown of developing pm4, incisor.
2431	unid.			19 shaft fragments, cow-sized or smaller, all of similar appearance.
Weight (2431): 30g				
2434	Cattle	Metatarsal		Shaft.
Weight (2434): 75g				
2436	Cattle	Skull	Right	Fragment including base of horn-core.
2436	Cow-sized			7 skull fragments, 9 unidentified fragments, may be same as above.
2436	Sheep	Tooth	Left	Lower m1(g), m2(d).
2436	Cow-sized			4 shaft fragments including ?cattle metapodial.
Weight (2436): 115g				
2449	unid.			?Skull fragment.
Weight (2449): <5g				
2458	Horse	Metacarpal	Right	Shaft, lateral side distal end and part of proximal end.
2458	Horse	Scapula	Left	Olecranon and part of blade.

Context	Animal	Bone	Side	Comments
2458	Pig	Mandible	Right	Fragment with dpm3, dpm4(m).
2458	Pig	Mandible	Left	Fragment with dpm3, dpm4(l), possibly matching above.
2458	Sheep	Tooth	Right	Upper molar.
2458	Sheep	Scapula	Left	Base of blade and neck region.
2458	Cow-sized	Mandible		Fragment of angle region.
2458	Cow-sized			Shaft fragment.
2458	Sheep-sized			2 shaft fragments.
2458	Cow-sized			Shaft fragment, burnt, partly calcined.
2458	Sheep-sized			9 ?skull fragments.
2458	Sheep-sized			3 small shaft or rib fragments.
Weight (2458): 335g				
2459	unid.			3 skull fragments.
2459	unid.			Dense, mineralised fragment.
Weight (2458): 20g; Total weight (Construction Section 19, Plot 146): 1360g				

## Plot 147

Context	Animal	Bone	Side	Comments
2015	Cow-sized	Vertebrae		6 small fragments, from at least 2 cervical vertebrae.
2015	Cow-sized	Rib		Large fragment of blade, and smaller fragment.
2015	Cow-sized			?Skull fragment; shaft fragment.
2015	unid.			3 ?scapula fragments.
Weight (2015): 105g; Total weight (Construction Section 20, Plot 147): 105g				

## Plot 148

Context	Animal	Bone	Side	Comments
2007	Deer	Antler		Sawn section of shaft, large, probably red deer.
2007	Cow-sized			2 rib fragments.
2007	Cow-sized			10 fragments of long-bone end, all from ?same bone, heavily eroded.
Weight (2007): 70g				
2011	unid.			?Shaft fragment.
Weight (2011): <5g; Total weight (Construction Section 20, Plot 148): 70g				

## Plot 149

Context	Animal	Bone	Side	Comments
002	?Horse	Mandible		Fragment.
002	Cattle	Radius	Left	Fragment of distal end articulation.
002	Cow-sized	Vertebra		Articular process of cervical vertebra.

Context	Animal	Bone	Side	Comments
002	Sheep	Mandible		Tiny fragment of coronoid.
002	Cow-sized			Fragment of long-bone end.
002	Sheep-sized			Shaft fragment, ?tibia.
Weight (002): 45g				
004	Cow-sized			Shaft fragment, ?tibia.
004	Cattle	Scapula	Right	Fragment of blade.
004	Cattle	Radius	Left	Shaft with ulna scar and medial part of proximal end.
004	Cattle	Metacarpal	Left	2 fragments from either end of shaft, probably the same bone.
004	Cow-sized			2 shaft fragments.
004	Sheep-sized			Rib fragment.
Weight (004): 180g				
005	Sheep	Tooth	Right	Lower m3(g).
Weight (005): 5g				
2008	?Pig			?Mandible fragment.
2008	Cow-sized			Shaft fragment; ?rib fragment.
Weight (2008): 10g				
2009	Horse	Mandible	Right	Fragment with m3
Weight (2009): 60g				
2024	Sheep-sized			Shaft fragment ?sheep radius.
Weight (2024): <5g				
2038	Cattle	Radius	Left	Small, unfused epiphyses missing from both ends.
2038	Cattle	Radius	Left	Unfused distal epiphysis, fused to unfused ulna end, larger than above.
2038	Cattle	Metatarsal	Left	Proximal end. Abnormal growth on lateral side and articular surface.
2038	Cattle	Metatarsal		Lateral side shaft fragment from ?right side.
2038	Cattle	Mandible	Right	Fragmentary, from symphysis to angle region, no teeth present.
2038	Cow-sized	Vertebra		2 centrum fragments, including one thoracic.
2038	Cow-sized			Shaft fragment, ?humerus, see (2039) below.
2038	Cow-sized			Rib fragment; 4 unidentified fragments, may be mandible.
Weight (2038): 575g				
2039	Cattle	Femur	Left	Shaft and distal end.

Context	Animal	Bone	Side	Comments
2039	Cow-sized			Shaft fragment, ?humerus, joins fragment in (2038), see above.
Weight (2039): 450g; Total weight (Construction Section 20, Plot 149): 1325g				

## Plot 150

Context	Animal	Bone	Side	Comments
2512	Sheep-sized			?Femur shaft.
2512	Cow-sized			Small shaft fragment, burnt, partly carbonised.
2512	unid.			Small shaft fragment, burnt, carbonised.
Weight (2512): <5g				
2514	Sheep	Maxilla	Left	Fragment with dpm3, dpm4, with loose m1 probably matching.
2514	Sheep	Tooth	Left	Lower dpm4(g), possibly matching above.
2514	Sheep-sized			2 fragments of ?mandible.
2514	Cattle	Innominate	Right	Fragment of Ilium.
Weight (2514): 45g				
2515	Cattle	Skull	Left	Fragment of frontal bone with base of horn core.
Weight (2515): 70g				
2517	Pig	Scapula	Left	Base of blade.
2517	?Pig			Scapula fragment, may be part of above.
2517	Cow-sized			Unidentified piece, possibly of sternum.
Weight (2517): 20g				
2521	Cattle	Mandible	Right	Diastema to pre-molar region, no teeth present.
2521	Cattle	Phalanx		Second phalanx, complete.
2521	Pig	Tibia	Right	Shaft.
2521	Pig	Metatarsal	Left	Metatarsal III, unfused distal end missing, proximal end damaged.
2521	Sheep	Radius	Right	Proximal end.
2521	Cattle	Tibia	Left	Medial side of distal end.
2521	Horse	Innominate	Right	Neck of pubis and part of acetabulum.
2521	Cattle	Scapula	Right	Olecranon and part of blade.
2521	Cattle	Skull		Occipital fragment.
2521	Cow-sized	Vertebrae		Neural arch fragments of 2 lumbar vertebrae.
2521	Cow-sized			4 mandible fragments, may be with mandible above.
2521	Sheep-sized			2 shaft fragments.

Context	Animal	Bone	Side	Comments
2521	Cow-sized	Rib		Fragment.
2521	unid.			Fragment.
Weight (2521): 280g				
2525	Horse	Innominate	Right	Acetabulum with necks of ilium and ischium.
Weight (2525): 5g				
2526	Sheep	Mandible	Left	Pre-molar region with dpm4(h).
2526	Sheep	Mandible	Left	Fragment with m1(g), m2(e), pm4 just erupting.
2526	Sheep	Tooth	Right	Lower m?2(f).
2526	Sheep	Tibia	Left	Distal end of shaft, unfused.
2526	Sheep-sized			2 shaft fragments, may be same bone as above.
2526	Sheep-sized			?Femur shaft.
2526	Sheep	Innominate	Right	Fragment of acetabulum.
2526	Pig	Mandible	Right	Fragment with m3(e).
2526	Pig	Tooth	Left	Upper m2, with small fragment of maxilla.
2526	Pig	Tooth		Lower incisor.
2526	Cattle	Tooth	Left	Lower m3(g)
2526	Cow-sized			Mandible fragment.
2526	Cattle	Skull		3 fragments, including occipital region.
2526	Horse	Vertebra		Thoracic centrum and unfused posterior epiphysis, wide foramen.
Weight (2526): 240g				
2532	Cattle	Metatarsal	Right	Proximal end.
2532	Cattle	Talus	Left	Complete.
2532	Cow-sized			Shaft, ?cattle right radius.
2532	?Deer	Metatarsal	Left	Part of proximal end.
2532	Sheep	Tibia	Right	Distal end.
2532	Horse	Tooth		?Left incisor.
2532	unid.			Tiny fragment.
Weight (2532): 260g				
2533	Horse	Radius	Right	Shaft and proximal end with fused ulna shaft.
2533	Horse	Scapula	Left	Olecranon and neck.
2533	?Horse	Scapula		2 fragments probably with above, but not re-fitting.
2533	Cow-sized			Heavily concreted shaft fragment.
Weight (2533): 490g				
2534	Sheep	Tooth	Right	Upper m3.
2534	Sheep	Tibia	Left	Distal end damaged, otherwise complete, butchery marks.
2534	Cattle	Metacarpal	Left	Proximal end; robust.

Context	Animal	Bone	Side	Comments
2534	Cattle	Vertebra		Thoracic vertebra, damaged, unfused centrum epiphyses missing.
2534	Cow-sized	Vertebra		Neural spine fragment.
2534	Cow-sized			Scapula blade fragment.
2534	Cow-sized			2 shaft fragments including ?radius.
2534	unid.			Skull fragment,
Weight (2534): 190g				
2537	Cattle	Mandible	Left	Fragment from pre-molar region, no teeth present.
2537	Pig	Ulna	Right	Distal part of articular region.
2537	Cow-sized			Shaft fragment; skull fragment.
Weight (2537): 35g				
2539	Sheep	Tibia	Left	Shaft and distal end, ends burnt, carbonised.
2539	Cow-sized			Shaft fragment.
2539	?Horse			Mandible fragment.
2539	Sheep-size			2 shaft fragments.
Weight (2539): 30g				
2540	Cattle	Phalanx		Proximal phalanx, medial side of distal end missing.
2540	Cow-sized			Shaft fragment, ?radius or ?metapodial.
2540	Cow-sized	Rib		Fragment.
Weight (2540): 20g				
2545	Sheep	Mandible	Right	Fragment with dpm2, dpm3, dpm4(e), m1(b).
2545	Sheep	Mandible	Left	Diastema region to pm3, pm4(f), m1(g), m2(e), m3(d).
2545	Sheep	Mandible	Right	Fragment with pm4(k), m1(m), m2(h).
2545	Sheep	Tooth	Left	Lower m1(f).
2545	Sheep	Mandible	Left	2 fragments, coronoid, and articular region, probable from same bone.
2545	Sheep	Metacarpal	Left	Distal end and half of shaft.
2545	Cattle	Mandible	Left	Fragment with pm3.
2545	Cattle	Mandible	Right	Coronoid and articular region.
2545	Cattle	Femur	Right	Distal end.
2545	Pig	Maxilla	Left	Fragment with pm4, m1, m2, m3 just erupting, see skull below.

Context	Animal	Bone	Side	Comments
2545	Pig	Mandible	Left	Fragment with dpm2, dpm3, dpm4(e), m1(b).
2545	Pig	Mandible	Left	Angle region, small, possibly same bone as above.
2545	Pig	Mandible	Right	Diastema region with incisor, pm3, fragment of pm4.
2545	Pig	Teeth		4 loose lower incisors, possibly with mandible above.
2545	Pig	Tooth		Loose lower ?pre-molar.
2545	Pig	Tooth	Right	Lower canine, male, large.
2545	Pig	Metacarpal	Left	Metacarpal III, complete
2545	?Pig	Skull		5 fragments from ?same bone, probably with maxilla above.
2545	Cattle	Innominate	Left	Ischial neck and part of acetabulum.
2545	Cattle	Innominate	Right	Neck of ilium and part of acetabulum.
2545	Cattle	Innominate	Left	Fragment of ilium.
2545	Cow-sized			2 ?innominate fragments, possibly from one of the above.
2545	?Pig	Vertebra		Thoracic neural spine.
2545	Cow-sized			2 shaft fragments; 2 ?mandible or ?skull fragments.
2545	Sheep-sized			3 shaft fragments.
2545	Cow-sized	Ribs		15 fragments, at least 6 ribs from ?same animal, 2 with butchery cuts.
2545	Sheep-sized	Ribs		3 ribs, two including articular region.
2545	Sheep-sized			Rib fragment, burnt, carbonised, calcined surface.
2545	unid.			2 ?shaft fragments, burnt, calcined.
Weight (2545): 750g				
2550	Sheep-sized			Shaft fragment.
2550	Cow-sized			Shaft fragment, burnt, partly carbonised.
2550	unid.			Skull fragment.
Weight (2550): <5g				
2551	Cattle	Skull		44 fragments, probably all from same animal.
2551	Cattle	Teeth	Right	Upper m2, pm4; incisor.
2551	Cattle	Tibia	Left	Shaft and distal end.
2551	Cattle	Talus	Left	Probably articulates with above, split but mostly complete.
2551	Cattle	Radius	Left	Fairly small.

Context	Animal	Bone	Side	Comments
2551	Cattle	Humerus	Left	Distal end, small, unfused lateral epiphysis present.
2551	Cattle	Humerus	Left	Shaft.
2551	Cattle	Humerus	Left	Fragment of shaft.
2551	Cattle	Innominate	Right	Part acetabulum with necks of ilium and ischium, very small.
2551	Cattle	Innominate	Left	Iliac and ischial parts of acetabulum, larger than above.
2551	Cattle	Axis		Right anterior end missing, unfused posterior epiphysis missing.
2551	Cattle	Vertebra		Thoracic vertebra, anterior part of centrum and extremities missing.
2551	Cow-sized	Vertebra		Base of neural spine of thoracic vertebra.
2551	Sheep	Mandible	Right	Symphysial region to pm3, pm4(g), m1(g), m2(g), m3(e).
2551	Sheep	Mandible	Right	Diastema to second molar region, no teeth present.
2551	Sheep	Tooth	Right	Lower m1(e).
2551	Sheep	Tooth	Left	Lower m2(a).
2551	Sheep	Scapula	Right	Olecranon and lower part of blade.
2551	Sheep	Humerus	Left	Distal end and part of shaft, lateral epiphyses unfused.
2551	Sheep	Mandible	Left	Articular region.
2551	Sheep	Metacarpal	Right	Unfused distal epiphysis missing, damage to medial side proximal end.
2551	Sheep	Radius	Left	Shaft, butchery cuts.
2551	Sheep	Radius	Right	Shaft, larger than above.
2551	Sheep	Innominate	Right	Ischial neck.
2551	Sheep	Phalanx		Complete proximal phalanx.
2551	Sheep	Tibia	Left	Proximal part of shaft.
2551	Sheep	Tibia	Right	Shaft fragment.
2551	Sheep-sized			?Right tibia shaft, larger than above.
2551	Horse	Tooth	Left	Lower molar or pre-molar.
2551	Horse	Mandible		2 fragments, one with fragment of molar root.
2551	?Horse			2 ?mandible fragments, may be same bone as above.
2551	Cattle	Ulna	Left	Shaft fragment.
2551	Cow-sized			?Right ulna shaft fragment.
2551	Sheep	Radius	Right	Shaft fragment.
2551	Pig	Scapula	Right	Part of blade.

Context	Animal	Bone	Side	Comments
2551	Bird	Femur	Right	Proximal end and part of shaft, probably from a mallard-sized duck.
2551	Cattle	Metapodial		Shaft fragment.
2551	Cow-sized			2 radial shaft fragments.
2551	Cow-sized			17 shaft fragments.
2551	Sheep-sized			9 shaft fragments.
2551	Pig	Metatarsal	Right	Proximal end of metatarsal II.
2551	Sheep-sized	Rib		Fragment including articular region.
2551	Cow-sized	Ribs		9 fragments, 2 probable rib fragments.
2551	Cow-sized			?Scapula fragment.
2551	Cow-sized			2 unidentified burnt fragments, carbonised, one calcined.
2551	Sheep-sized			3 rib fragments, burnt, calcined.
2551	Cattle	Skull		Fragmentary but substantially complete.
2551	Cattle	Teeth	Right	Upper pm4, m1, m2, m3 not in occlusal plane, with skull above.
2551	Cattle	Teeth	Left	Upper pm4, m2, m3, with skull above
2551	Cattle	Tooth	Right	Lower pm4(d), possibly same animal as skull above.
2551	Sheep	Tooth	Left	Lower m1(e).
2551	Cow-sized			Shaft fragment, ?radius.
2551	Sheep-sized			2 shaft fragments; rib fragment.
Weight (2551): 2755g				
2553	Cattle	Metatarsal	Right	Proximal end of shaft.
2553	unid.			Small fragment of ?proximal articular region of cow-size ?radius.
Weight (2553): 50g				
2554	Cow-sized			Fragment of ?tibia shaft.
Weight (2554): 5g				
2555	Cattle	Tooth	Left	Lower m1(f).
2555	Sheep-sized			?Radius shaft fragment.
Weight (2555): 15g				
2571	Sheep-sized			Shaft fragment.
2571	Cow-sized			Tabular bone fragment, ?mandible surface.
Weight (2571): <5g				
2572	Cow-sized			3 shaft fragments.

Context	Animal	Bone	Side	Comments
2572	Sheep-sized			Rib fragment, burnt, calcined.
Weight (2572): 10g				
2576	Cow-sized			Fragment of spongy bone from ?long bone end.
Weight (2576): 5g				
2579	Cattle	Metacarpal	Left	Proximal end and part of shaft, small, heavily pitted surface.
2579	Sheep	Metapodial		Shaft fragment.
Weight (2579): 65g; Total weight (Construction Section 20, Plot 150): 5345g				

# **APPENDIX 8**

**Shell**  
**Dr. R. Moore**

## Hatton to Silk Willoughby Pipeline Shell

### Marine Bivalves

The shell consisted mostly of oyster *Ostrea edulis*, with some mussel *Mytilus edulis* and cockle *Cardium sp.* These species are all commonly used for food.

Oyster shells show annual growth rings, allowing the age of the animal to be estimated. Medium-sized three or four year old specimens seemed to make up the bulk of the assemblage. The example in context (4332) was larger and at least 5 years old. Two shells in (4363) were probably younger, showing only two years growth, although abrasion of the edge of the shells may have occurred. Collecting of oysters from a wild population tends to result in a wide spread of ages, and the general similarity seen in this assemblage might suggest that they came from carefully managed beds. Oyster beds have been cultivated around the coast of Britain at least since Roman times. The Thames estuary was an important centre of this industry, but the Wash and other areas of the east coast would also have been significant.

Unlike most bivalves, oysters have distinct top and bottom shells. Food waste will normally contain roughly equal numbers of the flat upper shells and the concave lower shells. This was the case here.

Context	Species	Number	Weight/g	Comments
004/149	Oyster	1	20	1 bottom shell + 2 fragments
004/149	Mussel	1		Fragment
1892	Oyster	1	45	Top shell.
1930	Oyster	1	<5	
1986	Oyster	1	<5	
1986	Mussel	?1		2 fragments, one with umbo.
1986	Cockle	1		Fragment.
2551	Mussel	?1		3 fragments, at least 2 from ?same shell.
4136	Oyster	2	40	1 top, 1 bottom shell, + fragments.
4147	Oyster	2	45	1 top, 1 bottom shell + fragments
4167	Oyster	2	35	1 top, 1 ?bottom shell.
4177	Oyster	7	110	6 top, 1 bottom shell.
4206	Oyster	7	145	4 top, 3 bottom shells + fragments.
4215	Oyster	2	55	1 top, 1 bottom shell + fragments.
4241	Oyster	1	10	?bottom shell fragment.
4250	Oyster	8	175	3 top, 5 bottom shells + fragments.
4293	Oyster	10	165	5 top, 5 bottom shells + fragments.
4331	Oyster	?1	10	Top shell fragments.
4332	Oyster	1	50	Top, large.
4359	Oyster	1	10	Bottom shell.
4363	Oyster	2	10	2 bottom shells, small.
4364	Oyster	1	15	Top shell.
4376	Oyster	1	15	Top shell.
<b>Total Oyster</b>		<b>51</b>	<b>945</b>	

### Snails

Normal hand-collected finds retrieval produced snail shells from eight contexts. All were of the genus *Cepaea*. There are two species of this genus native to Britain, both extremely common. *C. nemoralis* is slightly larger and tends to occur in drier and more wooded habitats than *C. hortensis*, although both are widespread and there is a considerable overlap in their distributions. Without access to the soft body parts, distinguishing between these two species is not totally reliable, but all the specimens in the assemblage appear to be *hortensis*. This might imply that they came from relatively damp, unwooded environments.

The numbers from each context are tabulated below. All specimens had a diameter in the range 17 to 22mm except where noted. A group of these shell in context (1892) was sufficiently noteworthy for the excavators to give it a small-find number <001>. The eight shells retrieved represents about 10% of this group.

Context	Section/Plot	Number	Comments
4136	04/20	1	
1859	18/135	3	One 13mm diameter.
1888	18/139	1	fragment
1892	18/139	2	One 6mm diameter.
1892	18/139	8	<001>; ca. 10% sample
004	20/149	1	
1994	19/145	1	
2382	19/145	1	9mm diameter
2527	20/150	4	One 14mm diameter.

Most species of snail overwinter in underground hibernacula, formed from, say, old animal holes or by employing their surprisingly good burrowing abilities. It is likely that the collection of shells in context (1892) is the remains of such a hibernaculum, and is of wholly natural origin. However, these snails are of a relatively large species, comparable in size to the smaller edible marine gastropods such as winkles, and it is just possible that they may have been exploited as food.

Richard Moore

# **APPENDIX 9**

**Human  
W. Booth**

**Hatton to Silk Willoughby Pipeline**  
**Analysis of the Human Skeletal Remains**  
Wendy Booth

A total of nine articulated burials were discovered and excavated during the watching-brief phase of the archaeological work on the pipeline. All of these burials were found during the excavation of Site 18, in Plot 145 (TF 10647 45772), and were all orientated E-W, with their heads towards the western ends of the graves. This, together with their supine, extended burial position, suggests that they may have been Christian burials. As well as the nine articulated burials there was also a scatter of human bone, discovered to the north of skeleton no. 1980.

The state of preservation of the skeletal remains was surprisingly varied. Of the nine burials, only the bones from three of the individuals are in a reasonably good condition, while two of the individuals are poorly preserved, and the other four individuals are extremely poorly preserved. As this demonstrates, the rate of deterioration of buried human bone varies considerably. Many factors affect this. Among these are the action of plants, insects, animals such as rodents, and even the climate of the environment itself. The varying properties of the soil in which the remains are buried, such as its acidity, permeability, moisture content and the flora of micro-organisms present, also play a major role in its preservation (White, 1991; 360). Bone has both a mineral and a protein component, which are affected in different ways by these taphonomically variable properties. The best preservation occurs in well-drained areas with low water-tables, soils of a neutral or low alkaline pH, and temperate climates (Henderson, 1987). In this case the soil is a coarse, sandy, silty matrix, with occasional patches of clay. This means that it is reasonably permeable but very acidic. The high acidity encourages the disintegration of the physical matrix of the bone, while the good permeability ensures a constant draining of the surface water through the soil, encouraging the leaching away of this disintegrated fabric from the skeletal remains. Although this site was in one of the most well-drained areas of the pipeline, the water-table was still surprisingly high, enabling the soil to remain very moist despite its good permeability. This ensures that there is adequate moisture for bacteria and micro-organisms to survive and contribute to the efficient breakdown of the skeletal material. The good supply of oxygen allowed by the open structure of this soil also contributes largely to this process. The better preservation of some of the burials may be due to a higher percentage of clay in their burial environment. The extremely fine particles that clay is composed of does not allow such free movement of water and oxygen through the soil matrix. Therefore, this lessens the erosive qualities of the passing of the ground water through the grave, and provides a more anaerobic environment, which discourages the action of micro-organisms. The graves of the three better preserved individuals, 1977, 1980 and 1989, were all positioned in relatively close proximity to each other, which does suggest that the soil of this area of the site had a slightly different chemical make-up. This is most likely to be caused by a higher clay content.

The burials are grouped according to their state of preservation, with the best preserved individuals being discussed first. These are skeletons no. 1977, 1980 and 1989, which are all male, with ages ranging between 27-40 years.

**Skeleton No. 1977**

This male individual is the youngest of this group, with an estimated age of 27-35 years, and is therefore potentially the least interesting, as his skeleton has had the least time during life to react to his environment and lifestyle. Unfortunately, approximately one third of the remains, mainly the skull and shoulder girdle, were not present in the grave. This is possibly due to a disturbance of the grave during ploughing, which may have truncated and removed part of the remains while leaving the cut of the grave itself untouched. The rest of the skeleton remains reasonably intact.

The spine is a good indicator of the levels of physical stress endured during life, and the vertebrae of 1977 exhibit the early indications of this stress. For example, the early stages of osteophytic lipping are evident on some of the articular processes and vertebral bodies. This lipping is the formation of bony outgrowths from joint surfaces which represents the bodies attempt to spread the load at the joint and compensate for the stress to which the joint is being subjected (Roberts and Manchester, 1995; 101). Unfortunately, the vertebrae are too fragmentary to give us a complete picture of the frequency of this lipping, especially those of the upper spine. Allowing for this, it does appear that for both the bodies and the processes, the occurrence of this phenomenon is concentrated at the base of the spine. As this is the area of the spine with the greatest amount of physical stress placed on it, this is to be fully expected. The lipping is only slight, therefore still in the early stages of development. The other indicator of physical stress exhibited in this spine is the possible presence of several Schmorl's nodes on the lower thoracic vertebrae. These nodes are caused by the intervertebral discs exerting pressure on the vertebral body surfaces, (*ibid.*; 107), and look like small indentations or 'punched' holes. Some believe this is caused by trauma, such as a sharp jarring of the spine, while others see it as more of a symptom of degeneration caused by general physical stress, e.g. the carrying of over-heavy loads. Whatever the reason for their formation, they are a common feature of biologically older spines. In this case it appears that these nodes are in the very first stages of formation, exhibiting themselves as very shallow depressions on both the superior and the inferior, or the upper and lower, surfaces of the vertebral bodies of the 9th, 11th and 12th thoracic vertebrae. It is probable that the 10th thoracic vertebrae also displayed similar damage, but this vertebra is not preserved.

The dentition of 1977 is completely absent, which deprives us of valuable information regarding the oral hygiene and diet of this individual. It also deprives us of the most reliable tool for the estimation of his age at death. The degree of attrition, or wear, that the teeth, especially the molars, exhibit is used widely for this purpose. Brothwell, (1981), has devised a table of wear rates based on the children and adults of several early British groups, which can be used to assign fairly accurate, reliable ages to individuals. The indications of age at death of this individual are slightly ambiguous, as the bones of the skeleton have a fairly youthful appearance, yet the pubic symphyses and the auricular surfaces of the pelvis indicate a more advanced age at death. The presence of the dentition would have allowed a more balanced, informed estimation.

Pathologically, the surfaces of both the left and right tibiae and fibulae appear to be badly damaged, with none of the original bone surface preserved, and the remaining surface of the bone appearing extremely rough and pitted. This suggests the possibility of periostitis, a non-specific infection of the periosteum, the membrane which covers the surface of all bones. This infection often occurs in this particular location, possibly due to the vulnerability of the lower legs to physical damage and therefore soft tissue infection. However, on closer inspection it became apparent that the condition of the bone was too poor to allow a definite diagnosis, so the damage must be put down to the erosive properties of acidic soil and water which were referred to earlier. There was no other evidence of infection or disease present in the skeleton.

Several morphological traits are displayed by these remains. These are a third trochanter of the right femur, the absence of both anterior calcaneal facets, and the presence of both ostrigonums fused to the tali. The central channel of the sacrum is open to the level of the 4th sacral vertebrae, which is the normal hiatus level. These characteristics are merely genetic anomalies of the skeleton which usually have no effect on the life of the individual concerned. The presence and/or absence of morphological traits is often used to imply relatedness between skeletons buried in the same graveyard or section of graveyard. Unfortunately, this is highly unreliable as some of the traits tend to be sexually specific, (i.e. they only occur in males or females), or they may not always be physically expressed despite being genetically present. Another anomaly which is present is an unusually enlarged iliac tubercle of the left ilium. This is a thickening at the centre of the top of the ilium, the blade-like part of the pelvis, and provides one of the places of attachment for the muscles of the thigh and lower back. In

muscular individuals, this tubercle is often pronounced and rugose, but usually in a bilaterally even manner. In this case, the left tubercle is 50% longer and 75% wider than that of the right ilium, being 70mm long by 34mm wide, as opposed to 50mm long by 20mm wide. There is no evidence of infection either on the tubercle itself or on the surrounding bone, so it is possible that this is a response to some kind of muscular trauma or excessive strain which would encourage the extra growth of this feature, although there is no evidence for this elsewhere in the skeleton. It is possible that it is simply a developmental anomaly with no direct causal stimuli. This anomaly is not one of the morphological traits which is usually found on the skeleton, but its non-pathological nature necessitates its inclusion in this section. The presence of such anomalies demonstrates the variability and adaptability of the human body.

It is not possible to discern the cause of death of this individual. We can guess, however, that his death was relatively quick. Given the reasonably good state of preservation of the bones, the skeletal remains show absolutely no positive evidence of infection. If he had suffered a long, drawn-out illness the bone would have had adequate time to react to the infection which would therefore have been present in the soft tissues. The lack of evidence of trauma or physical injury makes the introduction of infection in this manner unlikely, so a fast-acting viral or bacterial infection would seem to be the most likely cause of death, although this can in no way be verified.

#### **Skeleton No. 1980**

The remains of this individual are the least complete of those in this group. The bones that are present are extremely fragmentary despite the fact that the actual fabric of the material is in surprisingly good condition. It is possible to assign an age at death of approximately 35 years.

Only 6 out of a possible 24 vertebrae are preserved, being the 12th thoracic vertebra and those of the lumbar spine. All of them exhibit degenerative changes, with osteophytic lipping present on many of the articular facets and vertebral bodies, varying in degree from mild to severe. There are no Schmorl's nodes present on the vertebral bodies, but it appears that this individual did suffer from a condition called osteochondritis dissecans. This condition exhibits itself as a lesion of the vertebral body and is usually seen at the anterior, or front, edge of the vertebra, (Wakely, *pers. comm.*). It occurs in the adolescent and young adult, and is much more common in males than females (Ortner and Putschar, 1981; 242). The condition is caused by the death of bone tissue from significant obliteration of the affected areas blood supply, (Roberts and Manchester, 1995; 87), with the knee being the affected area in over 80% of cases. The 12th thoracic and first lumbar vertebrae, where these lesions are placed, are in the area of the spine which suffers the most physical stress, so it is not unlikely that repeated heavy work could damage the blood supply to this part of the vertebral body, initiating the development of this condition. The osteophytic lipping seen on nearly all of the 8 faces of the affected vertebral bodies supports this theory. The lesions are both placed on the superior surfaces of the vertebrae, and are well developed, perhaps signifying the long term presence of the condition in the spine. The normally smooth superior surface of the body of the 2nd lumbar vertebra is roughened and reactive on the anterior, or front, side, indicating the probable early formation of a third osteochondritic lesion. This condition is not especially common, but its occurrence in a man of this age is not surprising. The most interesting feature of this spine can be seen in the articular facets and the arches. These appear to be reduced in size on the left-hand side, and enlarged on the right, causing a slight scoliosis, or bending, of the spine to the left. It is possible that this is a congenital, or inherited, condition, causing the non-development of the smaller left-hand processes, or it could have been acquired during life due to the asymmetrical loading of the spine from an early age. Whatever has caused the left-hand processes to be smaller, the right-hand ones appear to have increased in size to compensate for it, exaggerating the original difference in size between them. The median spine of the sacrum, which protrudes posteriorly, or backwards, also appears to have a bias, but in this case to the right-hand side. This may be completely unrelated and due to the pull of stronger musculature on that side of the body, but it may also be a response to the left-handed scoliosis of the spine. This would be an attempt of the skeleton to compensate for it and maintain a more upright posture.

Unfortunately, as so little of the vertebral column is preserved, there is too little information to provide a clearer picture.

Only a quarter of the dentition is present, eight out of a possible thirty two teeth, in the left side of the maxilla. These teeth are in a very poor condition with the enamel being opaque, powdery, stained, cracked and falling away from the underlying dentine. This may be caused by the aggressive burial environment, possibly encouraged by a weak condition of the enamel at death due to poor oral hygiene. There is also a large amount of what appears to be root decay, of a mild degree, focusing on the labial and lingual, or lip and tongue, surfaces of the front 5 teeth. The alveolar margins of the maxilla are not well preserved, but what remains does show a moderate degree of resorption, leaving the top portion of the roots exposed, and appears fairly porous and reactive. This suggests that a certain degree of infection was present in the gums during life. The subsequent transmission of this infection to the bone, called periodontitis, is exhibited as the porous, reactive appearance often seen on the alveolar margins of archaeological teeth. If the infection was serious enough, it could easily have passed to the roots themselves. This condition may have been caused by a lack of oral hygiene, allowing food remains to become stuck down the sides of the teeth, and therefore encouraging decay. The other possibility is an accumulation of calculus on the enamel surfaces of the teeth, which can push the gums away from them and cause the soft tissues to become inflamed, a condition called gingivitis (Roberts and Manchester, 1995; 56). Calculus is a deposit which is formed by the mineralisation of dental plaque, and most commonly develops on the tooth surfaces near the salivary glands. These are the lingual, or tongue, surfaces of the lower incisors and the buccal, or cheek, surfaces of the upper molars, (Roberts and Manchester, 1995; 55). It accumulates faster in a sucrose rich diet. Calculus is a common finding of archaeological teeth, and detailed analysis such as that done by Dobney and Brothwell, (1988), using scanning electron microscopy, has provided valuable information about diet, even identifying microscopic fragments of food debris in calculus on human teeth. Although very little calculus is present on the teeth, it is possible that it has been lost due to the aggressive burial environment. There are no carious lesions present or any other anomalies.

Several areas of the skeleton show evidence of damage to the bone, but the remains are not well enough preserved to allow the positive identification of infection or disease as being the cause of this damage. The areas in question are the outer edge of the left acetabulum, the left mastoid, and the outer surface of the skull vault.

The morphological traits present are one lambdoid ossicle of the left lambdoid suture, and exostosis of the right trochanteric fossa. An ossicle is an extra 'island' of bone which sometimes occurs within the sutures of the skull, and exostosis is the growth of bony fingers which may occur anywhere on the skeleton, but are often seen in this location, possibly as a reaction to the stress of muscle or ligament attachments.

As with 1977, it is not possible to identify the cause of death of this individual, as there is no positive evidence of infection, and no indication of trauma, injury or any other pathological condition.

#### **Skeleton No. 1989**

This skeleton is the most completely preserved of all the individuals represented in this burial ground, with the majority of the bones being present, despite the fragmentary nature of the skull and the thoracic vertebrae. It is also the oldest at death of the individuals to whom it was possible to assign an age, being 35-40 years. Potentially, this should make these remains the most interesting.

The degree of osteophytic lipping present on the articular processes of the spine demonstrates the relatively greater age at death of this individual, with the majority of the processes displaying lipping varying from a mild to a severe degree. The only processes which do not are those of the atlas and axis, the first and second cervical vertebrae, which are under the least physical stress and therefore are least likely to develop this lipping. The vertebral bodies have suffered erosion on most of their

edges, thereby destroying any lipping which may have been present here. The only lipping remaining is on the fifth lumbar vertebra and is of a mild degree. The thoracic vertebrae, from the first to the ninth, are extremely fragmentary, with the remains of 6 bodies and 7 arches being positively identifiable. Apart from its fragmentary nature, the bone itself of these vertebrae is in a very poor condition, being discoloured, rough and porous. All of this damage to the thoracic region appears to be caused by water erosion in the grave. The natural backwards curve of the thoracic region of the spine during life is very often reflected by its position in the grave, with this area usually being the lowest part of a supine burial. This means that if the soil becomes waterlogged at any point, the thoracic vertebrae are the ones most likely to suffer. There are several Schmorl's nodes present, with 5 nodes spread between the tenth thoracic and the first lumbar vertebrae, and the possible early stages of a node on the superior surface of the fourth lumbar vertebra. These are of a mild degree. It is probable that nodes would also have been visible on some of the other lower thoracic vertebrae had they survived to a better degree. This level of degeneration is no more than one would expect to find on the archaeological remains of an individual of this age.

The dentition of this individual is completely preserved. The only teeth which are missing are both lower third molars, which were lost ante-mortem, or before the death of the individual. This is demonstrated by the healed appearance and new bone growth in the location of the old sockets. The attrition, or wear, present on the teeth is quite marked, as is to be expected of an individual of this age, although the wear present in the molar region of the mandible does seem to be extreme, with three of the molars being represented by their roots only. This may be due to the loss of the tooth crowns through decay, leaving only the stubs of the roots as a biting surface. A pattern of slight wear is visible on the lingual side of the lower incisors and the labial side of the upper incisors, which indicates that the jaws occluded with a slight underbite. Three caries are present on the occlusal, or biting, surfaces of the maxillary teeth. Each of the third molars displays a moderate carie in the centre of the surface, and the right second molar displays a mild carie on the lingual, or tongue, edge of the surface. The third molars of the maxilla also display a slight root deformation, angling the crowns of the teeth 35-40 degrees towards the cheek. This does not appear to have caused any extra alveolar problems, although the alveolar margins of the whole dentition exhibit signs of reduction and infection, with the maxillae showing a more severe reaction than the mandible. Every single tooth in the maxillae exhibits slight decay of the roots on the labial/buccal surface, similar to the teeth of 1980. This feature is also apparent on the majority of the teeth of the mandible. Many of the teeth display calculus to either a mild or moderate degree, with the deposits being more severe on the lingual surfaces of the mandibular teeth than on the labial surfaces. This is to be expected when the position of the salivary glands is taken into account. It appears to be much more evenly spread on the maxillary teeth, with deposits equally distributed between both sides and the left and right ends of the dentition.

This is one of the few individuals to display unequivocal evidence of infection. This is located on the outer table of the posterior portion of the left parietal bone of the skull vault, and consists of what appears to be several infectious lesions in the final stages of healing, some of which run into the parietal-temporal suture. These lesions are irregularly shaped, and mostly shallow, approximately 1mm, with occasional deeper cavities of approximately 3mm present. The lesions are lined by what appears to be plaques of unreactive new bone, with only these deeper cavities showing any indications of porosity or reactivity, and even this appears to be in the advanced stages of healing. The reason for these lesions would appear to be that they are the almost completely healed bony reaction to a scalp infection which has passed to the skull. The unusual shape of the lesions, irregular 'tracks', almost like those you would expect from insect damage, are completely unlike anything caused by a specific bone infection or the damage caused to the skull by the treponemal diseases, such as syphilis or yaws. One explanation for this unusual shape could be what is known as 'pus-tracking', that is the pus from an initial foci creeping along the surface of the skull under the scalp, so spreading the infection in this shape. One other reason could be that what we see on the skull is the very last indications of a condition that has almost completely healed, with only the most

severe areas of damage remaining visible. Therefore, the larger areas of porous infected bone that would have given the lesions a more normal appearance are no longer present. As the healing of this condition is so far advanced, it can be concluded that it was in no way responsible for the death of this individual.

As far as morphological traits are concerned, it is possible to check for the majority of them in this case, due to the relative completeness of these remains. Therefore this gives the impression that this individual appears to have more traits present than others from this site, whereas it is simply that more are preserved in his case. These traits are a total of four lamdoid ossicles, with two being present on each side of the suture, the presence of precondylar tubercles on both sides, both atlas facets having a double form, both anterior calcaneal facets being absent, and a fused ostrigonum of the left talus.

It is not possible to discern the cause of death of this individual from the skeletal remains.

#### **Skeleton Nos. 1998 and 2327**

The next group of remains to be discussed are those that were poorly preserved. There are only two individuals in this group, nos. 1998 and 2327, 2327 being definitely female while the sexing of 1998 is slightly insecure, although probably also female. Both of these individuals were aged 25-35 years at death.

#### **Skeleton No. 1998**

As has already been stated, the remains present from this individual are of a much more limited nature, with all the bones present being eroded and damaged. The facial bones are completely absent, and the skull is very fragmentary, with the feet and the spine also being completely absent. Unfortunately, this means that we have absolutely no spinal pathology to discuss.

However, the dentition is almost completely preserved, with only 4 out of the possible 32 teeth being absent, two of which were lost ante-mortem and two of which were lost post-mortem. There appears to have been a fairly large degree of carious activity, with three of the teeth being reduced to the stubs of roots, the crowns having been completely destroyed. These are the first and third molars, and the second premolar of the right maxilla. The second molar has been lost ante-mortem, probably due to decay. If the individual had lived longer, the stubs of roots remaining in the jaw would probably have also been lost. The three other caries present are also on the right-hand side of the mouth, but on the mandible, being a mild carie on the lingual side of the third molar, a mild occlusal carie of the second molar and a moderate carie on the medial side of the second molar. All of these represent the most advanced group of caries present of any individual in the whole group of burials. There is a very slight enamel anomaly present in the form of a group of 4 very small pits in the enamel of the buccal side of the first premolar of the right maxilla. These are not carious and do not appear to have caused any problems. Calculus is present on many of the teeth to a mostly mild degree, with the heaviest deposits being, as expected, in the closest proximity to the salivary glands, which are the lingual surfaces of the lower incisors and the buccal surfaces of the upper molars. The root decay evident on the dentition of 1980 and 1989 is also present here in a mild to moderate degree on most of the surfaces of the roots. It is not possible to discern if periodontal disease was present due to the poor preservation of the alveolar margins. What is preserved does appear to be badly resorped, but the post-mortem damage present precludes a definite conclusion.

Generally, the surfaces of the bones are in very poor condition, with very little remaining intact. Damage to the anterior sides of both humeral shafts has resulted in the appearance of deep crevices in the bone which have perforated through to the medullary cavity. However, due to the complete lack of remodelling or bony reaction of any kind, it must be concluded that this damage occurred post-mortem, probably due to the erosive qualities of the burial environment.

Only one morphological trait was visible on these remains, being a complete supraorbital foramen. The remains were too badly preserved to be able to check for the majority of the traits which may have been present.

It is not possible to discern the cause of death of this individual from the skeletal remains.

#### **Skeleton No. 2327**

This skeleton is in a similar state to that of 1998, with the surfaces and joint ends of the majority of bones being eroded away. Very little of the skull remains, with the dentition being only partially represented.

Of the spine, only the 5 lumbar vertebrae are represented, and of these, only the arches remain relatively intact. The only changes which are visible are in the left articular processes and left-hand side of the arch of the fifth lumbar vertebra, which appear to be smaller than normal. This corresponds to similar changes in the first sacral vertebra. This damage appears to be very similar to that which appears in the spine of skeleton no. 1980, but unfortunately, the condition of the spine of 2327 is so extremely poor that it is not possible to draw any exact comparisons between the two individuals. It can only be assumed that if these changes are not due to post-mortem erosion, then they have been generated by the same forces that created the changes in skeleton no. 1980. It is thought that these changes were possibly caused by a congenital, or inherited, condition, causing the non-development of the smaller left-hand processes, or they could have been acquired during life due to the asymmetrical loading of the spine from an early age. One other degenerative change discernible is the presence of a small amount of eburnation, or polishing, on the superior left articular process of the second lumbar vertebra. This vertebra is also too damaged to allow an accurate analysis of the damage present. Eburnation is normally seen as part of the response to arthritic changes in a joint, and is usually accompanied by osteophytic lipping, and porosity of the bone. It is possible that the changes lower in the spine have placed extra stress on this articular process, possibly allowing the initiation of arthritic changes, and therefore causing the polishing. Any other changes which may have been present have possibly been obliterated by the post-mortem damage.

The dentition is poorly represented, with only 19 out of a possible 32 teeth being present. It is impossible to distinguish between ante-mortem and post-mortem tooth loss due to the extremely poor preservation of the both the mandible and maxillae. The possible evidence of healing and resorption of the sockets which may have been left exposed during life due to ante-mortem tooth loss have not been preserved. There is also one root present, probably from one of the lower incisors, but with the absence of the alveolar margin from this part of the mandible and the other lower incisors, it is impossible to positively identify it. The alveolar margins of both the mandible and maxillae are completely absent, making the detection of periodontal disease impossible. Three caries are present, a moderate carie on the medial face of the upper third left molar, a moderate carie on the distal face of the lower left second molar, and a mild carie on the labial side of the upper right canine. There is no calculus present on any of the teeth, but all the teeth present exhibit the root decay, varying from a mild to a severe degree on all surfaces of the root, which appears to be a feature of this site. In this case, the decay appears to always be worse on the labial/buccal face of the root, possibly due to a more acidic environment in this area of the mouth. It is possible that any calculus which may have been present has not been preserved post-mortem.

No positive evidence of periostitis or osteitis is present, but the poor preservation of the bone surface makes the survival of any such evidence unlikely.

There were two morphological traits discernable, being the double form of both anterior calcaneal facets, and the presence of both os trigonums fused to the tali.

It is not possible to discern the cause of death of this individual from the skeletal remains.

**Skeleton Nos. 2316, 2317, 2320 and 2322**

The final group of individuals to be discussed are the least well preserved ones. The state of preservation of these individuals is extremely poor, with some of them being represented by nothing more than a few fragments of the shafts of long bones. Only one out of the four individuals represented here has any teeth present, and even then only two which it is possible to analyse. This extremely poor condition of the bones has meant that it is not possible to assign a sex to any of them, and only possible to assign an age to one individual based solely on those two remaining teeth. The other three have been assigned an adult age status due to the size of the remaining fragments of bone, and the fully fused appearance of the epiphyses at any joint ends which may be present, which indicate that they had attained their full expected growth potential.

**Skeleton No. 2316**

There are no fragments of the vertebrae present in the skeletal remains.

The remains of only eleven teeth were present out of a possible 32, with only two of those being complete, the other nine being represented by their roots only, having no enamel surviving. It is possible to place the two complete teeth in the dentition, those being the lower left second and third molars, whereas none of the roots had enough characteristics remaining to enable them to be placed in the dentition. The two complete teeth had no carious lesions or calculus, but they did exhibit a moderate to severe amount of root decay, a feature which they shared in common with the root fragments. The decay appears to have been slightly milder on the lingual and distal faces of the roots. To see this extreme amount of decay in such a young adult is very unusual. It may be possible that a congenital, or inherited, weakness of the enamel has predisposed the teeth to an unusually rapid rate of decay, but it is in no way possible to verify this. Although, if this had been the case, it would be expected that the two surviving crowns would also be in a similarly advanced state of decay. The alveolar margin of the mandible, adjacent to the surviving molar sockets, exhibits extreme resorption which would have exposed half of the roots of the molars while in the sockets. The alveolar margin for the rest of the dentition is not present, but the degree of resorption which is present would appear to indicate severe periodontal disease, which would account for the extreme decay present on the roots.

No pathological changes or morphological traits were discernible on the skeletal remains.

**Skeleton No. 2317**

There are no fragments of the vertebrae or the dentition present in the skeletal remains.

The bone which is present consists of the shafts of both femora, fragments from the shafts of both tibiae, the shaft of the right humerus, part of the shaft of the right radius, and a fragment from the skull and the sacrum. The surface of the bone is too badly preserved to allow periostitis or osteitis to be discerned, and there is no evidence of trauma visible.

It was not possible to check for the presence of any of the morphological traits due to the extremely poor preservation of the bone.

**Skeleton No. 2320**

There are no fragments of the vertebrae or the dentition present in the skeletal remains.

The bone which is present consists of both humeral shafts, the right radial and ulnar shafts, fragments of the acetabulae of both pelves, fragments of both femora, the proximal ends of both tibiae and fragments of both fibulae. The surface of the bone is too badly preserved to allow periostitis or osteitis to be discerned, and there is no evidence of trauma visible.

It was not possible to check for the presence of any of the morphological traits due to the extremely poor preservation of the remains.

#### **Skeleton No. 2322**

There are no fragments of the vertebrae or the dentition present in the skeletal remains.

The bone which is present consists of the shafts of both femora, the shafts of both tibiae, the distal end of the left tibia, fragments of the left fibula, and fragments from both the left and right tarsals, or ankle bones. The surface of the bone is mostly too badly preserved to allow periostitis or osteitis to be discerned, although there is some damage to the perineal groove of the left distal fibula which may be an indication of infection. Unfortunately, the preservation is too poor to be certain if this is evidence of infection or post-mortem erosion. There is no evidence of trauma visible.

It was not possible to check for the presence of any of the morphological traits due to the extremely poor preservation of the remains.

#### **Bone Scatter No. 2383**

This consisted of a scatter of human bone which was discovered to the north of skeleton no. 1980. This scatter is composed of fragments of miscellaneous ribs, the distal end of a right tibia and fibula, a fragment of left scapula, two proximal hand phalanges, a left fourth metatarsal, and a fragment of sternum. When these are compared to the bones present as the remains of skeleton no. 1980, it can be seen that it is fully possible that these fragments are from this skeleton. Inclusion of this scatter with the bones recorded as being definitely from the grave cut of 1980 would not result in the duplication of any of the elements, and the bones are all of a similar appearance and condition. However, it is not possible to prove this in any way, therefore these few fragments of human bone must remain separate from those of 1980.

There is no evidence of pathological change, trauma or any morphological traits present on these bones.

#### **General Discussion and Conclusion**

To conclude, these nine burials represent a tiny section of one of the societies that have lived in this area in the first millennium A.D., suffering the same diseases, injuries and debilitating conditions that we suffer today. The discomfort of toothache, back pain and other infections is not new to humanity, but they must have caused so much more distress without the benefits of modern medicine to treat them.

It is not possible to attempt any kind of analysis of any statistical value due to the small number of individuals represented here, and the paucity of information that we are able to glean from some of them. However, we can discuss the information in a more informal manner. Of the total of nine individuals represented here, three are definitely male, one is definitely female, another is possibly female, and the remaining four are of an unknown sex. As for their age at death, the oldest individual is 35-40 years, the next is circa 35 years, one is 27-35 years, and the final three are 25-35 years. It was not possible to assign an age at death to the other three remaining individuals for the reasons stated above. With almost 40% of this population without a specific sex or age assigned to them, it is not useful to compare these sex or age ratios, as it is not possible to gain any meaningful conclusions from them. For the purpose of these discussions it will be assumed that skeleton no. 1998, which has been assigned a possibly female sex, is definitely female.

When the various states of preservation of the individuals are compared to their sex, a certain pattern seems to become apparent. It can be seen that the three best preserved individuals are the three males, but this is merely a coincidence of their sex and burial position. It is definitely not something which

could have been planned. The same can be said for the fact that the two poorly preserved individuals are female.

It can also be seen that the range of ages represented here is fairly narrow, being only 25-40 years. One could normally expect to see a much wider age range represented in a burial group, but again we have the small size of the sample limiting us in this respect. Also, three out of nine, or 30%, of the individuals have no age assigned to them, making the total sample size in reality only six individuals. Usually, an examination of the male:female age at death ratio would be made in an analysis such as this. It can be seen that the two females represent the youngest section of the population, together with the indeterminate individual 2316. If the sample numbered over fifty or sixty individuals, and this pattern of age at death:sex ratio still held true, then it would be possible to draw some kind of constructive conclusions from this, concerning the societies attitude towards women, and how this may affect the life expectancy of the women, creating a consistently younger age at death than that expected for the male members of the same society. However, this is simply not possible with the tiny sample that is present here.

There is a general paucity of pathologies present in this sample. This is probably due in a large part to the extremely bad preservation of the majority of the individuals present. Only the three best preserved individuals showed any possible indications of infection, and only one of them exhibited any unequivocal indications of infection, being no. 1989, with the healed skull infection.

There can be little doubt that this is only a proportion of the burials which are present in the vicinity of Plot 145, and if the excavation had encompassed a larger number of these burials, a much more complete, and therefore accurate, picture of the demography of the society from which they have come would become apparent.

### Bibliography

Brothwell, D.R., 1981, *Digging Up Bones*, New York, Cornell University Press.

Dobney, D., and Brothwell, D., 1988, A scanning electron microscope study of archaeological dental calculus, pp. 371-85 in S.L.Olsen (ed.) *Scanning electron microscopy in archaeology*. British Archaeological Reports International Series 452, Oxford.

Henderson, J., 1987, Factors determining the state of preservation of human remains. In: A. Boddington, A.N. Garland and R.C. Janaway, (eds.) *Death, Decay and Reconstruction*. pp.43-54. Manchester, Manchester University Press.

Ortner, D., J., and Putschar W., G., J., 1981, *Identification of Pathological Conditions in Human Skeletal Remains*, Smithsonian Contributions to Anthropology Number 28, Washington D.C., Smithsonian Institution Press.

Roberts, C.A., and Manchester, K., 1995, *The Archaeology of Disease*, New York, Cornell University Press.

White, T.D., 1991, *Human Osteology*, San Diego, Academic Press, Inc.

# **APPENDIX 10**

**Anglo-Saxon Artefacts**

**Dr. K. Leahy**

**Kirkby la Thorpe Anglo-Saxon cemetery  
Report on the finds and cemetery context**

By Kevin Leahy, BA FSA AMA MIFA for Network Archaeology

**Context (1982) of [1981]**

**1. Iron knife/ seax**

Description: Blade from an iron knife or seax. Back of blade straight but angled near point, Cutting edge also straight but curving up to the point. There appears to be a 4 mm wide fuller down one or both sides of the blade [check by conservation cleaning].

Dimensions: Length 285 mm, width of blade 27 mm

Classification: Evison Type 5

Dating: 7th century

**Context (1982) of [1981]**

**1. Iron knife blade**

Description: Iron knife blade, with a curving back and straight cutting edge.

Dimensions: Length 165 mm, width of blade 15 mm

Classification: Evison Type 4

Dating: 7th century

**Context (2301) overlying [1990]**

**1. Fragment of an iron knife blade.**

Description: Iron knife blade, with a curving back and straight cutting edge.

Dimensions: Length 81 mm (truncated), width of blade 10 mm

Classification: Evison Type 4

Dating: 7th century

**Discussion**

All three of the knives from this cemetery can be dated, on typological grounds, to the seventh century. The dating of Anglo-Saxon knives is based on the work of Böhner in the Trier region of Germany (Böhner 1958, 215-25 Taf. 60). and, although based on continental finds, this has been found applicable to English material. Böhner saw blade shape as the chronological indicator and, under his classification as interpreted by Evison in her study of the Buckland, Dover cemetery (Evison 1989, 145), all three of the Kirkby la Thorpe knives would be dated to the seventh century. Härke saw blade size as the most important factor in dating knives with the longer blades being later (Härke 1987, 113-5). Under this classification the large knife from context 1981 would, again, be seventh century.

It may be appropriate to use the term 'seax' to describe the blade from context 1981. A seax is a heavy, single edged knife or short sword and the Kirkby la Thorpe find is what Gale (1989, 72) describes as a 'common seax'. These have blade lengths of between 80 mm and 360 mm but a length of around 240 mm is most common. With a length of 285 mm this blade falls within this range. The presence of narrow fullers down the blade would also be in accord with it being described as a seax as would its position in the grave, across the hips of the skeleton. Later, sculptural representations of seaxes show them being worn horizontally in this position (Gale, 1989, fig. 6.15).

**Context (2326) of [2325]****Decorated bone object.**

**Description:** This object appears to have been burnt before burial leaving it distorted and incomplete and making reconstruction and interpretation difficult. It now has a 'U' shaped section although it was probably originally oval. The cancellous interior of the bone can be seen inside the object. Decoration consists of two sharply cut circumferential lines between which are two ringed-dots. These only survive on one side of the object.

**Dimensions:** Surviving length 62 mm, section oval, 18 mm x 12 mm.

**Classification:**

**Dating:**

**Discussion**

The interpretation of this object presents some difficulties, it may have been a knife or comb handle but neither identification is convincing. Bone knife handles are rare in the early Anglo-Saxon period, the most common material used being horn. Comparable bone objects have been found with cremations at Spong Hill, Norfolk, interpreted as a 'possible knife handle' (Hills et al 1987, 76 fig 118), and at Cleatham, Lincolnshire (Leahy, forth coming) where rust staining confirmed this identification. Handled combs appear in the seventh century and were used through the early Medieval period. These were, however, made from antler, not bone, and were fabricated from a solid tine (MacGregor 1985, 91). A further possible interpretation of this object is as a 'Hercules club pendant' (Meaney 1981, 162-5). These are a continental form of amulet but are known in England, occurring with fifth-early sixth century burials. The burnt condition in which the Kirkby la Thorpe object was deposited is unusual, suggesting that it was some thing out of the ordinary and may have been an amulet. Hercules clubs, however, have a tapering, round or square section with a perforation at the small end. While distortion makes it difficult to reconstruct the form of this object it seems unlikely that it was tapered.

The presence of animal bones in context 2325 is of some interest. Animal and bird bones are frequently found with Anglo-Saxon burials and occurring with both inhumations and cremations (Nicholson 1998, 236-40). The remains are usually those of domestic animals and birds some deposits probably representing food offerings. In other cases the bones may have been accidentally incorporated into the fill of the grave. These explanations are inappropriate for the horse vertebrae and dog jaws found at Kirkby la Thorpe and a ritual deposition seems probable. Both animals figure in Anglo-Saxon ritual and symbolism (Meaney 1981 131-2; 134-6) and context 2325 also contained the bone object which, even if not interpreted as a Hercules club, had been treated in an unusual way, having been burnt. The practice of this rite is uncertain although at Castledyke it was clear that it was being used in the late seventh/early eighth century (Nicholson, *ibid.*)

**Context (1997) of [1996]****Bone object, gaming piece?**

**Description:** Bun-shaped bone object, hollow based with a possible central perforation.

**Dimensions:** Diameter 12.3 mm, height 7.1 mm

**Classification:**

**Dating:**

**Discussion**

Early Anglo-Saxon gaming own pieces are well known but do not resemble this object being plano-convex and much flatter. A onion shaped gaming piece was found at Goltho but this was dated to the late tenth century (Beresford 1987, 190-3).

**Context (2326) of [2325]**

Description: Five (four) fragments of bone, unworked  
 Dimensions: not recorded  
 Classification: ?  
 Dating: ?

**Integrated Discussion**

The excavations at produced little in the way of finds, the usual brooches, clasps and beads being absent. This, in itself, is significant as it appears that Kirkby la Thorpe is an example of a 'Final Phase' cemetery. These cemeteries date from the seventh century and show the influence of Christianity. A number of points have been defined that allows Final Phase cemeteries to be recognised (Boddington 1990, 181). These are:

1. New cemeteries established under Christian influence
2. These are close to the settlements as opposed to their pagan predecessors, which tended to be away from settlement sites.
3. The burials are all by inhumation, cremation is not present.
4. The graves are orientated west-east.
5. Some graves are in, or under, barrows.
6. A high proportion of graves contain no grave goods, or just a knife.
7. Finds from the graves are predominantly utilitarian costume fittings or small personal tokens. Weapons are rare.
8. Some grave goods have Christian significance, most notably the presence of the cross.

To these may be added a further point observed by Hyslop (1963, 193); the graves are often in regular groups or rows.

The evidence from Kirkby la Thorpe does seem to fit in with this model;

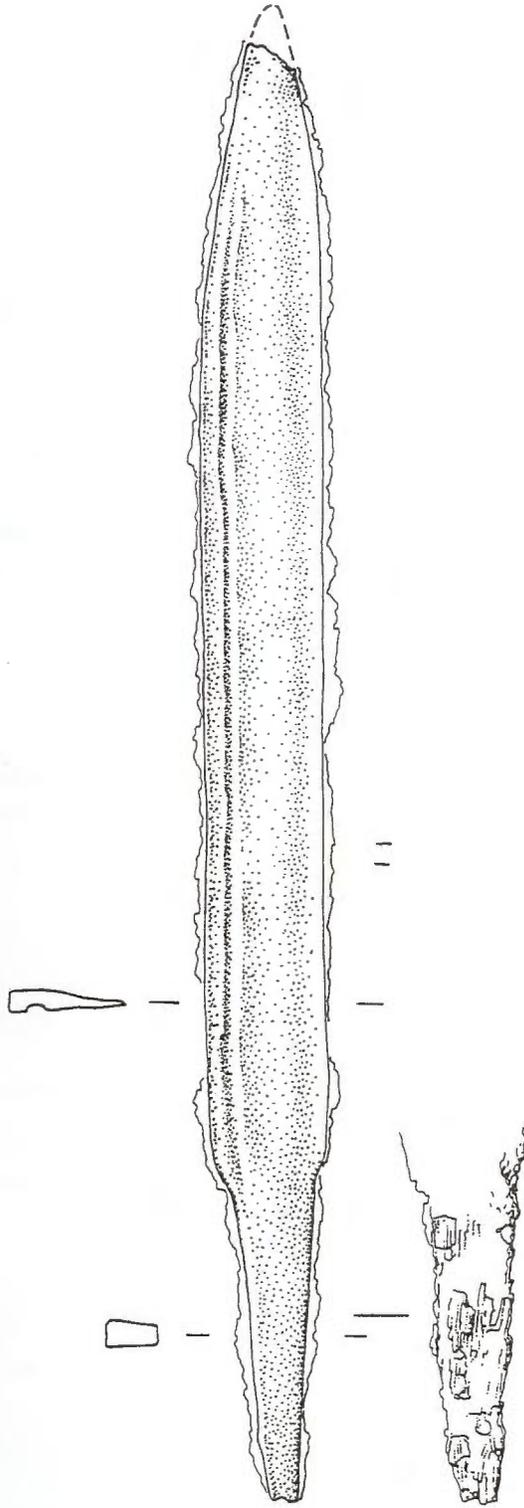
1. There does not appear to have been any earlier Anglo-Saxon burials on the site, the cemetery started anew.
2. The structures found near to the cemetery could be interpreted as the ends of Anglo-Saxon buildings. [This needs to be checked, could I have a look at the sections of the ditches?]
3. All burials were by inhumation and, although the bone object in context 2325 had been burnt it was found with an inhumation.
4. The graves were all aligned west-east.
5. While the Kirkby la Thorpe burials were associated with barrows, it appears that they post dated them and we are looking, at not Anglo-Saxon barrows but of the re-use of existing monuments, a practice which has been recognised as being systematic and wide spread (Williams 1998, 90-108).
6. Of the nine graves from Kirkby la Thorpe only three contained grave goods.
7. With the exception of the seax none of the finds could be seen as being significant, they are 'small personal tokens'. The seax is seen as being a weapon characteristic of these late graves.
8. There is, however, nothing that appears Christian from the Kirkby La Thorpe cemetery.

While not in rows, the graves found do appear to be well ordered compared to the chaos of the fifth and sixth century cemeteries. Where datable the finds can be assigned to the seventh century. The common and highly characteristic finds of the sixth century are absent.

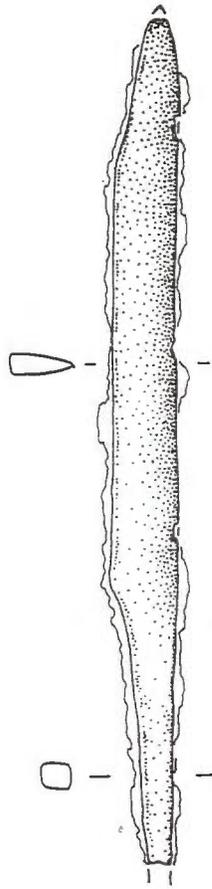
This small group of graves has an importance far greater than might be inferred from the poor grave goods, indeed the lack of grave goods is, as we have seen, a significant feature of the site. In view of the dating of the finds and the typical 'Final Phase' features of the cemetery layout it is felt unlikely that any finds have been lost to treasure hunters. Until the excavation of the Roxby 2 cemetery (Leahy and William, forthcoming) 'Final Phase' cemeteries were not known in Lincolnshire and this group of burials makes a welcome addition to our knowledge. It is made all the more significant by the presence, only 3 km to the west, of the great Sleaford cemetery which appears to have passed out of use at the end of the sixth century (Thomas 1887 383-406) to be replaced by small cemeteries like Kirkby la Thorpe. This group of graves makes an important contribution to our knowledge of the Anglo-Saxon period and its publication is urged.

## Bibliography

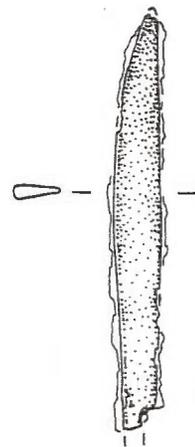
- Bereford G 1987 *Goltho, the development of and early medieval manor, c 850-1150*, English Heritage Archaeological Report No 4, London.
- Boddington, A. 1990 Models of burial, settlement and worship: the Final Phase reviewed, in Southworth, E. ed. *Anglo-Saxon cemeteries: a reappraisal, Proceedings of a conference held at Liverpool Museum 1986*, Alan Sutton, Stroud.
- Böhner, K *Die fränkischen Altertümer des Trierer Landes*, Germanische Denkmäler der Völkerwanderungszeit ser. B. 1, 1-2, Berlin.
- Evison, V I, 1987. *The Buckland Anglo-Saxon cemetery*, Hist Build Monuments Comm Engl. Archaeol Rep 3, London
- Gale, D 1989, The seax, in Chadwick Hawkes, S ed *Weapons and warfare in Anglo-Saxon England*, Oxford, Oxford University Committee for Archaeology, Monograph No 21,
- Härke, H 1989 Knives in early Saxon burials, blade length and age at death. *Medieval Archaeol* 33.
- Hills C; Penn K and Rickett R 1987 The Anglo-Saxon cremation cemetery at Spong Hill North Elmham, Part IV, Catalogue of cremations, East Anglian Archaeological Reports 34, Norfolk Archaeological Unit, Dereham.
- Hyslop, M. 1963 Two Anglo-Saxon cemeteries at Chamberlain's Barn, Leighton Buzzard, Bedfordshire, *Archaeol J* 120, 160-200.
- MacGregor, A 1985, *Bone, antler, ivory and horn, the technology of skeletal materials since the Roman period*, London.
- Meaney, 1981 *A Anglo-Saxon amulets and curing stones* Brit Archaeol rep Brit Series 96, Oxford.
- Nicholson, R 1998, Animal bone from graves in Drinkall, G and Foreman, M. 1998, *The Anglo-Saxon cemetery at Castledyke South, Barton on Humber*, Sheffield Excavation Reports, 6.
- Thomas, G W T 1887 On excavations in an Anglo-Saxon cemetery at Sleaford, in Lincolnshire, *Archaeologia* L 383-406.
- Williams, H 1998 Monuments and the past in early Anglo-Saxon England, *World Archaeology, The past in the past*, vol. 30 (1) 90-108, Routledge..



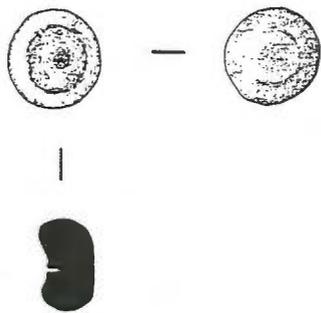
10.1 Iron knife/seax blade from grave [1981]



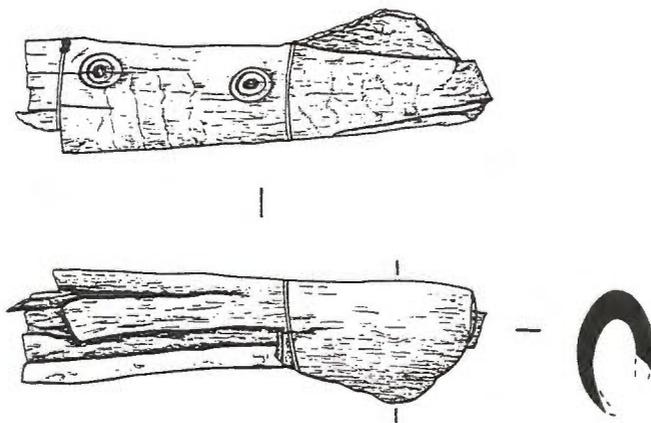
10.2 Iron knife blade from grave [1981]



10.3 Unstratified iron knife blade (2301)



10.4 Worked bone from grave [1996]



10.5 Worked bone from grave [2325]

Anglo-Saxon Worked Bone Illustrations, 10.4 and 10.5 [scale 1:1]

# **APPENDIX 11**

**Registered and Bulk Finds  
J. Cowgill**

**THE REGISTERED AND BULK FINDS FROM THE HATTON TO SILK  
WILLOUGHBY  
GAS PIPELINE (HWP 98)**

Jane Cowgill©  
January 1999

***Background***

A number of sites were identified as a result of fieldwalking, field reconnaissance, geophysical survey and a watching brief. Many of these sites were artefact scatters or geophysical anomalies which, on further investigation, did not prove to be of archaeological significance.

***Finds Introduction.***

A total of 8.85 kg of slag and associated materials (828 pieces) and 2.38 kg of plaster (39 pieces) were submitted for recording (Table 1). The slag was washed with a toothbrush, dried and identified solely on morphological grounds by visual examination, sometimes with the aid of a x10 binocular microscope. The plaster was examined in a similar fashion with particular attention being paid to the composition of the fabrics. They were recorded on *pro forma* recording sheets and the information entered into a Microsoft Access database using the following encoded fields: Construction section; Plot; Context; Material; Type; Count; Weight; Comments. A note of probable fuel type has been recorded when fragments or imprints were incorporated within the slag. The bulk finds catalogue is Appendix 2.

**Table 1.** Summary of the bulk finds recovered by Construction Section and Plot.

CS	Plot	Material	Count	Weight (g)
4	20	CLAY	1	55
4	20	FIRE CLAY	38	78
4	20	PLASTER	39	2,378
4	20	SLAG	786	8,669
4	20	STONE	2	17
19	144	SLAG	1	32
19	145	SLAG	2	73
19	146	SLAG	1	1

A total of 72 finds have been registered and catalogued using the object names in the City and County Museum (Lincoln) Thesaurus (Table 2). The copper alloy and iron objects were identified with the aid of x-radiographs (HWP98. 1 - 5. 1198) and the allotted registration numbers of the relevant objects were marked onto these plates. The assemblage is composed of one ceramic object, 22 copper alloy objects, 10 of glass, 22 iron, 8 lead and 10 stone objects. The condition of the objects is variable although they all appear relatively stable. The registered finds catalogue forms Appendix 1.

The finds and all relevant bulk finds from the environmental samples have been catalogued and the results incorporated into Tables 1 and 2. The relevant sample numbers are given within the comments field of the finds catalogues.

CS	Plot	Material	Object	Count
3	15	GLASS	VESSEL	1
4	20	GLASS	VESSEL	1
4	20	IRON	UNIDENTIFIED	8
4	20	IRON	HOOK	1
4	20	IRON	NAIL	2
4	20	STONE	UNIDENTIFIED	2
4	20	STONE	QUERN	2
8	61	IRON	UNIDENTIFIED	2
9	70	STONE	MOULDING	1
9	71	COPPER	COIN	1
9	72	GLASS	BOTTLE	1
9	79	GLASS	BOTTLE	1
11	88	COPPER ALLOY	BROOCH	1
11	88	IRON	NAIL	1
11	88	STONE	UNIDENTIFIED	1
12	91	LEAD	WEIGHT	1
17	125	COPPER ALLOY	UNIDENTIFIED	1
17	125	COPPER ALLOY	BUCKLE	1
17	131	IRON	BINDING	1
17	132	COPPER ALLOY	UNIDENTIFIED	5
17	132	LEAD	UNIDENTIFIED	2
17	132	LEAD	WASTE	2
17	133	COPPER ALLOY	STAPLE	1
18	135	IRON	UNIDENTIFIED	1
18	139	CERAMIC	SPINDLE WHORL	1
18	139	GLASS	UNIDENTIFIED	1
19	144	COPPER ALLOY	DISC	1
19	145	COPPER ALLOY	UNIDENTIFIED	4
19	145	COPPER ALLOY	COIN	4
19	145	COPPER ALLOY	MOUNT	1
19	145	COPPER ALLOY	STUD	1
19	145	IRON	NAIL	4
19	145	IRON	RING	1
19	145	LEAD	WASTE	3
19	145	STONE	QUERN	2
19	146	COPPER ALLOY	RING	1
19	146	STONE	UNIDENTIFIED	1
20	147	GLASS	VESSEL	1
20	149	GLASS	VESSEL	1

20	150	GLASS	WINDOW	1
20	150	STONE	UNIDENTIFIED	1
21	154	GLASS	VESSEL	2

**Table 2.** Summary of the registered finds recovered by Construction Section and Plot.

The finds are discussed below on a site by site basis; the site description is taken from information supplied by Network Archaeology Ltd. A high percentage of the metal-detected finds and those from unstratified deposits are post medieval or modern in date and therefore the majority will only be briefly mentioned if they are in the vicinity of an archaeological site.

### *The Finds by Site*

#### **Site 3, CS 02, Plot 08: Medieval field system/ ditch.**

A single fragment of glass from a modern light-green ?bottle was found in this area during fieldwalking (RF35).

#### **Site 6, CS 04, Plot 20: Late Iron Age and Romano-British settlement.**

All the stratified and unstratified registered finds from this late Iron Age/ early Romano-British site are made from stone or iron except for a single fragment of vessel glass. Most of the stone finds are quern fragments, whilst the majority of iron is unidentifiable. It is suspected that the use of a dishonest metal detectorist at the site accounts for this biased assemblage and the lack of any copper-alloy finds. (A brooch and a number of other items from the site were reputedly seen being sold at a local public house.)

#### **THE PLASTER**

The 2378 grammes of plaster recorded in the catalogue represents about a quarter of the material found at the site (Table 3).

**Table 3.** The quantity of plaster kept and discarded from the site.

Feature	Context	Plaster recorded	Plaster discarded
Pit 4115	4,116	1433g	4080g
Pit 4115	Recut 4214	441g	2025g
Pit 4166	Upper fill 4167	441g	330g
Pit 4166	Lower fill 4204	63g	-

All the plaster comes from two neighbouring pits in the southern part of the site. The pit fills consisted exclusively of plaster and there was no associated dating evidence for their deposition. The six surviving pieces of plaster from context 4116 are all made from a consistent dense sandy fabric with occasional stones but vary in thickness, when two opposing sides are present, from 15 to 30mm. Two pieces were formed against an irregular wooden shuttering and had traces of white wash on the shuttering side; a third piece with a smooth surface had also been white washed.

The ten surviving pieces from recut 4214 have very variable fabrics ranging from very fine to coarse and there are also distinct differences in the colour of them. A fine white plaster, 8mm thick, has a white painted outer surface and is backed by a layer at least 11mm thick of coarser plaster. A second piece of fine white plaster, probably from the same room, is 9mm thick. Another piece is made from a coarse stoney sandy fabric and has reed or fine wattle imprints on one side while two others in a fawn sandy fabric have large wattle or pole imprints on the back. It is evident that this group comes from a range of rooms or even buildings.

Two types of plaster are represented by the twenty-two small pieces from the upper fill of pit 4166. The majority (fourteen pieces) are a fine pale sandy fabric *c.* 7 – 10mm thick on a coarser sandier backing. All these pieces have been painted white with the edge of a red band present on two and a black band on one. A single piece has red and grey splashes over a white base. One plain white piece was possibly burnished to create a 'gloss' finish. The other eight pieces are made from a light-weight plaster achieved by the inclusion of organic temper. Three are 7 – 15mm thick with a coarser backing, the remainder are up to 30mm thick. All eight may have been painted.

It is evident that this plaster was not from any of the buildings uncovered during the excavation. The range of fabrics suggests that their source was likely to be a range of buildings, one of which was fairly high status because of the painted plaster. Romano-British tiles and a box-flue tile were found in the topsoil right across the site suggesting that a high status building, possibly a villa, existed in the vicinity perhaps after this site was abandoned. Why these two pits were dug and filled with a variety of plasters, and when, remains a dilemma.

#### THE IRON-SMITHING SLAGS AND ASSOCIATED DEBRIS

All of the 8853g of slag and associated debris were generated by iron smithing, the fabrication of bar iron into objects and the recycling of iron. The majority of this material (6900g) comes from pit 4286 located on the southern limit of excavation, the rest of the slag was found in a variety of features from across the main site with just three pieces from the northern area which is earlier in date. The assemblage from the main site is consistent in character and could all have been produced by a single smith working near to the excavated area.

**Table 4.** The categories of iron-smithing debris by weight and count.

TYPE	QUANTITY	WEIGHT(g)
Cinder	63	200
Fired clay	35	48
Hammerscale	*	*
Hearth Bottoms	32	3586
Unspecified slag	470#	1262
Smithing slag lumps	101	1537
Vitrified hearth lining	97	267

\* Present but not recorded

# High count due to the number of small pieces from sample 26.

The plano-convex hearth bottoms are very dense and compact but a number have large frothy blobs of cindery fuel ash slag attached to their bases or tops. A feature of these hearth bottoms is the very small size and consequently weight of many of them, the largest weighs only 706g. Hearth bottoms weighing over a kilogramme are common on Romano-British sites. Many of both the hearth bottoms and smithing slag lumps have rust coloured surfaces, or are partially encrusted with iron and some are actively corroding. A few pieces have started to crack. These features indicate that the slags probably have a high iron content, possibly some in the form of small waste pieces of iron that have become separated from the iron being worked. The greatest loss of iron occurs when smithing at high temperatures, particularly the white heat (1350°C) needed for welding when some of the iron can 'burn' or melt in the hearth. If the smith was doing a lot of welding it may help to explain the small size of the hearth bottoms. It is important to keep the hearth as clean as possible during these operations and in modern practice all slag would be removed from the hearth before making a weld, therefore small hearth bottoms may be more common. Frequent welding may be an indication that some of the iron used at the smithy was 'old iron' being recycled. The broken pieces and small items would be welded together to make a bar before that in turn was converted into a new object.

Plate and spheroidal hammerscale were also recovered from Pit 4286. (Sample 26 weighed 13kg and produced a 2.2kg residue of which 746g was slag, 6g hammerscale and approximately 1280g of charcoal.) The spheroidal scale, which is thought to be produced during welding, forms quite a high percentage of the total although plate scale is always the more common of the two. This again reinforces the suggestion that welding may have been a significant part of the smiths work. The paucity of cinder, a silicate rich slag, and the density of the other smithing slags suggests that the smith was not fluxing the iron with sand before welding. Some smiths use this technique to remove the oxidised iron surfaces of the iron to ensure a clean weld.

Another reason for the small size of the hearth bottoms and their density, could just, possibly be the date of the site. Although not a reliable date indicator (the Late Iron Age hearth bottoms from Sleaford were large) the hearth bottoms from a probable Late Iron Age – 1<sup>st</sup> century site at Ledstone, Yorkshire also had an assemblage of unusually small and dense hearth bottoms (Cowgill 1997).

Most of the pieces of vitrified hearth lining are probably tuyere fragments (the cylinder or block of clay that protected the bellows nozzle from the heat of the fire). Only one piece has the remains of the tuyere hole and this suggests that it was about 20 – 25mm in diameter which falls well into the expected range (Tylecote 1986, 142; Cowgill, McDonnell and Mills 1997, 15). The colour range - orange to a mauve/ purple - for these pieces is also that which would be expected.

The sole fuel used for the smithing was charcoal and large quantities are incorporated within or adhering to the slags. Some of these pieces are large (30 x 45 x 10mm for example) and when identifiable by the author appear to be oak. (A wood anatomist would be able to identify the majority to species.) There was also a large amount of charcoal in pit 4286, presumably also hearth debris, and this again includes some large pieces but there are also some smaller twigs. Charcoal is the expected fuel at this date although occasionally coal was used.

The deposit in pit 4286 appears to consist of the debris from a smithy and its hearth, which suggests that this pit was probably very close to where the smithing was undertaken. Romano-British and medieval slags are very different to those produced by smiths today (on account of the type of iron, fuel and hearth used) so it is difficult to estimate the amount of iron working a slag assemblage represents. This group is, however, likely to be the results of more than a short visit to the settlement by an itinerant smith and on a rough basis of one hearth bottom a day (Cowgill, McDonnell and Mills 1997) represents an absolute minimum of 24 days work. A built smithy structure would therefore be anticipated within which this work would have been undertaken

All the smithing slag from the southern and main area of excavation was probably produced at the proposed smithy. The only group that may be different is that from the northern area, however, there are only three pieces from there and differences in soil type etc. can affect the appearance of the slags. The two hearth bottoms are again small and compact but they have no charcoal inclusions or imprints which is such a major feature of the others. The piece of smithing slag lump is exceptionally large and dense and has an irregular raked appearance – often a characteristic feature of Iron Age slags. With only three pieces, however, it is not possible to confirm that these form a different and distinct group.

## DISCUSSION

The majority of the finds that should have been registered were probably stolen and the few pieces that exist in the archive can add nothing to any discussion concerning the date, status or interpretation of the site. This information will have to be gleaned from other forms of evidence. The slag strongly suggests that there was a smithy very close to the site in which the smith just possibly used recycled old iron as a part of their stock of raw materials. The plaster from the two pits is probably later in date and perhaps complements the box-flue tile and other tiles found unstratified on the site. These would suggest the presence of a building, perhaps of villa status, in proximity to the excavated area.

**CS 08, Plot 61: Evaluation Trench.**

Three large iron finds were recovered from context 004, all of which are modern in date. These include a cast piece of farm machinery (RF26), a very large nail or tool (RF27) and a bolt that has been discarded (not registered).

**CS 09, Plots 70, 71, 72 and 79**

The four registered finds from this Construction Section are all post medieval in date with the possible exception of the architectural stone moulding (RF5) which cannot be dated by this author. A 1899 Victorian penny was found by a metal detectorist in Plot 7. A sherd from a modern glass beer or wine bottle was found in robber trench fill 919 (Plot 72; RF37) and the degraded fragments of a 17<sup>th</sup> – 18<sup>th</sup> century brown glass bottle were recovered from the Ridge and Furrow headland in Plot 79 (RF38).

**Site 9, CS 11, Plot 88: Romano-British rectangular enclosure and field boundaries.**

An iron nail shank (RF28) was the sole registered find from the enclosure ditch (re-cut 1151). The remains of a copper alloy brooch from the curving ditch is probably a Colchester derivative type and therefore can be dated to the 1<sup>st</sup> century AD. It is in a poor condition and details of its form and type of decoration are not clear on the x-radiograph.

**CS 17, Plot 125; Area of reputed Bronze Age burial.**

A short section of a copper alloy blade from an unstratified context may be the remains of a Bronze Age sword (RF48); the shape of the section through the object is probably consistent with this identification. The surviving length of the mid-blade section is 59mm with a width of 23mm although the edges are bent and damaged. The casting of the object was (in terms of modern standards) poor giving a pock-marked appearance on the x-radiograph although this is not visible on the objects surface. The marks are probably due to the presence of small air bubbles that became trapped when the molten metal was poured into the mould.

A buckle pin (RF47) was found in an undated linear feature (1708) in the same plot. It is a large pin but of a simple plain type made from copper-alloy wire and is therefore undatable.

**CS 17, Plot 131: Area of reputed Anglo-Saxon cemetery.**

A piece of roughly triangular iron binding, probably post-medieval in date, was found in an unstratified context (RF29).

**Site 14, CS 17, Plot 132: Ridge and Furrow field system, Iron Age features and unstratified Romano-British pottery.**

The majority of the metal-detected finds are post medieval or modern in date. The only find of interest is a cast copper-alloy pinhead (RF51) which is in a diamond shape with a simple stamped motif on one side. Very elaborate hairstyles were often fashionable for women and girls during the Roman Empire and it is very likely that this pin was once used to secure and decorate the hair of a woman.

**Site 17, CS 18, Plot 139: Iron Age ditches, gullies and pits.**

The two finds from pit 1884 comprise a very small fragment of brown glass that is probably intrusive because it is modern in date. The other find is a half of an Iron Age fired clay spindle whorl (RF11). The whorl is globular in shape with a maximum diameter of 32mm and was originally decorated very simply with four dimples in its sides. The central perforation for the spindle has a diameter of 9mm.

**Site 18, CS 19, Plot 145: Bronze Age and Iron Age features and nine Anglo-Saxon burials.**

The majority of the finds from this site are unstratified and were found by metal detecting. These do, however, include seven probable copper-alloy Romano-British objects including three 4<sup>th</sup> century coins (RF56, RF57 and RF62). There is also a domed stud with traces of an iron shank (RF61), a possible stylus (RF58) but the section of the shaft is square not circular as is normal, a mount with simple linear decoration (RF60) and a decorative 'duck' shaped terminal or fitting (RF59). Although no Romano-British features were excavated in this plot this assemblage indicates that there was some activity in this area during the 4<sup>th</sup> century.

Of the six excavated registered finds three are post medieval in date. These are the iron nail (RF32) from layer/furrow 2312, an iron ring (RF30) from field boundary/headland 1921 and a sandstone quern (RF7) from surface 1990. A Roman coin was found in context 1963 (no context information) but unfortunately its condition is too poor for identification. The fragment of fine sandstone quern (RF8) from the square barrow ditch 2310 could be of either Iron Age or Anglo-Saxon date.

The 4g of slag from the Anglo-Saxon grave fill 1987 is a piece of very vitrified clay that could have been produced by a range of high temperature processes, not necessarily iron smithing. The hearth bottom weighing 69g from the upper fill of ditch 1990 is, however, definitely the product of iron smithing and is therefore very unlikely to be of Bronze Age date. Although iron-working slags have been found in late Bronze Age contexts (in a few instances inside complete pots) it is still very rare and therefore this piece is likely to be either in a late fill of the ditch or intrusive.

This small assemblage unfortunately does not aid the dating or interpretation of the site except in terms of indicating the presence of some 4<sup>th</sup> century activity in the area.

**Site 19, CS 19, Plot 146: Settlement site with Bronze Age and Iron Age features.**

The only registered finds from this site are a piece of stone from pit 2419 (RF9) which is probably natural (glacial erratic?) but could have been used as an irregular hone and a metal-detected cast copper alloy ring with a diameter of 48mm (RF66). The latter could be medieval but is more likely to be post medieval in date.

**Site 21, CS 20, Plots 147 and 149: Area of significant Romano-British and medieval pot scatters/ crop marks.**

A single piece of decorative Romano-British glass was found on each of these plots. The piece from Plot 147 is made from a light-green glass and is the remains of a vessel – probably a bottle, jug or flask – conical base with a high kick. The sherd from 149 is from a light-blue vessel with raised moulded-rib decoration.

**CS 20, Plot 150: Area of medieval activity.**

Of the two registered finds from this Plot the only possible medieval find are the small disintegrated fragments of lavastone (RF10) which are likely to be the remnants of a quern stone. The other find is a piece of post-medieval window glass probably of 18<sup>th</sup> – 19<sup>th</sup> century date (RF42).

**Conclusions**

The assemblages recovered from pipeline excavations and watching briefs are generally small and therefore difficult to interpret, however, the quality and distribution of the finds gives a good insight into the intensity of occupation at different periods during the past and the wealth of those inhabitants. Construction section 4 Plot 20 produced the largest assemblage and this has been discussed above.

***Bibliography***

Cowgill Jane 1997, A report on the iron-working debris from the Kirkhamgate to Selby water pipeline (KTS96: Site65A). Archive report prepared for the West Yorkshire Archaeology Service.

Cowgill Jane, McDonnell Gerry and Mills JM 1997, Iron-working report for the Scole and Oakley road improvement project. Publication report produced for the Norfolk Archaeological Unit and the Archaeology Section of the Suffolk County Council Planning Department.

Tylecote R 1986, *The Prehistory of Metallurgy in the British Isles*.

## APPENDIX 1

THE REGISTERED FINDS  
IN CONSTRUCTION SECTION AND PLOT ORDER

## ABBREVIATIONS USED IN THE CATALOGUE

//	Parallel
BA	Bronze Age
DIAM	Diameter
IA	Iron Age
MAX	Maximum
MD*	Original metal detected find number
MOD	Modern
PMED	Post medieval
ROM	Roman
SF*	Original small find number
V	Very
XRAY	X-radiograph

CS	Plot	Context	Find No	Material	Object
4	20	999	1	STONE	
4	20	4158	2	STONE	QUERN
4	20	4186	3	STONE	
4	20	4378	4	STONE	QUERN
9	70	999	5	STONE	MOULDING
11	88	1122	6	STONE	
19	145	1992	7	STONE	QUERN
19	145	2346	8	STONE	QUERN
19	146	2417	9	STONE	
20	150	2576	10	STONE	
18	139	1899	11	CERAMIC	SPINDLE WHORL
12	91	999	12	LEAD	WEIGHT
17	132	999	13	LEAD	
17	132	999	14	LEAD	
17	132	999	15	LEAD	WASTE
17	132	999	16	LEAD	WASTE
19	145	999	17	LEAD	WASTE
19	145	999	18	LEAD	WASTE
19	145	999	19	LEAD	WASTE
4	20	999	20	IRON	NAIL
4	20	999	21	IRON	
4	20	999	22	IRON	HOOK
4	20	4169	23	IRON	NAIL
4	20	4267	24	IRON	
4	20	4368	25	IRON	
8	61	4	26	IRON	

CS	Plot	Context	Find No	Material	Object
8	61	4	27	IRON	
11	88	1152	28	IRON	NAIL
17	131	999	29	IRON	BINDING
19	145	1974	30	IRON	RING
19	145	1922	31	IRON	NAIL
19	145	2312	32	IRON	NAIL
19	145	999	33	IRON	NAIL
19	145	999	34	IRON	NAIL
3	15	999	35	GLASS	VESSEL
4	20	999	36	GLASS	VESSEL
9	72	919	37	GLASS	BOTTLE
9	79	999	38	GLASS	BOTTLE
18	139	1899	39	GLASS	
20	147	999	40	GLASS	VESSEL
20	149	999	41	GLASS	VESSEL
20	150	999	42	GLASS	WINDOW
21	154	999	43	GLASS	VESSEL
21	154	999	44	GLASS	VESSEL
9	71	999	45	COPPER	COIN
11	88	1154	46	COPPER	BROOCH
17	125	1710	47	COPPER	BUCKLE
17	125	999	48	COPPER	
17	132	999	49	COPPER	
17	132	999	50	COPPER	
17	132	999	51	COPPER	
17	132	999	52	COPPER	
17	132	999	53	COPPER	
17	133	999	54	COPPER	STAPLE
19	144	999	55	COPPER	DISC
19	145	999	56	COPPER	COIN
19	145	999	57	COPPER	COIN
19	145	999	58	COPPER	
19	145	999	59	COPPER	
19	145	999	60	COPPER	MOUNT
19	145	999	61	COPPER	STUD
19	145	999	62	COPPER	COIN
19	145	999	63	COPPER	
19	145	999	64	COPPER	
19	145	1963	65	COPPER	COIN
19	146	999	66	COPPER	RING
18	135	1843	67	IRON	
4	20	4035	68	IRON	
4	20	4186	69	IRON	
4	20	4360	70	IRON	
4	20	4306	71	IRON	
VOID			72		
4	20	4288	73	IRON	NAIL
19	145	1981	74	IRON	KNIFE/SEAX

CS	Plot	Context	Find No	Material	Object
19	145	1982	75	IRON	KNIFE BLADE
19	145	2301	76	IRON	KNIFE BLADE
19	145	2326	77	BONE	DECORATED OBJECT
19	145	1997	78	BONE	GAMING PIECE ?

## APPENDIX 2

THE BULK FINDS  
IN CONSTRUCTION SECTION AND PLOT ORDER

## ABBREVIATIONS USED IN THE CATALOGUE

CIND	Cinder
CHARC	Charcoal
FAS	Fuel ash slag
H	Height
HAMMS	Hammerscale
HB	Plano-convex hearth bottom
HL	Hearth lining
INCL	Inclusions
SSL	Smithing slag lump
V	Very
VHL	Vitrified hearth lining
W	Width

75 x 50 x 22   Hearth bottom length x width x height

CS	Plot	Context	Material	Type	No	Weight
4	20	4167	PLASTER		5	267
4	20	4167	PLASTER		3	75
4	20	4167	PLASTER		6	46
4	20	4167	PLASTER		3	17
4	20	4167	PLASTER		1	18
4	20	4167	PLASTER		1	2
4	20	4167	PLASTER		2	4
4	20	4167	PLASTER		1	12
4	20	4204	PLASTER		1	63
4	20	4116	PLASTER		1	543
4	20	4116	PLASTER		1	32
4	20	4116	PLASTER		1	31
4	20	4116	PLASTER		1	372
4	20	4116	PLASTER		1	414
4	20	4116	PLASTER		1	41
4	20	4214	PLASTER		1	14
4	20	4214	PLASTER		1	31
4	20	4214	PLASTER		1	17
4	20	4214	CLAY		1	55
4	20	4214	PLASTER		1	61
4	20	4214	PLASTER		1	83
4	20	4214	PLASTER		1	36
4	20	4214	PLASTER		1	30
4	20	4214	PLASTER		1	94

CS	Plot	Context	Material	Type	No	Weight
4	20	4214	PLASTER		1	37
4	20	4214	PLASTER		1	38
19	146	6	SLAG	FAS	1	1
19	144	8	SLAG	SSL	1	32
19	145	1988	SLAG	SLAG	1	4
19	145	2356	SLAG	HB	1	69
4	20	4030	SLAG	HB	1	64
4	20	4065	SLAG	HB	1	461
4	20	4162	SLAG	VHL	1	16
4	20	4162	FIRED CLAY		3	30
4	20	4185	SLAG	SSL	1	65
4	20	4186	SLAG	SSL	1	44
4	20	4240	STONE		1	16
4	20	4241	SLAG	HB	1	71
4	20	4256	SLAG	SLAG	1	16
4	20	4302	SLAG	SLAG	1	230
4	20	4331	SLAG	SLAG	2	17
4	20	4332	SLAG	SLAG	1	7
4	20	4360	SLAG	FAS	1	3
4	20	4360	SLAG	SLAG	2	3
4	20	4360	SLAG	SSL	2	91
4	20	4360	SLAG	HB	1	106
4	20	4319	SLAG	FAS	1	11
4	20	4319	SLAG	SSL	1	51
4	20	4300	SLAG	HB	1	133
4	20	4243	SLAG	HB	1	193
4	20	4083	SLAG	SSL	1	149
4	20	4083	SLAG	HB	1	86
4	20	4288	SLAG	HB	1	706
4	20	4288	SLAG	HB	1	166
4	20	4288	SLAG	HB	1	160
4	20	4288	SLAG	HB	1	136
4	20	4288	SLAG	HB	1	237
4	20	4288	SLAG	HB	1	332
4	20	4288	SLAG	HB	1	274
4	20	4288	SLAG	HB	1	51
4	20	4288	SLAG	HB	1	77
4	20	4288	SLAG	HB	1	152
4	20	4288	SLAG	HB	1	92
4	20	4288	SLAG	HB	1	72
4	20	4288	SLAG	HB	1	83
4	20	4288	SLAG	HB	1	103
4	20	4288	SLAG	HB	1	62
4	20	4288	SLAG	HB	1	89
4	20	4288	SLAG	HB	1	66
4	20	4288	SLAG	SSL	11	334
4	20	4288	SLAG	SSL	58	923

CS	Plot	Context	Material	Type	No	Weight
4	20	4288	SLAG	SSL	7	94
4	20	4288	SLAG	SLAG	30	94
4	20	4288	SLAG	HB	15	728
4	20	4288	SLAG	SLAG	62	652
4	20	4288	SLAG	CIND	3	53
4	20	4288	SLAG	VHL	1	13
4	20	4288	SLAG	SLAG	24	18
4	20	4288	SLAG	CIND	4	32
4	20	4288	SLAG	SLAG	10	78
4	20	4288	SLAG	CIND	3	20
4	20	4288	SLAG	CIND	2	17
4	20	4288	FIRE CLAY		5	19
4	20	4288	SLAG	CIND	1	24
4	20	4288	SLAG	VHL	3	35
4	20	4288	FIRE CLAY		4	11
4	20	4288	FIRE CLAY		1	2
4	20	4288	SLAG	VHL	1	13
4	20	4288	SLAG	VHL	14	47
4	20	4288	SLAG	VHL	5	33
4	20	4288	SLAG	VHL	2	56
4	20	4288	SLAG	SLAG	337	398
4	20	4288	STONE		1	1
4	20	4288	SLAG	SLAG	7	22
4	20	4288	FIRE CLAY		24	15
4	20	4288	FIRE CLAY		1	1
4	20	4288	SLAG	SSL	25	186
4	20	4288	SLAG	CIND	50	54

## APPENDIX 3

**GLOSSARY OF IRON WORKING TERMS AND CODES**

by Jane Cowgill©

It is important to note that the slags generated by the same process form a continuum and that each type is not necessarily distinct from any other. There are, however, a number of types of slag that can confidently be assigned to a specific type of metal-working process and these are explained below followed by the more general forms and related debris. The codes used in the catalogue are in bold.

A wide range of factors concerning iron production and smithing are not yet understood and much misleading and over simplified information has been published. Fundamental aspects concerning the techniques, such as slag formation, is still poorly understood. Experimental archaeology and more informed excavations are gradually improving the situation.

It is recommended that the Historical Metallurgy Society Datasheets on metal-working are obtained from D Starley (Ancient Monuments Laboratory, English Heritage, Fortress House, 23 Savile Row, London) for the price of £1 made payable to Historical Metallurgy Society.

Unlike all other metals, before AD1500, iron was produced and worked only in the solid state; this technology is known as the Direct Process. The processes involved using this direct or bloomery technology are the extraction of the metal from the ore in a furnace, the compaction and purification of the metal to produce a bar during primary smithing and the working of the iron to an object in secondary smithing. Primary smithing is usually discussed with the smelting/ iron production because it is only after this stage that a saleable and workable piece of iron has been produced.

**IRON PRODUCTION**

Iron ores are commonly found throughout Britain, often in the form of iron oxide bog ores. For the early technologies to succeed it was essential that this ore was as rich as possible, over 70% iron oxide. (Iron slags commonly contain over 50% Fe). All ores were probably washed, bonfire roasted and crushed before being fed into the furnace. (McDonnell 1995a).

The basic furnace structure was a cylindrical shaft built of clay, between 1 and 2m high, with an internal diameter of 0.3 to 1m with an air hole through the furnace wall for the supply of the air draught (produced by bellows). At the base was an arch through the wall to allow the removal of the slag. Each furnace could have been reused for numerous smelts. The furnaces would have been covered by some sort of structure although the evidence seldom survives. When excavated the furnace remains can be very difficult to identify and often survive as little more than a reddened scoop in the ground (Crew 1995).

The most common form of fuel was charcoal (coal was never used for this technology) which was consumed in very large quantities (Crew 1991). The availability of this resource was probably the most important factor in determining the location of the smelting sites, available ores and clays for furnace building are usually more freely available.

To smelt iron the furnace has to be preheated and then the ore and further charcoal would be fed into it; the bellows meanwhile producing the draught. Two equally important operations occurred inside the furnace, the production of iron and the removal of the gangue (impurities within the ore *etc*) as liquated slag. The slag collected at the bottom of the furnace and was often tapped off into a pit or hollow in the ground (**TAP**); some of the slag sometimes solidified in the channel connecting the furnace to the pit (**CHAN**). At the end of a smelt some slag may remain inside the furnace and allowed to cool there, this is known as furnace slag; it often has the imprints of the large pieces of charcoal used as fuel (**FURN**). The iron formed as a bloom (thus the term bloomery) attached to the inside wall of the furnace just below the air hole. When the bloom reached a large enough size to impede the air hole the smelt stops and the soft spongy bloom, a mixture of slag and iron, is extracted for refining and smithing to make it into a workable bar. This initial working of the iron is the primary smithing stage but the slags produced are similar to those generated by secondary smithing. Blooms are extremely rare archaeological finds because they can always be re-smelted if they are failures or shatter while being worked. (Crew 1996.)

### SECONDARY SMITHING

This is the term used to describe the manufacture or repair of objects. Although this can be undertaken almost anywhere, permanent forges were often built. The main features of a forge are the hearth, often built waist high, a bosh or water container, the anvil and a pair of bellows. There was usually a tuyere on the hearth to protect the bellows' nozzle from the heat of the fire. This often took the form of a perforated cylinder or plate of clay or even a reused piece of tile. The most common fuel was charcoal although from the Romano-British period coal was occasionally used.

Iron smiths had a range of irons available to them varying from pure ferritic iron (relatively soft), iron containing phosphorus (relatively harder) to steels (potentially very hard, but more brittle) and were also probably involved in re-cycling broken and damaged artefacts of varied iron composition (McDonnell 1988, McDonnell 1989). Steel is the best material for use in the production of cutting or working tools, since it can be heat treated to produce the optimum toughness.

Secondary smithing produces a range of waste products, slag being the most common. The classic form is a 'plano-convex accumulation of slag', commonly called a 'hearth bottom', which is formed in the hottest part of the hearth just below the tuyere (**HB**). The terminology is incorrect, although it persists, in that it does not necessarily form in the base of the hearth. The usual shape is a convex base with a flattish top often with a shallow depression formed by the blast of air from the bellows. Another common waste product is termed 'smithing slag lumps' (**SSL**). These develop as free slag within the fuel filling the hearth. They are randomly shaped pieces of iron silicate generated during the smithing process which have failed to coalesce with the 'hearth bottom'. During formation the slag would be in a plastic, or semi-molten state and would need to cool before the smith could remove it from the hearth. The high temperatures produced in the hearth can lead to considerable quantities of the clay wall and the tuyere melting, leading to the formation of vitrified hearth lining and cinder, the latter a silica rich slag (**VHL**, **CIND**). The above slags would all have formed in the hearth.

The processes involved in the formation of these hearth slags are not completely understood. The possible 'ingredients' include ash, sand, impurities in the fuel, hammerscale and any iron that 'burns' (melts) in the fire. Free iron oxide is extremely reactive with silicates and therefore the hearth wall or tuyere will be attacked leading to the combining of the sand in the clays with the slags. A result is that the hearth wall and/or the tuyere may have to be repaired or replaced between smithing operations. In the final stages of formation the 'hearth bottoms' may be attached to the tuyere or hearth wall and can threaten, by their increasing size, to block the tuyere hole and thereby lessen the air draught into the hearth. When removed they are snapped off the wall which usually removes a certain amount of the structure again necessitating repair.

When the hot iron is hammered another waste product, hammerscale, is produced the presence of which may help in locating the anvil within a smithy archaeologically (HAMM)(McDonnell 1992b and 1992c). When heated by the smith the surface of iron oxidises and this oxidised layer flakes off when beaten producing thin flat plates of scale debris (plate hammerscale). Surface oxidation can be avoided by careful placement of the iron within the fire (in a reducing zone) and by fluxing. Fluxing involves covering the metal surface with a thin layer of sand. Spheroidal hammerscale, small droplets of slag that have solidified and may be either hollow or solid, is also produced and is again created when the hot iron is hammered (Starley 1995). Hammerscale is easily trampled and can form a concreted layer that may be mistaken for iron pan. The significance of such deposits may not be recognised. Hammerscale is seldom recognised during excavations, indeed many archaeologists are unaware of its existence.

Unfortunately there is nothing that easily characterises a smithy archaeologically. An essential feature is the hearth, but these may have often been constructed at waist height and therefore little or nothing that is 'fired' and definable survives. Anvils and other tools are portable and valued objects and the water bosh need not be a sunken feature. The most important form of evidence is therefore the hammerscale and slag (McDonnell 1992b and 1992c). The presence of hammerscale in quite large quantities is thought to be a significant indicator of the presence of a smithy and in most circumstances this material will be found in an uncorroded state and is easily retrieved with a magnet (though often difficult to see when mixed with soils). Occasionally, however, hammerscale does corrode and resembles a type of 'loose' iron-pan (the circumstances when this occurs and are not well understood). The presence of tuyeres and hearth lining is also important because it is thought that they remain close to their origins, namely the hearth. Another important part of the finds assemblage that is frequently overlooked are the iron fragments. Amongst these are often the bars, off cuts and general detritus of a smiths' waste products (see for example Ottaway 1992). Frequently they appear to be amorphous lumps, particularly if the iron is badly corroded.

#### BIBLIOGRAPHY

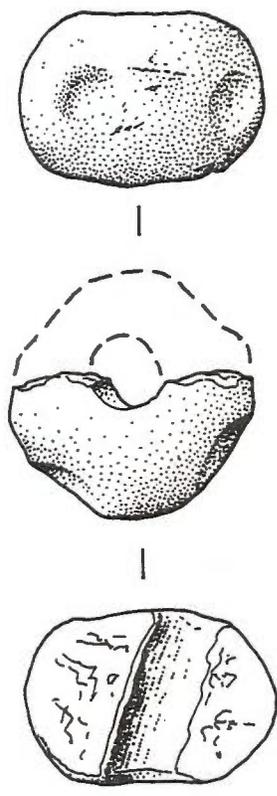
- Crew, P. 1995 'Bloomery iron smelting slags and other residues', Archaeology Datasheet 5, Hist Metall Soc
- Crew, P 1991 'The experimental production of prehistoric bar iron' *J Hist Metall Soc* 25, No1, 21 - 36
- Crew, P 1996 'Bloom refining and smithing, slags and other residues', Archaeology Datasheet 6, *Hist Metall Soc*
- McDonnell J G 1988 Ore to Artefact: A Study of Early Ironworking, E Slater and J Tate (eds) *Science and Archaeology* Glasgow 1987 BAR British Series 196
- McDonnell G 1989 Iron and its alloys in the fifth to eleventh centuries AD in England *World Archaeol* 20 no3 373 - 381
- McDonnell, J G 1992a, The ironworking residues, in Ottaway, Patrick (ed) *Anglo-Scandinavian Ironwork from 16-22 Coppergate*, The Archaeology of York 17/6, 471-80, CBA, London
- McDonnell, J G 1992b, The identification and analysis of the slags from Burton Dassett, Warwickshire Ancient Monuments Laboratory Report 46/92
- McDonnell, J G 1992c, The identification and analysis of the hammerscale from Burton Dassett, Warwickshire Ancient Monuments Laboratory Report 47/92

McDonnell, G 1995a, Iron working processes, Archaeology Datasheet 3, *Hist Metall Soc*

McDonnell, Gerry 1995b, Ore, Slag, Iron and Steel in Crew, Peter and Susan (eds) *Iron for Archaeologists: A review of recent work on the archaeology of early ironworking sites* Occas Pap Plas Tan y Bwlch 2, 3-7,

Ottaway, Patrick 1992, *Anglo-Scandinavian Ironwork from 16-22 Coppergate*, The Archaeology of York 17/6, CBA, London

Starley, D 1995 'Hammerscale' Archaeology Datasheet 10, *Hist Metall Soc*



**Iron Age Spindle Whorl Illustration, 11.1 [Scale 1:1]  
From ditch fill (1899), Site 17**

# **APPENDIX 12**

**Environmental Analysis**

**Dr. J. Rackham**

## Hatton to Silk Willoughby Gas Pipeline, HWP98 Environmental Archaeology Report

### Introduction

Excavations along the route of the Hatton to Silk Willoughby Pipeline in advance of pipe laying uncovered a number of archaeological sites. From these 45 soil samples were taken from which 33 were submitted for assessment and analysis (Table 1). These samples were recovered from nine distinct sites (see Table 1) and these are dealt with individually in the report below.

Most of the sites lay on calcareous soils with a limestone gravel component, but plots 8, 20, 88 and 135 included sharp flint and pebble gravel with little or no limestone (Table 2). Bone, shell and charred material survived well but uncharred organic remains were rare and only recorded in any significant quantity from one feature.

**Table 1:** List of soil samples from Hatton to Silk Willoughby Pipeline submitted for assessment and post-excavation analysis.

sample	context	feature	vol in l.	wt in kg	period	plot
2	1930	fill of pit 1929	4	5	undated	145
3	1977	backfill of grave 1975	4	5	A-S	145
4	1988	backfill of grave 1987	3	4	A-S	145
9	1994	natural? silting in ring gully 1993	10	16	LIA	145
10	2382	primary silting in ring ditch 1990	9	12	M-LIA	145
11	2381	natural silting in ring ditch 1990	12	16	M-LIA	145
12	2380	fill of ring ditch 1990, mound slump?	12	16	M-LIA	145
13	2377	final silting in ring ditch 1990	12	16	M-LIA	145
14	2309	natural silting in gully 2308	9	12	A-S	145
15	2352	natural silting in gully 2310	11	15	A-S	145
16	2333	natural silting in gully 2332	9	13	A-S	145
17	1942	fill of posthole 1941	2	3	IA or A-S	145
18	1946	fill of posthole	2	4	IA or A-S	145
19	2458	fill of butt-end of ditch	10	14	LIA	146
20	2551	fourth fill of butt-end of ditch 2516	9.5	11	IA	150
21	4004	backfill of pit 4003	16	22	R-B	20
23	4016	fill of ring gully 4013	11	14	R-B	20
25	4204	primary silting in posthole/pit 4166	10	12	R-B	20
26	4288	primary backfill of pit 4286	14	13	R-B	20
27	4291	possible <i>in situ</i> burnt post	5	6	R-B	20
33	2031	silting/fill of well/deep pit	10	16	3rd/4th AD	08
34	2032	silting/fill of well/deep pit	10	16	3rd/4th AD	08
35	2065	silting/fill of well/deep pit	8	12	3rd/4th AD	08
36	2062	silting/fill of well/deep pit	11	16	3rd/4th AD	08
37	2064	silting/fill of well/deep pit	7	11	3rd/4th AD	08
38	1154	fill of ditch 1127	18	23	R-B	88
39	1152	fill of recut 1151 of ditch 1123	17	19	R-B	88
40	1811	silting in ditch 1810	8	8	IA	135
41	1804	burning deposit backfilled into pit 1803	2	3	IA	135
42	1806	fill of fire pit 1805	7	9	IA	135
43	932	primary silting in roadside ditch	1	1	Med. 13/14th	71
44	005	secondary fill of enclosure ditch 003	5	6	R-B	147-9
45	004	tertiary fill of enclosure ditch 003	5	7	R-B	147-9

Period: M-LIA mid-late Iron Age; LIA late Iron Age; IA Iron Age; RB Romano-British; A-S Anglo-Saxon

### Methods

The bulk soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried in all but one case, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured, and the volume and weight of the residue recorded. One organic sample (35) with well preserved organic material was kept wet. A total of 283.5 litres of soil was processed in this way.

The residue from the samples was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill. The residue was then discarded in all but one case (sample 26). The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are detailed below in Tables 2 and 3. After this assessment samples were selected on the basis of the frequency and diversity of environmental remains they contained and the interpretative potential of these for further more detailed study (Tables 4-8).

#### *Charcoal and wood identification (Rowena Gale)*

Three charcoal samples were examined and some iron-smithing slag charcoal fragments. These included charcoal from a pit containing smithing debris in Plot 20 and second pit in this Plot, and waterlogged twigs and roundwood from a possible well in Plot 8.

The charcoal from both pits was well preserved although sample 35 from the possible well was mostly comprised of thin slivers. The charcoal was firstly examined with a x20 hand lens and sorted into groups based on the anatomical features observed on a freshly exposed transverse (TS) surface. Representative fragments from each group were selected and examined using high magnification. These were further fractured to expose tangential (TLS) and radial (RLS) surfaces and supported in sand. The structures were examined with incident light using a Nikon Labophot microscope at magnifications of up to x400. The anatomical features were matched to prepared reference material.

The waterlogged wood from the possible well in Plot 8 consisted of a mixture of roundwood and smaller twigs. In some instances preservation was excellent but some material was extremely degraded. The TS, TLS and RLS sections were prepared using double-edged razor blades and mounted in 70% glycerol on microscope slides. The anatomical structure was examined with transmitted light using similar methods to the charcoal.

The results are shown in Table 5 and discussed below under the individual sites. Classification follows that of *Flora Europaea* (Tutin, Heywood *et al* 1964-1980). It should be noted that measurements from charred material should be increased by up to 50% to ascertain the likely dimensions of the living material.

#### *The Plant Remains* (John Giorgi)

After the completion of the assessment fourteen samples were selected from eight sites for an analysis of the plant remains. These dated from the Bronze Age through to the medieval period.

The charred plant remains had been sorted from most of the flots before being sent to the author with the exception of the two richest charred plant assemblages from Plot 147-9; these were separated by size through a stack of sieves for ease of sorting. A binocular microscope was used for the identification of the botanical material. Modern and charred reference material and reference manuals were used for identification purposes. The plant items were quantified with the exception of small cereal fragments (smaller than 2mm), hazel (*Corylus avellana*) nut fragments, charcoal fragments and indeterminate seeds, the quantities of which were estimated as follows: + = 1-10; ++ = 11-100; +++ = 101-250; ++++ = 251+ plant items. One sample from a well/pit (Plot 8) contained plant remains preserved by waterlogging. This sample was scanned wet and presence and frequency of individual species recorded using the same rating system as above.

The results are shown in Tables 4 and 8 and discussed by site. Most of the samples produced very little charred plant material with the exception of the two samples from Plots 147-9 (see Table 3). Flecks and small fragments of charcoal were found in variable quantities in all the samples. The well/pit sample (Plot 8) produced plant remains preserved by waterlogging. Uncharred seeds were present in small numbers in some of the dry samples, eg. goosefoots/oraches etc. (*Chenopodium/Atriplex* spp.), although this material is probably intrusive.

#### *Molluscs* (James Rackham)

After completion of the assessment the snails from a series of nine samples from six sites were identified and counted, and thirteen samples from the late Iron Age to Anglo-Saxon site at Plot 145. Very few of the samples were rich, but it was considered that the snail fauna might give some indication of the contemporary environment around the sampled features. The burrowing blind snail *Cecilioides acicula* was not counted since in most of the contexts this species is likely to be intrusive, having burrowed down from the soil above (see Evans 1972) and only an estimate of abundance produced (see Table 7). The results are presented in Tables 6 and 7 and are discussed below under each site. The environmental implications of each species have been drawn from Evans (1972), Ellis (1969) and Macan (1976).

#### **Results by Site**

##### *Site 2, Plot 08: Late 3rd/4th century Romano-British field boundaries and pits*

Only one feature on this site was sampled. This was a deep pit or well of late 3rd/4th century AD date associated with several other pits and field boundaries of Romano-British date. A series of five samples were taken from the fills of this feature. Archaeological finds were extremely limited in these samples and included only a few grammes of fired clay, four possible flint waste flakes and several fragments of animal bone. Cattle and horse were identified among the latter. The fills included much iron concreted sediment and flint gravel, with some rolled chalk and limestone fragments. The flots included small quantities of charcoal, and three samples produced a few unidentifiable fragments of charred cereal grain. Only sample 37, context 2064 produced identifiable cereal. Sample 35, context 2065, the basal fill contained abundant waterlogged remains of plant and insect, with a few molluscs. The wood and plant remains from this sample were identified further. Frog or toad bones were found in 2032 along with the bones of field vole, *Microtus agrestis*.

Table 2: Hatton to Silk Willoughby Gas Pipeline, HWP98: Archaeological finds from the samples

sample	context	feature	sample vol. lt	Res. wt.	Fired clay wt	Pot *	Coal/cinder wt.	Ham' scale/slag	Flint no.	Bone wt	date	residue description and comments
<b>Plot 08</b>												
33	2031	fill of well/pit	10	2200							3rd/4th AD	flint gravel & concreted sediment
34	2032	as above	10	3000						287	3rd/4th AD	flint gravel & concreted sediment
35	2065	as above	8	520						<1	3rd/4th AD	flint and limestone gravel
36	2062	as above	11	3400	4					14	3rd/4th AD	flint gravel & concreted sediment
37	2064	as above	7	700					4		3rd/4th AD	chalk and flint gravel
<b>Plot 20</b>												
21	4004	backfill pit 4003	16	780		4/6					RB	concreted sediment with some flint
23	4016	fill ring gully 4013	11	1560	?	7/10					RB	flint gravel, some burnt stone & chalk
25	4204	fill post-h/pit 4166	10	730			+	+	1	<1	RB	flint gravel, with mortar, chalk & limestone
26	4288	prim. backfill pit 4286	14	2200	16	1/2	54	+++			RB	584g slag, 70g vitrified hearth lining (Cowgill)
27	4291	poss <i>in situ</i> burnt post	5	150	21				1		RB	flint and concreted sediment
<b>Plot 71</b>												
43	932	fill of roadside ditch	1	200						2	Med.13/14th	pebble and chalk gravel
<b>Plot 88</b>												
38	1154	fill of ditch 1127	18	2850						<1	RB	flint and pebble gravel
39	1152	fill of recut of ditch 1123	17	2550	50	3/2	+			<1	RB	flint and pebble gravel
<b>Plot 135</b>												
40	1811	fill of ditch 1810	8	410							IA	flint and pebble gravel
41	1804	backfill of pit 1803	2	460	1				1	<1	IA	flint and pebble gravel
42	1806	fire pit 1805, fill	7	410	17			+		4	IA	flint gravel, with pebbles
<b>Plot 145</b>												
2	1930	pit 1929	4	790						1	undated	limestone gravel
3	1977	grave 1975 backfill	4	1040					1	4	A-S	limestone gravel
4	1988	grave 1987 backfill	3	690					2	4	A-S	limestone gravel
9	1994	ring gully 1993 fill	10	1520	+		<1	+	2	2	LIA	limestone & flint gravel
10	2382	ring ditch 1990 fill	9	2700	+			+	1	2	M-LIA	limestone gravel
11	2381	ring ditch 1990 fill	12	1850	+	5/3		+		22	M-LIA	limestone gravel
12	2380	ring ditch 1990 fill	12	3900	+	2/2		+	2	10	M-LIA	limestone gravel

13	2377	ring ditch 1990 fill	12	1600		5/17			16	M-LIA	limestone gravel, some burnt flint
14	2309	gully 2308 fill	9	1310	+	1/5			<1	A-S	limestone and flint gravel
15	2352	gully 2310 fill	11	1340	+	3/5		5	<1	A-S	limestone and flint gravel
16	2333	gully 2332 fill	9	2450	+					A-S	limestone and flint gravel
17	1942	posthole 1941 fill	2	450					<1	IA or A-S	limestone gravel, occasional burnt flint
18	1946	posthole fill	2	790				1	1	IA or A-S	limestone & flint gravel, with chalk
Plot 146											
19	2458	fill ditch butt-end	10	980	13	3/14		+	<1	LIA	limestone gravel
Plot 147-9											
44	005	2nd fill encl ditch 003	5	650					<1	RB	limestone gravel
45	004	3rd fill encl ditch 003	5	560					1	RB	limestone gravel, some burnt stone & flint
Plot 150											
20	2551	fill ditch butt-end 2516	9.5	1750	+	3/5			37	IA	limestone gravel, firecracked stone

\* fragment or sherd no/weight in grammes

+ present

Period - key as in Table 1

Table 3: Hatton to Silk Willoughby Gas Pipeline, HWP98: Environmental finds from the samples

sample	context	sample vol. lt	flot vol in ml.	char coal #	cereal #	chaff #	seeds, charred *	seeds, water-logged *	insects *	snails #	bone #	burnt bone	comments
<b>Plot 08</b>													
33	2031	10	<1	2	?			+					
34	2032	10	1	2	1			+			1		cow, horse, field vole, frog/toad
35	2065	8	600	2				3/3	3/3	1/1	1		waterlogged, much wood twigs, spines, <i>Daphnia</i> , etc
36	2062	11	2	2	1						1		cattle size
37	2064	7	2	1	1			+					barley
<b>Plot 20</b>													
21	4004	16	6	3	?		1/1	+	+	1/1			
23	4016	11	5	3	1		1/1	+		1/1			
25	4204	10	1	2				+		2/2	1	+	oyster
26	4288	14	180	5	1		1/1	+	+				barley?
27	4291	5	40	4				+					
<b>Plot 71</b>													
43	932	1	3	2				+		3/3	1		frog/toad, uncharred wood fragments
<b>Plot 88</b>													
38	1154	18	1	2	1		1/1	+			1	+	wheat
39	1152	17	1	1	1			+			1		oat
<b>Plot 135</b>													
40	1811	8	3				1/1	+					
41	1804	2	<1	1							1	+	
42	1806	7	11	3	1	1	1/2	+		1/1	3	+	wheat, barley?, sheep
<b>Plot 145</b>													
2	1930	4	5	4	1			+		3/2	1		rodent
3	1977	4	4	1	1			+	+	3/1	2		human rib and frags
4	1988	3	1	1				+	+	2/2	2	+	human phalanx and frags, rodent, oyster frag
9	1994	10	5	3	1		1/1	2/2		4/2	2	+	field vole
10	2382	9	4	3				+	+	3/1	1	+	
11	2381	12	12	3	1		1/1	+		4/2	3	+	sheep, lamb, vole, frog/toad
12	2380	12	8	3	1		1/1	+	+	4/2	2	+	hazelnut, sheep, pig, rodent, snake, frog/toad.

## Appendix 12

13	2377	12	11	3	1	1	1/1	+	+	3/1	2	+	sheep, wood? mouse, snake, newt, frog/toad.
14	2309	9	3	1			1/1	+	+	3/2	1		
15	2352	11	2	2	?		1/1	+	+	4/2	1	+	vole sp.
16	2333	9	1	2				+	+	3/1			
17	1942	2	4	1			1/1	+	+	3/1	1	+	
18	1946	2	2	1	?		1/1	+	+	3/1	1	+	
<b>Plot</b>	<b>146</b>												
19	2458	10	14	4	2		2/3	+		3/2	1	+	wheat, hazelnut, blackberry, legume?, mouse, ostracod
<b>Plot</b>	<b>147-9</b>												
44	005	5	40	3	5	3	4/3			2/2	1		wheat, barley, oat, legume, field vole
45	004	5	10	1	4		3/2		+	2/2	1		wheat, barley, oat, field vole, oyster? frag
<b>Plot</b>	<b>150</b>												
20	2551	9.5	35	4	2		1/1			3/3	3		wheat, barley?, sheep, rodent, frog/toad, mussel

# frequency of items: 1=1-10; 2= 11-50; 3=51-150; 4=151-250; 5=>250

\* frequency/diversity - frequency as above and diversity as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

+ present, and for waterlogged seeds and insects probably modern contaminants

Sample 37 was recovered from one of the upper fills (2064) of the well; a single charred barley grain was identified along with a small number of uncharred weed seeds, eg. *Chenopodium* spp., *Polygonum* spp.. These may have been contemporary and survived through partial waterlogging but could be intrusive, having moved through the soil from deposits above.

The seeds and fruits (Table 4) from sample 35 were from plants that grow in the following range of habitats - disturbed (including cultivated) ground and waste places eg. nettles (*Urtica* spp.), black nightshade (*Solanum nigrum*), *Polygonum* species, goosefoots (*Chenopodium* spp.) and chickweeds (*Stellaria media* gp.); wetland habitats, eg. hemlock (*Conium maculatum*) and sedges (*Carex* spp.); grassland places, eg. buttercups (*Ranunculus acris/repens/bulbosus*); and hedgerow/shrub environments, eg. blackberry/raspberry (*Rubus* sp.) and elder (*Sambucus nigra*). Very fragmented wood, charcoal, stem and occasional leaf fragments were also present in the sample.

The wood from this sample was separated into larger pieces of roundwood and twiggy pieces, and more comminuted debris consisting of thin bits of twig and degraded wood fragments. The larger fraction, probably brushwood, was predominantly blackthorn (*Prunus spinosa*); segments of well preserved roundwood still retained bark and measured up to 18mm in diameter. Several of these bore oblique tool marks at one end clearly demonstrating severance. Numerous spines and twiggy pieces of blackthorn were also identified. Several pieces of oak (*Quercus*) were also present and although these may have been roundwood, the wood was too degraded to be certain.

The smaller fraction was largely composed of thin twigs and spine tips from blackthorn (*P. spinosa*). Several pieces of narrow stem (diameter up to 5mm) were identified as either willow or poplar (*Salix* or *Populus*); these related genera are anatomically similar. Although bark remained *in situ* the wood was degraded.

Most of the woody material in this sample appeared to be young stem or brushwood. Tool marks on the wider pieces of blackthorn tends to implicate an artefactual origin for the wood rather than a natural accumulation of debris within the well. However, the great abundance of narrow twigs (which are of minimal economic value) suggests that this was probably unlikely. It is more likely either that the wider and more useful parts of the stems had been cut away for some particular use, leaving the twiggy material to be disposed of (perhaps in the well), or that the product of scrub clearance was deposited in the well or pit. The wood blackthorn does not attain any great dimensions but it is hard and dense, has various applications such as for fuel, or narrow sails in hurdles, tools, domestic items and other artefacts (Edlin 1949).

This botanical assemblage probably reflects conditions both within and in the immediate vicinity of the well which suggests a disturbed habitat, possibly indicative of human activities nearby, which is supported by the presence of charcoal and cut wood in the sample. The wild fruits may be from hedgerow plants growing close-by, the fruits of which may have been gathered and used while in season. There were no true aquatic plants in the assemblage to suggest standing water although water flea eggs (Cladoceran ephippia) were present in moderate numbers in the sample; these crustacea lay their eggs in water in the months leading up to winter. A fairly high number of insect (beetle) remains were also noted, but it was decided not to take these further. No definite economic plants were found in the sample.

**Table 4:** Botanical remains from Plots 08, 20 and 88 (charred material except for sample 35)

	Plot	08	08	20	20	20	88	88
	Period	3/4th c	3/4th c	RB	RB	RB	RB	RB
	context	2065	2064	4004	4016	4288	1154	1152
	sample	35*	37	21	23	26	38	39

<b>Cereal grains</b>								
<i>T. aestivum</i> s.l.	free-threshing wheat						1	
<i>Hordeum sativum</i> L.	barley		1					
cf. <i>H. sativum</i>	?barley					1		
<i>Avena</i> sp(p).	oat							1
indeterminate cereals	indet. grains > 2mm				3		3	3
cf Cerealia indet.	?indet. grains		1					
<b>Cereal chaff</b>								
indet	culm node						1	
<b>Other plants</b>								
<i>Ranunculus acris/repens/bulbosus</i>	buttercups	++						
<i>Agrostemma githago</i> L.	corncockle							
<i>Stellaria media</i> gp	chickweed	+						
<i>Chenopodium</i> spp.	goosefoots etc.	++						
<i>Vicia/Lathyrus/Pisum</i> sp.	vetch/vetchling/pea							
Fabaceae indet.	indet. legumes							
<i>Rubus fruticosus/idaeus</i>	blackberry/raspberry	++						
<i>Oenanthe</i> spp.	water dropwort	+						
<i>Aethusa cynapium</i> L.	fools parsley	+						
<i>Conium maculatum</i> L.	hemlock	+						
<i>Polygonum aviculare</i> agg.	knotgrass	++						
<i>P. persicaria</i> L.	red shank	+						
<i>P. lapathium</i> L.	pale persicaria	+						
<i>Fallopia convolvulus</i> L.	black bindweed							
<i>Polygonum</i> spp.	-	++						
<i>Rumex acetosella</i> agg.	sheeps sorrel							
<i>Rumex</i> spp.	docks	++						
Polygonaceae indet.	-							
<i>Plantago lanceolata</i> L.	ribwort					1		
<i>Urtica urens</i> L.	small nettle	+						
<i>U. dioica</i> L.	stinging nettle	++						
<i>Solanum nigrum</i> L.	black nightshade	++						
<i>Sambucus nigra</i> L.	elder	+						
<i>Juncus</i> sp.	rush					1		
<i>Carex</i> spp.	sedge	+						
indet plant items	-	+						
charcoal fragments			x	x	x	x	x	x

Period - key as in Table 1; \* waterlogged sample

*Site 6, Plot 20: Late Iron Age/Romano-British settlement and field system*

Five samples were submitted from this site (Table 2) - two pit fills, a post or pit fill, a gully fill and a possible *in situ* burnt post. All samples produced some archaeological material with fired clay, pottery, hammerscale and slag, flint and animal bone fragments being recorded. The ring gully 4013

included burnt stone and chalk, while the post-hole/pit 4166 produced mortar and some chalk. The bulk of the residue from the backfill of pit 4286 was composed of smithing slag (see Cowgill).

The flots produced small quantities of charcoal except for contexts 4288 and 4291 both of which were rich in charcoal. One or two charred cereal grains were recovered along with a few charred weed seeds (Table 3) and a few terrestrial molluscs. A fragment of oyster shell was recorded from pit 4166. Three samples were submitted for the identification of the cereals and weed seeds and the charcoal from pit 4286 was identified.

The three samples analysed for botanical remains were pit fills 4004, 4288 and gully fill 4016 (Table 4). The pitfill samples contained just a few charred grains with one ?barley grain in 4288 while the gully fill contained three poorly preserved cereal grains and two weed seeds, ribwort (*Plantago lanceolata*) which grows in grassy places on neutral and basic soils, and a rush (*Juncus* sp.) seed, a plant of wetland habitats. Little further comment may be made on the basis of this small plant assemblage.

Context 4288, the backfill of pit 4286 was of interest because it produced the bulk of the slag recovered from the site and Cowgill (pers comm) has identified this as smithing slag. The sample also contained substantial quantities of slag and hammerscale and a large sample of charcoal. It is presumed that the charcoal from the feature derives from the smithing activity and therefore this was submitted for identification along with a few pieces of slag within which charcoal was embedded.

The large volume of charcoal from this sample consisted mainly of fragments of oak (*Quercus*) sapwood. Although the charcoal was mostly fragmented the dimensions of the pieces suggested that they originated from mixed diameter roundwood, ranging from about 20mm to >30mm. Growth rates also varied from fast grown, eg. 5 growth rings in 17mm, to slow grown, eg. 17 growth rings in 10mm. Heartwood was relatively sparse. In addition, small quantities of narrow roundwood (measuring up to 10mm diameter) were identified as maple (*Acer*), hazel (*Corylus*), member/s of the hawthorn group (Pomoideae which includes *Crataegus*, hawthorn; *Malus*, apple; *Pyrus* sp., pear; *Sorbus* sp., rowan, service tree and whitebeam) and possibly dogwood (*Cornus*) (Table 5).

Charcoal associated with the smithing slag was also identified as oak (*Quercus*) and was similar in character and composition to that described above (Table 5). Many impressions of charcoal were carried in the fabric of the slag and although it was impossible to identify these with any certainty, they clearly showed the use of a coarse grained wood charcoal consistent with that of oak.

It seems probable that comparatively immature oak roundwood, with little or no heartwood, provided the bulk of the smithing fuel. The high calorific value of oak charcoal has ensured its importance for metallurgy, where consistently high temperatures are required over a lengthy period. Thus, when available, oak charcoal has traditionally been the preferred fuel for smelting and smithing (Edlin 1949). The infrequent occurrence of narrow roundwood from other taxa may be attributable to residues from kindling. It is difficult to assess the use of coppiced oak wood since the growth rates varied so much; certainly some of the charcoal was indicative of such. It may be that the slower-grown oak was from stems initiated on stools already supporting well-developed growth.

Sample 27, a possible *in situ* burnt post within the fill of a posthole was studied to identify the charcoal. The charcoal although fairly abundant, mostly consisted of thin slivers and was therefore difficult to examine. The bulk of the charcoal was identified as oak (*Quercus*) heartwood; sapwood was minimal. In addition, a single piece of narrow stem/twig (diameter 3mm) from blackthorn (*Prunus spinosa*) was present. The remaining unidentified charcoal appeared to be superficially similar to the identified oak. The high proportion of oak heartwood suggests that it may have originated from trunk- or branch-wood probably in excess of 20 years of age and therefore substantial enough to provide a post or stake. Had the sample consisted entirely of oak it would be reasonable to

assume an origin from the post, subsequently burnt *in situ*, and despite the presence of the charred blackthorn twig (possibly extraneous material) this origin cannot be ruled out.

**Table 5:** Taxa identified from charcoal and waterlogged wood samples.

Plot	8	20	20	20
Sample	35	26	slag	27
Context	2065	4288	4288	4291
Period	3/4th C AD	RB	RB	RB
<i>Acer</i>		6r		
<i>Cornus</i>		?1r		
<i>Corylus</i>		1r		
Pomoideae		4r		
<i>Prunus spinosa</i>	xxx			1r
<i>Quercus</i>	x	247r/s, 25h	31r/s, 12h	1s, 36h
Salicaceae	x			

r = roundwood (diameter <20mm); s = sapwood; h - heartwood;

x = present; xxx = predominant taxa (waterlogged wood only)

Period - key as in Table 1

*Site 7, Plot 71: ?13/14th century roadside ditches*

A single sample from the primary silting (932) of roadside ditch 931 was taken at this site. It produced no archaeological finds other than a few fragments of unidentifiable animal bone and a little charcoal. The flots included uncharred wood fragments and seeds, probably of recent origin, and a small sample of molluscs (Table 6). The dominant taxa are those of woodland or shaded habitats, *Carychium* sp., Zonitidae, *Acanthinula aculeata* and Clausiliidae, although a few shells of the typically open country or grassland genus *Vallonia* are present. This suggests that the roadside ditch was probably hedged.

*Site 9, Plot 88: Romano-British field boundaries and small rectangular enclosure*

Two samples were taken from ditch fills on this site. Both fills produced domestic debris during excavation and probably lay on the edge of the settlement area. The sample from fill 1154 of ditch 1127 produced virtually no archaeological finds and a residue of flint and pebble gravel. In contrast that from 1152, the fill of recut 1151 of ditch 1123, produced fired clay and three pottery sherds.

The flots were both poor with very small quantities of charcoal and one or two charred seeds. The charred material from both samples was studied and contained just a few charred cereal grains including one free-threshing bread wheat (*Triticum aestivum*) grain from 1154 and one oat (*Avena* sp.) grain in 1152 which may be either a cultivated or wild oat (Table 4). The grains were probably burnt during drying of the grain or cooking and found their way into the ditches along with the other general debris (pot, bone, brick, tile) recovered from the two samples. The charred weed seed fragments were unidentifiable.

**Table 6:** Terrestrial and freshwater molluscs from the samples. All sites except Plot 145

Period	RB	RB	Me d	IA	IA	LIA	RB	RB	IA
Plot	20	20	71	135	135	146	147	147	150
context	400 4	420 4	932	181 1	180 6	245 8	005	004	255 1
sample	21	25	43	40	42	19	44	45	20
flot vol.(ml)	6	1	3	3	11	14	40	10	35

<i>Carychium</i> sp.	4		52					1	1
<i>Cochlicopa lubrica</i>							2		4
<i>Cochlicopa</i> sp.			1					1	5
<i>Vertigo pygmaea</i>									11
<i>Vertigo</i> sp.		3				2	2	6	8
<i>Pupilla muscorum</i>						4			
<i>Acanthinula aculeata</i>			5						
<i>Vallonia costata</i>		1	3				1	1	5
<i>Vallonia excentrica</i>			1		1	4	8	11	11
<i>Vallonia</i> sp.	1		1		1	1	8	3	12
Clausiliidae			2						2
<i>Clausilia bidentata</i>			1						2
<i>Cecilioides acicula</i>		+			+	+	+	++	
<i>Punctum pygmaeum</i>			2						
<i>Oxychilus</i> sp.			3		1				
<i>Retinella nitidula</i>			4						
<i>Retinella pura</i>			3						
Zonitidae			8						
<i>Discus rotundatus</i>		2	1						4
<i>Helix aspersa</i>			29						
<i>Helix nemoralis/hortensis</i>			3						
<i>Hygromia hispida</i>		3				6	9	1	19
<i>Lymnaea truncatula</i>			2				1		8
<i>Lymnaea peregra</i>									1
<i>Planorbis leucostoma</i>				1				1	27
indet.									1

Period - key as in Table 1

*Site 16, Plot 135: Iron Age settlement with ring gullies, postholes and occasional pits*

Three samples were submitted for analysis from this site. The fill of ditch 1810, the backfill of pit 1803 and the fill of fire pit 1805. Archaeological finds were limited although the fire pit, sample 42, included fired clay, a few grammes of animal bone and hammerscale. The environmental finds were equally limited although the fire pit again contained charcoal, charred cereals and weed seeds, sheep bone, burnt bone and a few snails. This was the only sample from this site whose analysis was taken further.

The fire-pit fill, 1806, produced several charred cereal grains including a ?free-threshing bread wheat and ?barley grain. The presence of glume wheats was also indicated by the identification of a single glume base although it was not adequately preserved to determine the species of glume wheat. Other plant remains in the sample included an indeterminate legume fragment which may be either from a cultivated species or a weed and two weed seeds of sheeps sorrel (*Rumex acetosella* agg.); this plant may have been harvested as a weed of the cereals as it grows on cultivated ground, mainly in acidic soils. It is also found, however, on heaths and in grassland. These charred plant remains were presumably derived from human activities nearby. The mollusc shells are too few to permit interpretation (Table 6).

*Site 18, Plot 145: Mid-late Iron Age settlement and barrows and an Anglo-Saxon graveyard*

This was the most heavily sampled site with 13 samples collected from a variety of features including the possible barrow ditches, gully fills, postholes and grave fills (Table 2).

Four samples were collected from the fills of a mid-late Iron Age ring ditch, 1990, in the north-east of the plot. Small quantities of fired clay and hammerscale were present in most of the samples, three produced a few sherds of pottery, and all produced some animal bone. Context 2377 included some burnt flint. All the flots included small quantities of fragmented charcoal, and three included charred cereals and weed seeds. Fragments of hazelnut shell were recovered from 2380. Two of these flots were submitted for botanical identification.

The two samples from fills 2381 and 2377 respectively produced a few charred cereal grains with either a barley or wheat (*Hordeum/Triticum* sp.) grain identified in 2381 although the presence of glume wheats was confirmed by the recovery of a glume base in 2377. Several seeds of wild plants, eg. dock (*Rumex* sp.), medick/trefoil (*Medicago/Trifolium* sp.) were also identified. Little comment may be made on the basis of this small amount of material with the grains possibly being charred during drying or cooking activities.

**Table 7:** Terrestrial and freshwater molluscs from the samples from Plot 145

Period	M-LIA	M-LIA	M-LIA	M-LIA	LIA	IA/A-S	IA/A-S	A-S	A-S	A-S	A-S	A-S	un-dated
Plot	145	145	145	145	145	145	145	145	145	145	145	145	145
context	238 2	238 1	238 0	237 7	199 4	194 2	194 6	197 7	198 8	230 9	235 2	233 3	193 0
sample	10	11	12	13	9	17	18	3	4	14	15	16	2
flot vol.(ml)	4	12	8	11	5	4	2	4	1	3	2	1	5
<i>Cochlicopa</i> sp.		1			2				+		1		
<i>Truncatellina cylindrica</i>		1											
<i>Vertigo</i> sp.										1			+
<i>Pupilla muscorum</i>			1	1					+	2	5	2	+
<i>Vallonia costata</i>	1	1	1							1			
<i>Vallonia excentrica</i>	2	2	1	2	1			+	+	2	3		+
<i>Vallonia</i> sp.	1	3	5	1	3	1	2			5		2	
<i>Cecilioides acicula</i>	+	+	+++	++	+++	++	++	++	+	++	++	++	++
<i>Vitrea</i> sp.					1								
<i>Oxychilus</i> sp.					8								
<i>Vitrina</i> sp.					1								
<i>Helix</i> sp.			1										
<i>Hygromia hispida</i>			1		5						3	1	
<i>Helicella itala</i>											3?		
<i>Helicella</i> sp.													+

+ 1-10 shells; ++ 11-50 shells; +++ 51-150 shells;

Period - key as in Table 1

In addition to the botanical remains from these fills the samples included bones of sheep, lamb and pig. A small vertebrate fauna of wood mouse (*Apodemus sylvaticus*), vole, snake, newt and frog or toad was also present. The terrestrial mollusc fauna from these samples is limited (Table 7) but the

taxa identified indicate an open country or calcareous grassland habitat with *Vallonia costata*, *V. excentrica* and *Pupilla muscorum* present.

A sample from the fill of the adjacent ring ditch (Fig. 00) which is assigned a late Iron Age date produced appreciably less archaeological material. A few tiny fragments of burnt clay, hammerscale, flint and bone fragments. Charcoal was present as were two unidentifiable fragments of charred cereal grain and a couple of charred weed seeds. Despite its close proximity to ring gully 1990 the limited snail fauna in this sample, while still including shells of the open country taxa, produced a greater number of shells of taxa associated with shaded or woodland habitats, *Vitrea* sp., *Vitrina* sp. and *Oxychilus* sp. (Table 7). Clearly at this period the immediate environment of the ditch was more shaded than earlier in the 1st millennium BC.

Two posthole fills were sampled (1942 and 1946). These were both undated and have been assigned to either the Iron Age or Anglo-Saxon period. They lacked archaeological finds and were very poor in environmental remains (Tables 2 and 3) producing only shells of *Vallonia* sp. and numbers of the burrowing blind snail *Cecilioides acicula*, a species that is likely to have burrowed from higher up in the sequence (Evans 1972). One or two charred weed seeds and an unidentified fragment of burnt bone were all that was recovered. Although occupation debris is low, the small size of the samples, only 2 litres, is such that this absence may be a factor of sample size.

Three rectilinear gullies (2308, 2310 and 2332) in the south east of the plot were sampled (Fig. 00). These have been assigned to the Anglo-Saxon period. All produced very small quantities of fired clay, two produced pottery fragments and unidentifiable bone fragments, and one five possible waste flakes of flint. They were all very poor in environmental finds and produced little charcoal, no sure evidence for charred cereal grains, one or two fragments of charred weed seed, a few snails and a vole bone. The terrestrial mollusc fauna is composed only of species of open country or intermediate habit implying a calcareous grassland environment, but the sample size is very small.

The backfills of two of the Anglo-Saxon graves, 1975 and 1987, were sampled. These produced no finds apart from three possible flint waste flakes, an oyster shell fragment and some human bone fragments from the burial. Charcoal was very infrequent and two unidentifiable fragments of charred cereal grain were the only recognisable remains in the flots, apart from a few unquantified shells of terrestrial molluscs of open country habit (Table 7).

An undated pit fill, 1930, produced an equally uninformative assemblage.

#### *Site 19, Plot 146: Iron Age ring gully, ditches and pits*

Only a single sample was collected from this site out of the butt end of a ditch and this has been dated to the late Iron Age. It produced a few grammes of fired clay, three sherds of pottery, hammerscale and a few tiny fragments of bone. Charcoal was relatively abundant in the flots which included a small number of charred cereal grains including several wheat grains, plus some wild plant seeds, medick/trefoil, indeterminate legumes (either cultivated or wild) and hedgerow/shrub plants, eg. blackberry/ raspberry (*Rubus fruticosus/idaeus*) and hazelnut shell fragments (Table 8). Charred thorn and stem fragments were also present in the sample. This material may represent the residues of plant material used as tinder although some of the wild plants may reflect the character of the immediate environment. The few molluscs recovered from this sample would suggest a grassland environment (Table 7).

#### *Site 21, Plot 147-9: Romano-British enclosure and medieval field systems*

Two samples were taken from the secondary and tertiary fills of the Romano-British enclosure in this plot. Neither produced any significant archaeological finds, just a few fragments of unidentifiable bone. The flots were appreciably richer and constituted the richest samples recovered during the pipeline excavations, particularly since the sample size was only 5 litres for each. Although charcoal

was not abundant they contained very large quantities of charred plant material consisting mainly of cereal grains with smaller amounts of cereal chaff and weed seeds. The botanical composition of the two samples was broadly similar although the sample from fill 005 contained more plant material (Table 8).

Free-threshing bread wheat was the best represented wheat in both samples although the presence of the glume wheat spelt (*Triticum spelta*), was confirmed both by the presence of grains and glume bases and a single spikelet fork in sample 44. Other wheat chaff included spikelet bases and rachis fragments. The majority of the wheat grains, however, were too poorly preserved for further identification. Barley was equally well represented in the samples with the presence of hulled straight and twisted grains showing the presence of six row hulled barley. Barley rachis internodes were also present in both samples. Smaller quantities of oat grains (and one oat awn in 44) were present in both samples although the absence of oat floret bases meant that it was not possible to establish whether these were cultivated or wild oat or a mix of the two. Hundreds of the cereal grains and fragments were too poorly preserved for identification.

The charred weed seeds in the two samples included several grasses, bromes and rye-grass (*Lolium* spp.); bromes are characteristic of cereal storage deposits as being of a similar size to the grains, they are difficult to separate other than by hand sorting. Corncockle (*Agrostemma githago*) is another characteristic arable weed, a large seed which is also found in storage deposits. Other weeds represented in the samples were docks and *Polygonum* species which included black bindweed (*Fallopia convolvulus*), a plant that grows in waste places, arable land and gardens. Some of these seeds may be from weeds imported with the cereals or from plants growing close-by.

The cereals represented in these two samples, bread wheat, spelt wheat and barley, have all been recovered from both urban and rural sites in Roman Britain. Spelt wheat and barley are usually the best represented grains during this period, while free-threshing wheat is less usual, and abundant at very few sites (Greig 1991, 309). Oats are rarely found in abundance and in this instance probably represent weeds of the other cereals.

The two plant assemblages are dominated by cereal grains from the final stages of crop cleaning which may have been charred during drying or cooking or from the accidental burning of part of a grain store. The presence of crop-processing debris, however, which included by-products (rachis fragments and weed seeds) from the early stages of crop-processing, suggests that the site was probably producing its own crops. The relative dearth of other finds may be due to the small sample size but it is possible that the charred material reflects a specific dump from activities taking place near to this part of the enclosure ditch.

The cereal grains may have been used for bread, porridge, gruel and cakes (Wilson 1991, 234). The Romans made a number of different types of bread, for example, *artophites*, a light leavened bread made from the best wheat flour, probably bread wheat. A gruel, known as *puls* or *pulmentus*, was made from barley or spelt wheat, which was roasted, pounded, and cooked in water to make a porridge, similar to Italian polenta (Renfrew 1985, 22). While wheat was probably used exclusively for human food, barley may also have been used for animal fodder, particularly for horses, and brewing.

Table 8: The charred plant remains from the Hatton to Silk Willoughby Pipeline, Plots 135- 150

	Plot	135	145	145	146	147-9	147-9	150
	Period	IA	M-LIA	M-LIA	LIA	RB	RB	IA
	context	1806	2381	2377	2458	5	4	2551
	sample	42	11	13	19	44	45	20
<b>Cereal grains</b>								
<i>Triticum spelta</i> L.	spelt wheat					2		
<i>T. cf. spelta</i>	?spelt wheat					8	1	
<i>T. dicoccum/spelta</i>	emmer/spelt wheat					3	1	
<i>T. aestivum</i> s.l.	free-threshing wheat					24	5	
cf. <i>T. aestivum</i> s.l.	?free-threshing wheat	1				39	4	
<i>T. aestivum/spelta</i>	bread/spelt wheat					4	3	
<i>Triticum</i> spp.	wheat				4	77	19	2
<i>Hordeum sativum</i> L.	barley					136	35	
cf. <i>H. sativum</i>	?barley	1				29	11	1
<i>Hordeum/Triticum</i> sp(p).			1					
<i>Avena</i> sp(p).	oat					36	5	
indeterminate cereals	indet. grains > 2mm	5	2		9	728	213	8
indeterminate cereals	indet. grain frags <2mm					+++ +	+++ +	
cf Cerealia indet.	?indet. grains			1				
<b>Cereal chaff</b>								
<i>Triticum spelta</i> L.	spelt wheat spikelet forks					1		
<i>Triticum spelta</i> L.	spelt wheat glume bases					13		
<i>Triticum</i> spp.	wheat spikelet bases					25	6	
<i>Triticum</i> sp(p).	wheat glume bases	1		1		33	8	
<i>Triticum</i> spp.	wheat rachis fragment					15	2	
<i>Hordeum</i> spp.	barley rachis fragments					18	4	
<i>Avena</i> sp.	oat awn fragment					1		
<b>Other plants</b>								
cf Ranunculaceae indet.	-				1			
<i>Agrostemma githago</i> L.	corncockle						1	
Chenopodiaceae indet.	-		1					
<i>Vicia/Lathyrus/Pisum</i> sp.	vetch/vetchling/pea					1		
<i>Medicago/Trifolium</i> sp.	medick/trefoil		1		1			
Fabaceae indet.	indet. legumes	1			2			
<i>Rubus fruticosus/idaeus</i>	blackberry/raspberry				1			
<i>Fallopia convolvulus</i> L.	black bindweed					12	3	
<i>Polygonum</i> spp.	-						3	
<i>Rumex acetosella</i> agg.	sheeps sorrel	2						

<i>Rumex</i> spp.	docks		1	1		14		
Polygonaceae indet.	-				1	11		
<i>Corylus avellana</i>	hazel				+			
Cyperaceae indet.	-					3		
<i>Lolium</i> spp.	rye-grass						3	
<i>Bromus</i> spp.	brome(s)					9		
cf. <i>Bromus</i> spp.	?brome(s)						3	1
<i>Bromus/Avena</i> spp.	brome/oat					6		
Poaceae indet.	indet. grasses			1		8	2	
indet. stem fragments	-				+			
indet. thorn fragments	-				++			
indet plant items	-			+	++	++	+	
charcoal fragments		x	x	x	x	x	x	x

Period: as in Table 1

Frequency: +=1-10 items; ++=11-50 items; +++=51-150 items; ++++=250+ items

x=present

The other environmental evidence is more limited. The snail fauna suggests an open country/grassland environment, although a single shell of *Planorbis leucostoma* in the tertiary fill possibly indicates that the enclosure ditch was seasonally water filled at some times during its period of filling. Bones of field vole, also a grassland species, were found in both samples.

#### *Site 22, Plot 150: Iron Age ditches, gullies, pits and postholes*

A single sample from the fourth fill of the butt-end of Iron Age ditch 2516 was sampled. It produced a few tiny fragments of fired clay, three sherds of pottery, a fragment of mussel shell and 37 grammes of animal bone, including fragments of sheep or goat. The residue also included a number of fire-cracked stones.

The flot was relatively rich in charcoal and charred material producing a small number of cereal grains including wheat and ?barley and just one ?brome (cf. *Bromus* sp.) seed, a characteristic weed of stored cereal deposits. This material was probably derived from human activities close-by and was dumped along with the other remains in the sample.

The snail fauna was relatively rich (Table 7) and shows a mix of open country and woodland taxa with the former most abundant. The ditch was clearly at least seasonally water filled since the most numerous taxa is *Planorbis leucostoma*, a species characteristic of small ponds and bodies of water that dry up (Macan 1976), and a shell of the aquatic snail *Lymnaea peregra* is also present.

#### Conclusions

In general the results from the samples were fairly poor. The level of archaeological debris in many of the sampled features was low and apart from Plot 147-9 and Plot 20, both of which produced significant environmental assemblages, the environmental material allowed little interpretation. There is a general tendency for the terrestrial mollusc faunas to indicate open country/grassland habitats around the sampled features, and apart from the medieval roadside ditch in Plot 71 and the silting in the Iron Age ring gully in Plot 145 there was little evidence for shaded or woodland habits on any of the sampled sites. The absence of aquatic molluscs from most of the samples probably suggests that the sampled areas were reasonably well drained and ditches and features did not retain water for long. The butt end of ditch 2516 on Plot 150 appears to be the only feature with a significant freshwater element although the waterlogged sediments at the base of the well or pit on Plot 08 contained water fleas, and have clearly remained waterlogged since burial.

The samples were perhaps too small for a serious consideration of the density of material within them but the quantity of debris in the mid-late Iron Age ring ditch 1990 in Plot 145, with evidence of hammerscale and burnt clay, might suggest that this feature could represent a structure rather than a

barrow. A sample size of at least 20 litres, and preferably 30 litres, is more appropriate for samples in which charred remains are likely to represent the bulk of the environmental evidence.

The fill of Roman-British pit 4286 in Plot 20 has an assemblage clearly related to smithing activity on the site and the charcoal evidence suggests a specific selection of young grown (up to 17 years), some possibly coppiced, oak for the manufacture of the charcoal used to fuel this smithy. The lack of other charred material in this sample and the quantity of slag and vitrified hearth lining (see Cowgill) supports the inference that the charcoal is of industrial, rather than domestic, origin.

The charred cereal evidence is too sparse in all the samples except those from Plot 147-9 to allow any discussion concerning changes in the types of cereal cultivated since the middle of the 1st millennium BC, although spelt and free-threshing wheat and barley have been identified while no positive identifications of emmer were made. The enclosure ditch 003 at this latter site has produced the only evidence that can confidently be used to suggest the early stages of cereal crop processing and therefore local cultivation and this deposit may reflect both the specific discard of burnt waste and the accidental charring of a cleaned crop. The density of remains in these samples is extremely high, over 200 items per litre in sample 44, and must represent a specific discard event or accident.

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#### Bibliography

- Cameron, R.A.D. and Redfern, M. 1976 *British Land Snails*. Linnean Soc. Synopses of the British Fauna No. 6
- Clapham A., Tutin T., and Moore D. 1987, *Flora of the British Isles*. 3rd edition. Cambridge University Press.
- Corbet, G.B. and Southern, H.N. (eds) 1977 *The Handbook of British Mammals*. Blackwell Scientific Publications, Oxford.
- Edlin, H.L. 1949 *Woodland Crafts in Britain*, Batsford.
- Ellis, A.E. 1969 *British Snails*. Clarendon Press reprint, Oxford.
- Evans, J.G. 1972 *Lands Snails in Archaeology*, Academic Press
- Greig J. 1991, The British Isles, in W. van Zeist, K. Wasylikowa, K-E. Behre (eds) *Progress in Old World Palaeoethnobotany*, Rotterdam, 229-334.
- Macan, T.T. 1976 *A key to the British Fresh- and Brackish-water Gastropods*, FBA Scientific publication No. 13.
- Moffet L., Robinson M. & Straker V. 1989, Cereals, fruits and nuts - charred plant remains from Neolithic sites in England and Wales and the Neolithic economy, in A. Miles, D. Williams & N. Gardner (eds) *The Beginnings of Agriculture*, BAR International Series, 496, 243-261.
- Rackham, D.J., Gale, R. and Giorgi, J.A. 1998 The Environmental Archaeology of Lobs Hole, Stevenage. In Hunn, J. Excavations at Lobs Hole, Stevenage. Unpublished.
- Renfrew J. 1985, *Food and Cooking in Roman Britain*. History and Recipes (English Heritage).
- Tutin, T.G., Heywood, V.H. et al 1964-80 *Flora Europaea*, Cambridge University Press.
- Williams, D. 1973 Flotation at Siraf, *Antiquity*, 47, 198-202
- Wilson C.A. 1991 *Food and Drink in Britain. From the Stone Age to Recent Times*. Penguin. Harmondsworth.

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# **APPENDIX 13**

**1998 Evaluations**

**HATTON TO SILK WILLOUGHBY  
PROPOSED NATURAL GAS 1050MM PIPELINE  
LINCOLNSHIRE**

**ARCHAEOLOGICAL FIELD EVALUATION  
REPORT  
(STAGE 4)**

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## 1. Summary

1.1 Definitions : In this Evaluation Report, the following definitions will apply:

<u>The Client</u>	Laing Engineering Limited and TransCo.
<u>The Contractor</u>	Network Archaeology Ltd.
<u>The Curator</u>	Lincolnshire County Archaeologist.
<u>The Landowner</u>	The land interests as defined on such maps and accompanying documentation as may be supplied by the Client for the purposes of such identification.
<u>The Brief</u>	TransCo's general Brief for Archaeological Field Evaluation.

- 1.2 This document constitutes the Field Evaluation Report, detailing the programme of trial-trenching on thirteen areas (including Car Dyke), along the Hatton to Silk Willoughby natural gas pipeline. No Field Evaluation report was produced prior to construction due to the unexpected early commencement of works. All mitigations and recommendations were therefore discussed verbally and acted upon as construction progressed. Where little or no archaeology was encountered only a brief resume and location has been given. The trial trenches produced two positive archaeological sites (main report Site 19, Plot 146 and Site 21, Plots 147-149). The works adjacent to the scheduled part of Car Dyke are discussed within a separate document (Network Archaeology, Report No 133).
- 1.3 All statements and opinions presented in this report are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the authors of the report for any error of fact or opinion resulting from data supplied by any third party, or for any loss or other consequences arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

## 2. Project Background

- 2.1 Initially the pipeline was intended for construction in 1994 therefore a series of archaeological investigations including fieldwalking and limited geophysics were carried out prior to this (Brooks, 1994). A new 1998 construction date was then issued which meant that further archaeological works were required. These comprised an Archaeological Desk-Based Assessment (ADBA, Network Archaeology 1997); a field survey (Network Archaeology, December 1997) which consisted of fieldwalking, a field-reconnaissance survey and a geophysical survey along the pipeline length comprising a full magnetic scan of all areas, followed by more detailed gridded survey where appropriate. The geophysical survey was carried out in January and February 1998 (GSB Prospection 'Geophysical Survey Report 98/07'). The combined results of all these surveys led to the recommendation that thirteen areas would require further investigation by trial-trenching in advance of construction. Network Archaeology Ltd were commissioned by Laing Engineering Ltd in February 1998 to carry out this programme of works. Further details of all pre-evaluation investigations can be found within the main report.

- 2.2 The thirteen sites recommended for Field Evaluation were within Plots 15, 39, 45, 57, 74, 103, 110, 129, 130, 144, 146, 149 and at Car Dyke SAM (Figure 1). Each site will be discussed in detail later.
- 2.3 In February 1997, Network Archaeology Ltd were commissioned by Laing Engineering Ltd (the contracting firm commissioned by TransCo to construct the pipeline) to carry out the Stage 4 Field Evaluation of the thirteen sites chosen in the field survey report for trial-trenching. The field evaluations commenced on February 6th 1998 and were completed on the 17th March 1998. Right of Way construction commenced simultaneously.

### 3. Objectives of the Field Evaluation

#### 3.1 These were:

- To gather sufficient information to establish the presence or absence, extent, character, quality and date of any archaeological remains at each of the thirteen sites;
- To assess the overall value/importance of each site;
- To assess the potential impact of the pipeline on each site;
- To provide information for the design of site specific mitigatory measures;
- To provide sufficient information to determine the need for open area excavation at each site;
- To produce a report which addressed the above.

### 4. Methodology

#### 4.1 *Machining*

- 4.11 All trenches were accurately surveyed in and clearly marked out before trenching.
- 4.12 All machine work was supervised by a suitably experienced archaeologist.
- 4.13 Trenches were opened with a 360 degree tracked excavator fitted with a 1.8-2.0m wide, toothless ditching blade, or where this was not possible, a 360 degree mini-excavator fitted with a 1.0 - 1.2m wide toothless ditching bucket.
- 4.14 The machine removed topsoil/ploughsoil (and then any subsoil deposit, as necessary), down to the surface of the first significant archaeological deposits, or to solid geological or drift basal deposits, whichever was reached first.

#### 4.2 *Hand-excavation*

- 4.21 Trenches were normally cleaned by hand, paying careful attention to any archaeological deposits. In some cases only a sample area was hand cleaned.
- 4.22 Sufficient of every archaeological deposit was hand-excavated (in a controlled and stratigraphic manner), in order to meet the stated objectives (Section 4).

- 4.23 After hand-excavation and recording, trenches were backfilled by machine, replacing any subsoil first, before the topsoil.

#### 4.3 *Site-Specific Strategies*

- 4.31 The locations of the trenches for each site are shown in the attached maps (Figures 2 to 24), which are extracts from data processed by GSB (*Geophysical Survey Report 98/07*). All trenches were at least one machine-bucket wide. The numbers, positions and lengths of trenches were largely determined with the following considerations in mind :

- Investigating the geophysical anomalies which had accompanying evidence to believe that they may be archaeological *i.e.* supporting evidence from the ADBA;
- Investigating the most positive and a representative enough sample of the geophysical anomalies to determine which (if any) were archaeological in origin;
- Investigating areas that were highlighted in the ADBA but did not show very positive results on the geophysical survey.

### 5. Field Records

- 5.1 Each of the thirteen sites under evaluation was numbered with the Construction Plot, *e.g.* Plot 149. Each of the excavated trenches within this plot were numbered sequentially with a two-digit code, in the order in which they are opened. Together with the project code and the site number, this provided a unique reference for each trench. Thus, the reference for the second trench opened at Plot 149 was be : HWP 98 / 149 / 02.

- 5.2 Each site was allotted a block of three-digit context numbers for recording purposes.

- 5.3 A system of *pro-forma* record sheets with appropriate fields was used for on-site recording. The system has been developed by Network Archaeology and is in a format that would be acceptable to the IFA.

- 5.4 A written record was made of all archaeological and natural deposits within the trenches.

- 5.5 All planning was carried out by hand.

- 5.6 A full drawn record was made of all archaeological deposits, by trench, and included:

- OS base plans (1:2500 scale) showing the locations of the trenches at each site;
- Trench plans (at 1:20 or 1:50 scale, as appropriate), showing all archaeological and natural deposits;
- Detailed plans (at 1:20 scale) of all excavated features (if trench plans have been drawn at 1:50 scale);
- Section drawings (at 1:10 or 1:20 scale, as appropriate) of all excavated features.

- 5.7 Multi-context recording was used.

- 5.8 Detailed records (drawn and written) were kept of the depth below ground level of archaeological and/or basal deposits across each site under investigation, so that the volume

of overburden could be calculated for any subsequent stages of work which might have been required.

- 5.9 The stratigraphy of all trenches was recorded, even in the event that no archaeological deposits were present.
- 5.10 A full and proper photographic record (35mm format) in monochrome and colour was taken of all archaeological deposits. This normally included overall shots of each site, work in progress, overall trench shots and detailed feature shots. A suitable scale, context number and north arrow (if appropriate) appeared in each photograph.

## 6. Finds Policies

- 6.1 All retained artefacts were cleaned, (marked where appropriate), conserved and packaged in accordance with the guidelines of Lincoln Museum.
- 6.2 *Pro-forma* finds record sheets were completed for all retrieved artefacts.
- 7.8 All artefacts have been assessed by relevant specialists and the results included within the overall report for the pipeline. These specialists comprised: Maggi Darling (Iron Age and Roman Pottery), Alan Vince (Medieval pottery), Jane Cowgill (slag and small finds: coins, glass *etc*), David Bonner (flint), Alan Vince (burnt and fired clay), Mark Allen (ceramic building material), Richard Moore (animal bone) and Dr James Rackham (environmental sampling).

## 7. Results

The following results are presented in Construction Plot order, beginning at the northern end of the pipeline route (Figure 1). The areas of evaluation in Plots 146 and 149 subsequently became parts of larger 'sites' during construction (Sites 19 and 21, see main report). These two areas will therefore be discussed in detail within the text of the main report and only a brief summary will be included here. The remainder of the information, including all trench plans, is stored as part of the Site Archive.

### **Plot 15 (TF 1710 7250)**

This site lies immediately west of the present day village of Gautby and is situated in an area of Jurassic boulder clays. The village was identified during the Archaeological Desk-Based Assessment as a Shrunken Medieval Village with associated earthworks (NAL., Report No. 103, 1997). Faint traces of ridge and furrow earthworks were visible during the field reconnaissance survey within Plot 15 but these lay at the southern end of the field outside the pipeline easement.

A detailed magnetic survey was conducted over a 40m by 60m grid (Figure 2), which detected several linear trends, caused by ridge and furrow, and six pit-like anomalies (Figure 3). Because of the close proximity of cropmark features and the strength of the geophysical readings it was decided to investigate further by the opening of two evaluation trenches, measuring 4m by 10m, over four of these anomalies (Figure 3).

### **Trench 1 (TF 17170 72525)**

Topsoil stripping revealed a number of features, the majority being interrupted plough scrapes which followed the orientation of the surviving ridge and furrow earthworks outside the easement. Communications with the landowner confirmed that this field, currently under pasture, had not been ploughed within living memory.

Within the topsoil there were frequent fragments of 'modern' brick and building debris. A substantial 'modern' brick-built structure was also partially uncovered at the western end of the trench. The visible structure measured approximately 1.25m by 1.0m and consisted of three brick courses set with mortar and laid to a depth of two bricks beneath the clay natural. The bricks formed a wall around a central hollow. From mortar remains on the surface of the bricks it was clear that they had previously continued above the level of the natural clay but had subsequently been demolished. The interior of the structure appeared to have been filled with building debris, including brick and slate roofing tile fragments. It was not possible to say whether this rubble formed an integral part of the structure or was a by-product of its destruction. A glazed late 19th/early 20th Century drain ran from the structure down slope toward the south-east. It was not possible to say how far the structure extended beyond the trench to the west.

Interpretations for the brick structure included either the base for a water trough or the foundations of a small building, such as an early toilet. Information from local residents suggested the previous existence of a late 19th century brick-built dwelling situated approximately 100-150m to the west of the trench. Its garden extended alongside the road, the remains of which form the thin strip of land evident as Plot 15A on the location map (Figure 2). It is thought that this was pulled down sometime between the wars. It is probable that our structure was somehow associated with this building.

### **Trench 2 (TF 17180 72527)**

This trench also contained frequent plough scrapes identical to those found in Trench 1 and assumed also to be the remains of ridge and furrow. There were no further features within the trench.

As in Trench 1 there were frequent 'modern' building fragments within the topsoil and it was probably these which produced the pit type anomalies.

**Plot 39 (TF 14853 66809)**

This site is situated south-east of Abbey Warren Farm, Southrey. During the Archaeological Desk-Based Assessment (NAL., Report No. 103, 1997) cropmarks of a possible rectilinear enclosure were noted approximately 250m from the pipeline route (PRN 42959, TF 1534 6679). The area has also been suggested by locals as being the possible site of a WW2 plane crash.

A detailed magnetic survey was conducted over a 40m by 80m grid (Figure 4). The data was dominated by weak, diffuse anomalies throughout the survey area characteristic of natural variations in the topsoil/subsoil and pockets of magnetic gravels. Against this background of 'natural noise' were several more discrete responses which were interpreted as being of possible archaeological significance (Figure 5). The survey results seemed to suggest the possibility of a small enclosure.

This combination of factors led to the decision to open up one 2m by 30m evaluation trench which would twice dissect the potential archaeological feature, as well as the area enclosed by it. No archaeological features were visible within the trench although the clay natural appeared disturbed in places, probably as a result of clearance. There were also irregular patches of peat. It was probably these natural phenomenon which produced the geophysics results.

**Plot 45 (TF 13839 64820)**

A detailed magnetic survey was conducted over a 40m by 180m grid within Metheringham Fen (Figure 6). Diffuse natural type responses were present throughout the grid but a more discrete, archaeologically promising, linear anomaly was noted towards the centre of the grid (Figure 7).

A 2m by 15m evaluation trench was opened over the potential linear but no features of archaeological significance were detected. The natural, however, was a mix of clay and silt deposits, which may explain the geophysical anomalies recorded.

**Plot 57 (TF 13050 62818)**

This site is situated in Blankney Fen. No evidence was found during the ADBA or the fieldwalking and reconnaissance stages, although magnetic scanning located a magnetically enhanced area which had the potential to be archaeological.

A detailed geophysical survey was conducted within a 40m by 60m grid (Figure 8). Several diffuse responses were apparent whose form suggested they had a natural in origin. Within these natural responses were more well defined, coherent curvilinear anomalies which were interpreted as being of possible archaeological interest (Figure 9).

One 2m by 36.5m trench was opened over three of the possible curvilinear anomalies to an average depth of 0.55m. The anomalies proved to be geological in origin, including a proportion of iron staining which could have produced positive magnetic results.

**Plot 74 (TF 11556 60600)**

This site is situated to the north of Martin village. The ADBA (NAL., Report No. 103, 1997) found evidence of possible ditch cropmarks approximately 20m from the pipeline in this location (DBA.BJ, TF 1150 6065-TF 1180 6050).

A detailed magnetic survey was conducted within a 40m by 100m grid (Figure 10). Weak parallel linear trends on two roughly perpendicular alignments were visible in the data. These were interpreted as probably agricultural in origin. Elsewhere within the survey area, several weak linear anomalies were also noted. As these were on a different alignment they were interpreted as being of possible archaeological significance. Several pit type responses were also detected (Figure 11).

A 6.5m by 22m trench was opened to investigate both the supposed agricultural and archaeological linears and one of the pit type anomalies (Figure 11). On excavation the trench was dominated by a slight geological hollow running the length of the trench. There were also a number of plough scrapes which followed the alignment of the potential archaeological anomalies and two land drains matching the alignment of the 'agricultural' features. There was no visible feature that corresponded with the pit type readings. A single post-medieval dish fragment was recovered from the topsoil within the trench.

#### **Plot 103 (TF 11060 55910)**

This site lies to the north-east of Rowston Grange Farm. The Archaeological Desk-Based Assessment (NAL., Report No. 103, 1997) recorded significant archaeological features to the east: a Neolithic Long Barrow some 400m away (SAM 27900, TF 1155 5559), cropmarks of a possible prehistoric barrow cemetery approximately 200m (PRN 60312, TF 1172 5558) and Catley Medieval Priory some 500m from the pipeline route (SAM 251, TF 1185 5560).

Magnetic scanning observed an increased magnetic response in this area which led to a detailed geophysical survey being carried out within a 40m by 60m grid (Figure 12). This detailed survey detected a number of linear trends and pit-like anomalies (Figure 13).

The linear anomaly within the evaluation trench was found to coincide with the location of an old field boundary/drainage ditch of relatively modern date and the pit-like anomalies proved to be natural pockets of sands and gravels.

#### **Plot 110 (TF 11190 53440)**

This site lies at the junction of Digby and Ruskington Fens. No desk based or fieldwalking sites were noticed. However, during scanning a strong linear magnetic response was detected. Because of this a detailed geophysical survey was carried out within a 40m by 60m grid (Figure 14).

Detailed survey identified a broad curvilinear anomaly in the northern half of the grid and numerous pit-like anomalies (Figure 15). A 4m by 25m trench was opened up to investigate the linear and two of the pit-type anomalies which proved to be geological. The natural consisted of clay with bands of siltier deposits which may have affected the readings.

#### **Plots 129 and 130 (TF 12830 48840 and TF 12590 48650)**

These plots are situated to the south of the River Slea. The Archaeological Desk-Based Assessment (NAL., Report No. 103, 1997) noted the supposed presence of an Anglo-Saxon cemetery in the vicinity of Plot 129 (DBA.DB, TF 129 489). As its exact location is unknown it was decided to include Plot 130 as an additional high risk area.

Scanning in Plot 129 showed an increase in the number of small scale ferrous anomalies and a single pit-type response. A detailed survey over a 40m by 240m grid was then conducted (Figure 16). This detected a number of small pit-type anomalies, although many of these were interpreted as possible products of more deeply buried ferrous objects. While such material is usually assigned a modern origin, in this case an archaeological interpretation, such as iron grave goods, could not be ruled out (Figure 17).

Scanning also detected a single broad pit type anomaly in plot 130. A detailed survey over a 40m by 80m grid was then carried out (Figure 16). This detected the same broad pit-type anomaly around the centre of the sample and several other possible pits (Figure 18). Whilst natural or modern origins for

these responses could not be ruled out it was still felt necessary, in light of the supposed Anglo-Saxon cemetery, to make further investigations.

A series of four trenches measuring approximately 4m by 14m (3) and 4m by 5m (1) were opened in Plot 129. A further two trenches measuring 4m by 10m and 5.5m by 6m were opened in Plot 130. All these trenches were located over one or more pit-type anomalies (Figures 17 & 18). Following removal of between 0.30 - 0.35m of topsoil a silty clay 'natural' was encountered in all trenches. Apart from modern land-drains no features could be seen to account for the readings. It was later found during construction that this 'natural' represented a thick layer of approximately 0.20 - 0.30m of silty clay deposits overlying the natural boulder clay. These deposits probably represent riverine flood deposits from the nearby Sleas. A number of animal bones, including an entire sheep skeleton, were found sealed within these deposits with no apparent cuts.

Following the removal of these flood deposits, prior to trenching, it became apparent that a number of features had been sealed beneath it. These took the form of irregular, shallow features, which had the appearance of tree bowls, possibly associated with a phase of land clearance. There were no other features visible which might explain the pit type data and the magnetic responses are therefore considered to be geological.

#### **Plot 144 (TF 10754 45977)**

This site lies to the north-east of the village of Kirkby la Thorpe. The Archaeological Desk-Based Assessment noted the presence of a substantial parallel ditch complex cropmark approximately 150m from the proposed route (NAL., Report No. 103, 1997, PRN 60590/60591, TF 111 455). It was considered possible that this feature may have continued across the pipeline route.

Magnetic scanning indicated several broad anomalies of potential interest. It was, therefore, decided to undertake a detailed survey over a 40m by 100m grid (Figure 19). The data was once more dominated by broad, strong anomalies. Although a natural origin was possible, it was not inconceivable that they could be archaeological (Figure 20). In order to investigate two of these anomalies, and to ensure the cropmark did not continue, a 2m by 50m trench was opened up within the grid. This trench revealed a variable natural of mixed clays and sandy gravels, which were responsible for the anomalous readings.

A single linear feature [009] recorded running approximately north-east to south-west across the trench and not indicated by the geophysical survey (Figure 20). This feature comprised a ditch measuring 1m wide and 0.45m deep. It appeared to have been re-cut at least once, the final phase of deposition containing fragments of 16th and 17th century pot. It is likely that this feature represents an abandoned field boundary of that date.

#### **Plot 146 (TF 10516 45528)**

This site lies to the east of the village of Kirkby la Thorpe on a band of Sleaford sands and gravels. One fragment of Romano-British pot and two fragments of medieval pot were recovered from this plot during fieldwalking (NAL., Report No. 111., 1997). No records were found during the Archaeological Desk-Based Assessment to indicate the presence of archaeological activity in this immediate area (NAL., Report No. 103, 1997).

Magnetic scanning located several isolated potential targets towards the central and southern end of the plot. Detailed grids measuring 40m by 80m and 40m by 60m were surveyed and a concentration of pit type anomalies were noted in the central area (Figure 21). It was possible that this data could have a natural or modern cause but due to the density of readings it was decided to open up a 4m by 14m trench to investigate (Figure 22). Due to a misunderstanding of the figures provided by the

geophysicists, the trench was not opened up directly above the anomalies, as intended, but instead dissected a group of three 'pits' on its northern edge.

These three anomalies turned out to represent a single curvilinear gully [003]/[007], partially exposed along the trench edge. This gully contained two fills: (008)/(005) and (004)/(006). Fills (008)/(005) contained no artefactual remains whilst (004)/(006) contained 27 sherds of pottery (Appendix 3), seven fragments of animal bone (sheep, cattle and horse bone, and cow and sheep-sized bone) (Appendix 7), and 72 fragments of triangular loom weight (Appendix 6). The pot is exclusively Late Iron Age in date, with one fragment possibly from a possible pedestal vessel. The bone came from both sheep and cattle and included a sheep radius and tibia, cattle mandible and teeth and several small unidentified fragments of bone including five which were burnt. This combination of finds suggested settlement activity.

A number of other features were also investigated but most were interpreted as being natural in origin, either the result of root and animal disturbance or else due to geological variations. Of these there were two features, [010] and [030], both linear in form, which were found, during construction, to continue outside the evaluation trench area and proved to be contemporary with the curvilinear gully [003]/[007] within the evaluation trench.

As few features appeared to be lying within this evaluation trench it was felt that the area could be dealt with during the construction watching brief. Details of these excavations can be found in full within the main body of the report in Site 19.

#### **Plot 149 (TF 10360 45104)**

This site lies to the south-east of the village of Kirkby la Thorpe on a band of Sleaford sand and gravels. During the Archaeological Desk-Based Assessment a concentration of cropmarks, indicative of settlement and associated field systems were located either side of the pipeline route (NAL., Report No. 103, 1997, RCHME TF 107 448).

These cropmarks were recorded in the Lincolnshire Sites & Monuments Record as being medieval in date, although there was also the suggestion of a Romano-British site somewhere nearby. Unfortunately the field was not available for study during the fieldwalking survey so neither claim could be substantiated.

A detailed magnetic survey was conducted within a 40m by 80m grid (Figure 23). This detected two anomalies forming a rectilinear pattern and extending to the northern edge of the grid (Figure 24). These features highlighted the presence of possible archaeological deposits. A further broader, linear response was recorded extended south-eastwards from the first, on roughly the same alignment (Figure 24). Interpretation of the latter was more difficult due to the diffuse nature of the response and a natural origin was considered equally likely.

In order to investigate both the probable and possible linear features an evaluation trench, measuring 2m by 10m, was opened up over each feature (Figure 24). Trench 01 produced no archaeological features but indicated the presence of substantial subsoil deposits overlying a mixed and undulating sand and gravel natural. The diffuse linear anomaly within this trench was the result of these geological variations.

Due to a misunderstanding of the geophysicists measurements, Trench 02 was placed 4m further east than had been intended and, therefore, only partially dissected the feature associated with the strong rectilinear anomaly. However, this was sufficient, to reveal a substantial steep sided ditch [003], approximately 0.60m deep and potentially 1.5 - 2m wide. It contained charred plant rich fills (006), (005) and (004). Primary fill (006) contained no finds whilst (005) contained a single sheep's tooth

and a shell-gritted pottery sherd of possible Iron Age but more likely Roman date. Fill (004) produced eight fragments of animal bone, a fragment of Romano-British *tegula* or brick and ten pottery fragments of mixed date possibly late Iron Age but mainly 3rd century. The animal bone consisted of partial cattle scapula, radius and metacarpal as well as three cow-sized shaft fragments and one sheep-sized rib fragment. Two sherds of samian ware from the ditch were produced in Central Gaul during the second century AD.

In addition to these finds a further fragment of unidentified Romano-British brick/tile fabric, a Late Neolithic/Bronze Age scraper and six fragments of animal bone were recovered from the subsoil immediately above the ditch.

Environmental samples were also taken from the fills (004) and (005) of this ditch (Sample Nos. 44 & 45), providing the richest samples taken from the whole pipeline. The samples taken from both fills contained a large amount of charred plant remains, consisting mainly of cereal grains, with smaller amounts of cereal chaff and weed seeds (Appendix 12).

Free-threshing bread wheat was best presented, with glume wheat also present, although the majority of the wheat grains were too poorly preserved for further identification. Large quantities of barley, especially six row hulled barley, and some oat grains were present, although the oats are more likely to be wild, rather than cultivated.

The weed seeds included bromes and corncockle, both of which are characteristic of cereal storage deposits. Other weeds included black bindweed, which grows in waste places, arable land and gardens.

The plant remains within the samples are dominated by cereal grains from the final stages of crop cleaning which may have been charred during drying or cooking, or from the accidental burning of part of a grain store. Crop-processing debris was also present within the samples, suggesting that the site was probably producing its own crops. It is possible, from the lack of other finds within the samples, that the charred material reflects a specific dump from activities taking place, near to this part of the enclosure ditch.

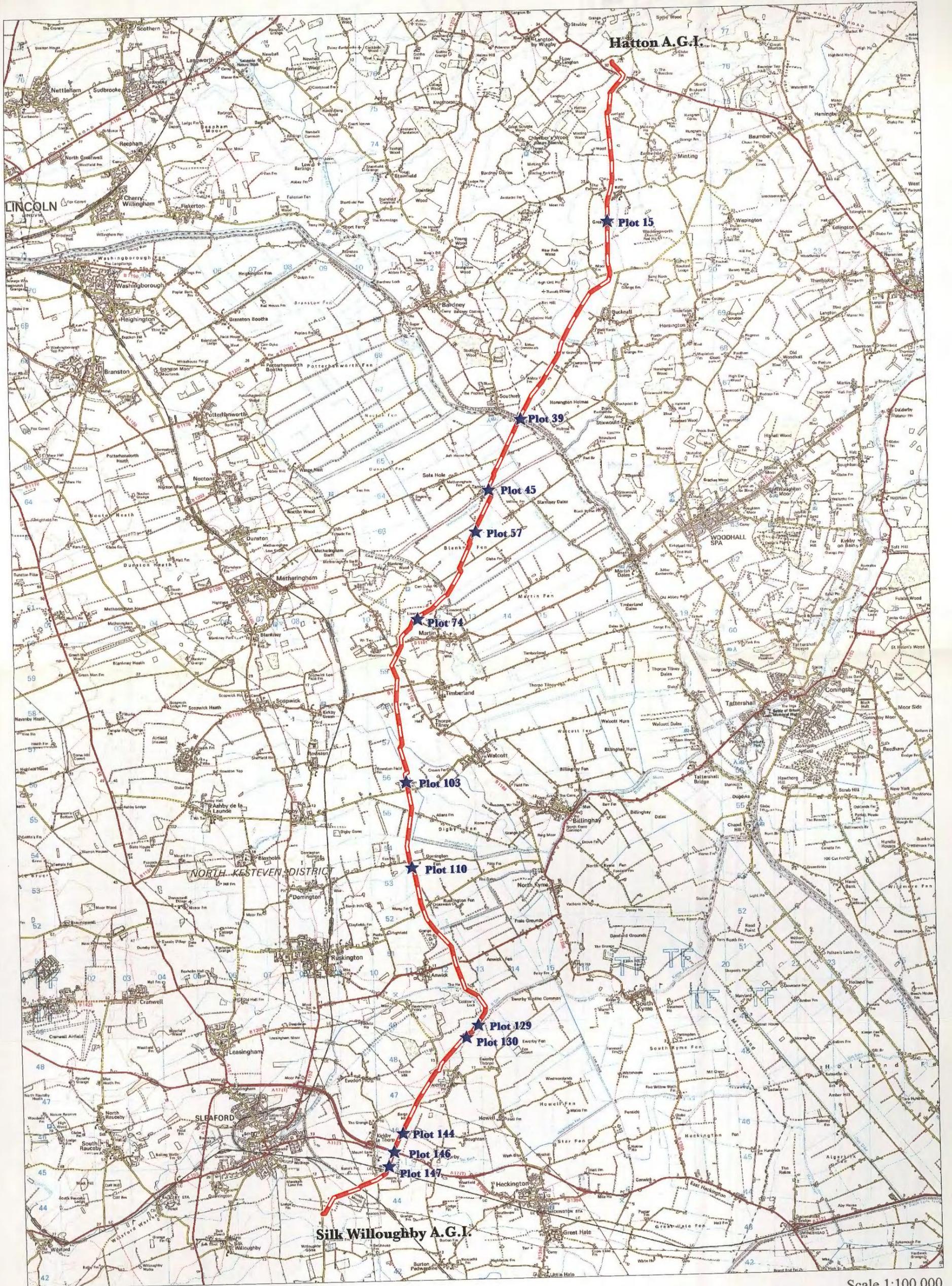
These samples suggested a high level of activity within the vicinity of the ditch occurred, with arable farming producing a wide variety of crops. These included free-threshing bread wheat, glume wheat, and six row hulled barley. Livestock were also kept, although only a small assemblage of animal bone was recovered, which either suggests that the emphasis of the site was arable farming, or that the soil conditions did not aid survival of the animal bone. The bones which did survive indicate that cattle, and some sheep, pigs and horses were kept.

A single snail shell of *Planorbis leucostoma* from fill (004) suggests that the ditch was seasonally water filled at some times during its period of silting.

Further excavations were carried out when the site was further topsoil stripped during the construction watching brief. Full details of the evaluation and the excavation can be found within the main report and Site 21.

## 8. REFERENCES

- Brooks, I.P., *et al*, 1994. *Hatton to Silk Willoughby Pipeline: Initial Archaeological Fieldwork*.
- Lincolnshire County Council, City and County Museum, Lincoln, *Conditions for the Acceptance of Archaeological Archives* 1994.
- Network Archaeology Ltd., Report No. 103., January 1997. *Proposed Hatton to Silk Willoughby Gas Pipeline Archaeological Desk Based Assessment*. Commissioned by British Gas TransCo.
- Network Archaeology Ltd., Report No. 111., December 1997. *Hatton to Silk Willoughby Archaeological Fieldwalking and Field Reconnaissance Survey on the Proposed Natural Gas 1050 mm Diameter Pipeline LEC 0217*. Commissioned by Laing Engineering Ltd.
- Network Archaeology Ltd, Report No. 133., September 1999. *Hatton to Silk Willoughby 1005mm Gas Pipeline. Archaeological Evaluation and Watching Brief at Car Dyke (SAM 314)*. Prepared for English Heritage on behalf of Transco.



Scale 1:100 000

Fig 1: Evaluation Trench Locations

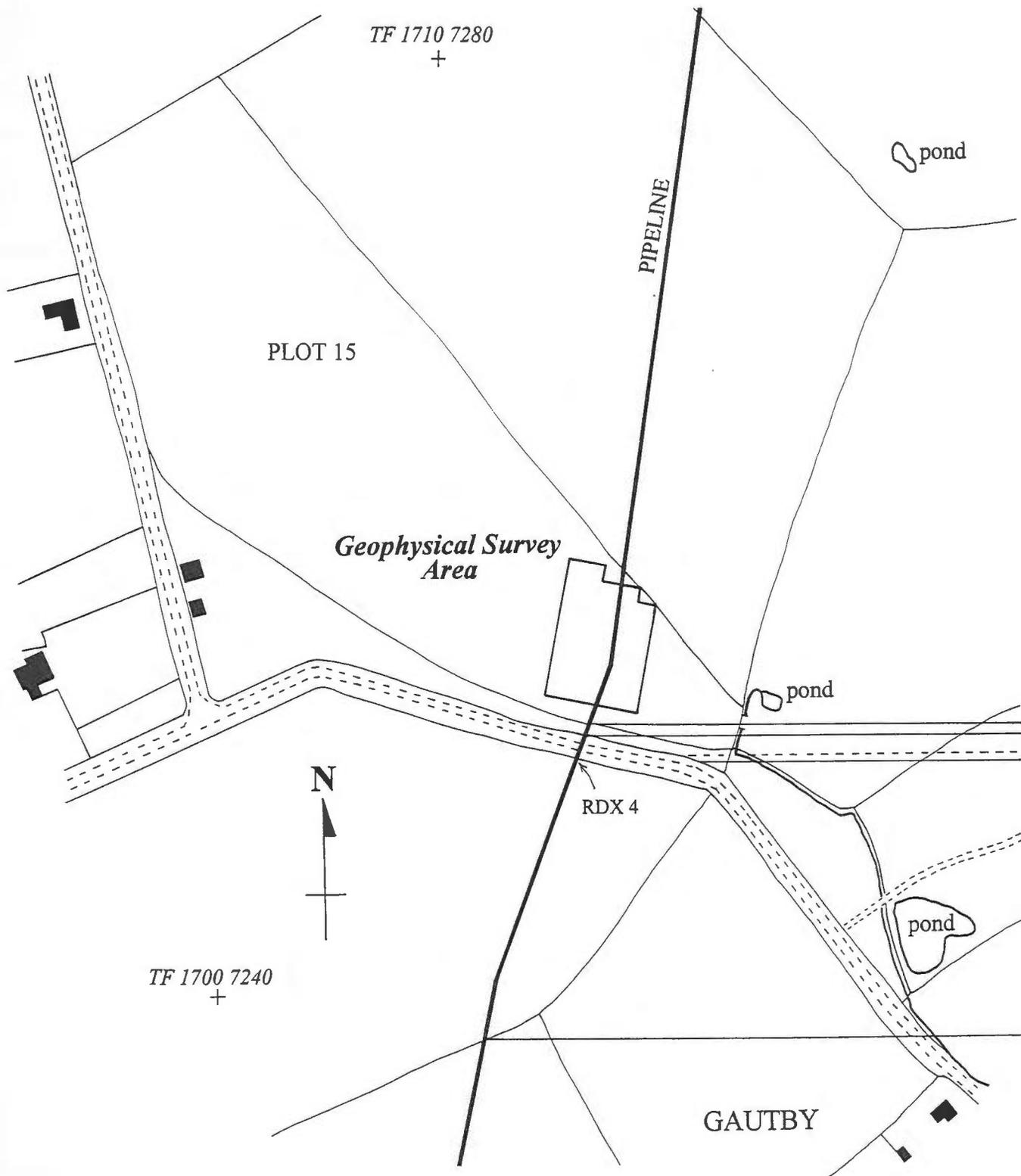


Figure 2: Plot 15; Location of Geophysical Survey Area [scale 1:2500]

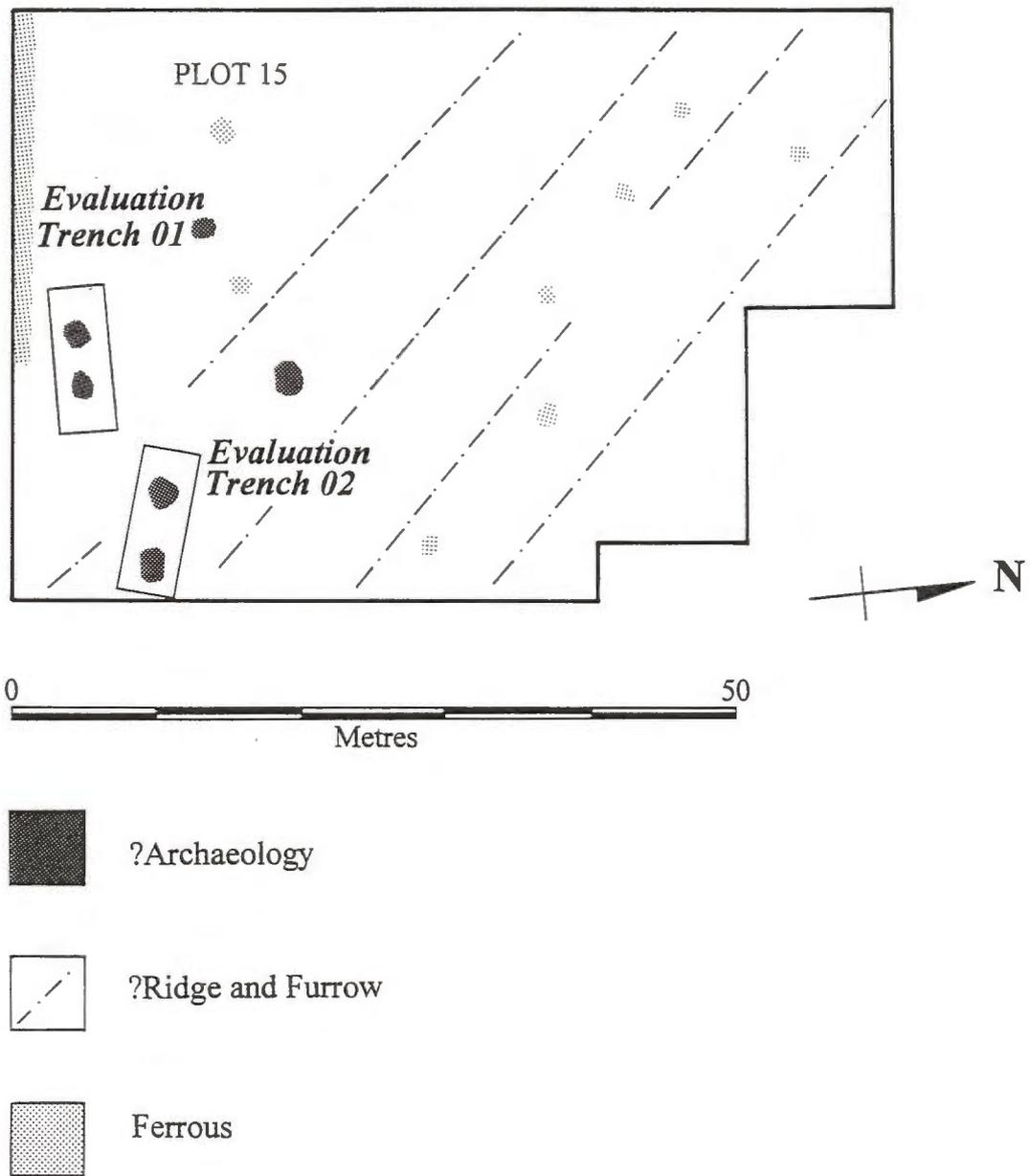


Figure 3: Plot 15; Results of Geophysical Survey and location of Evaluation Trenches 01 and 02

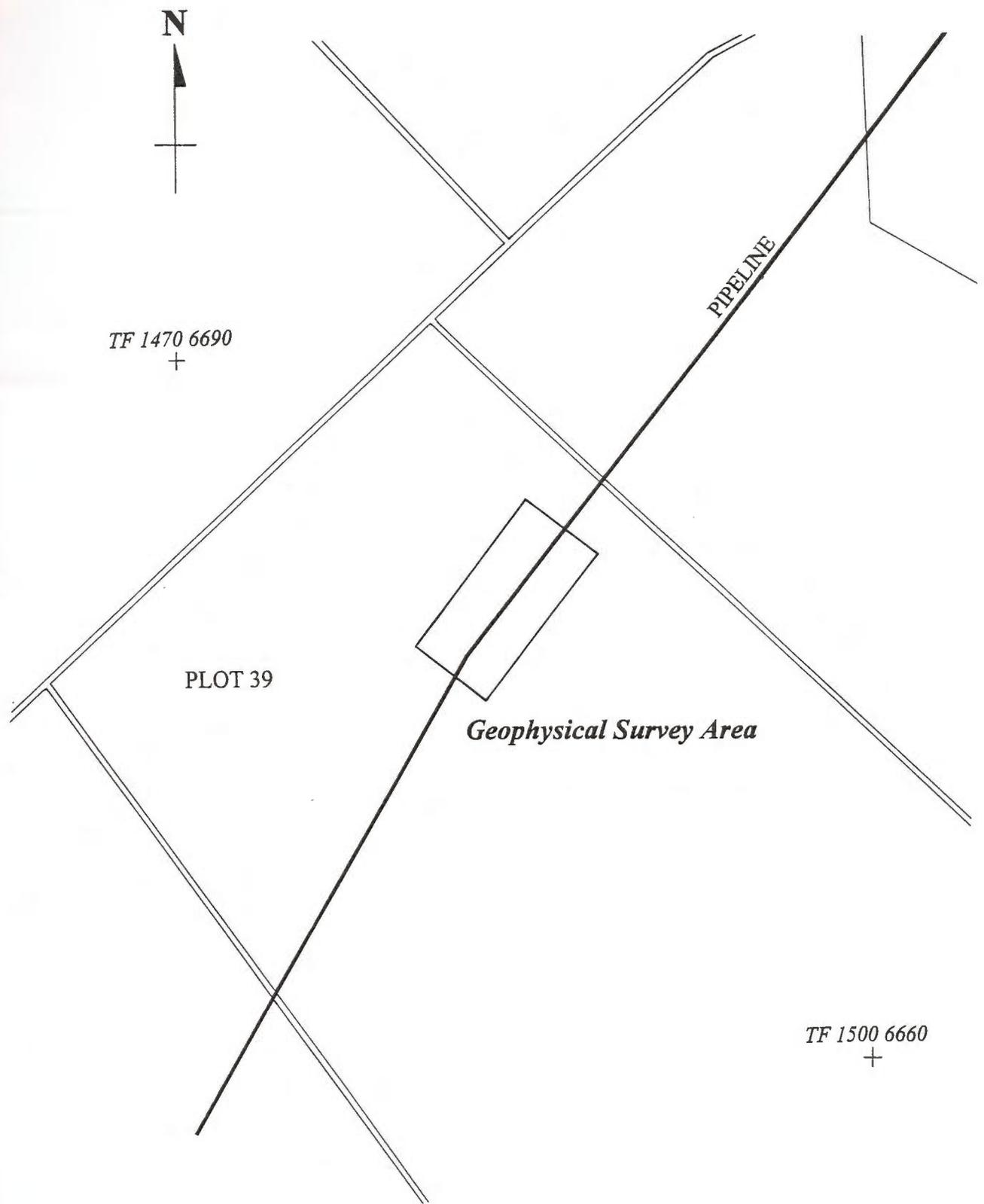


Figure 4: Plot 39; Location of Geophysical Survey Area [scale 1:2500]

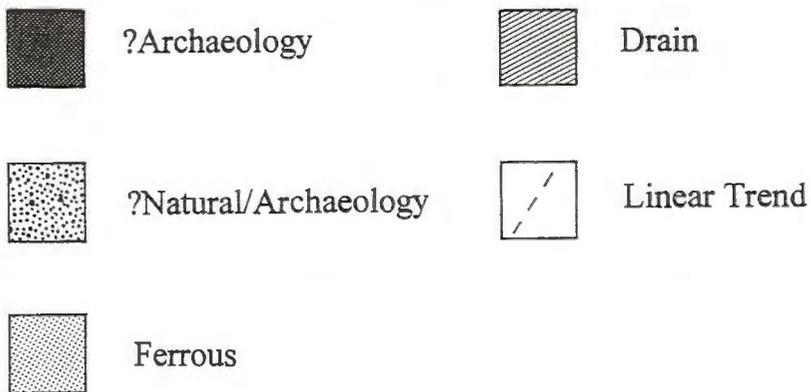
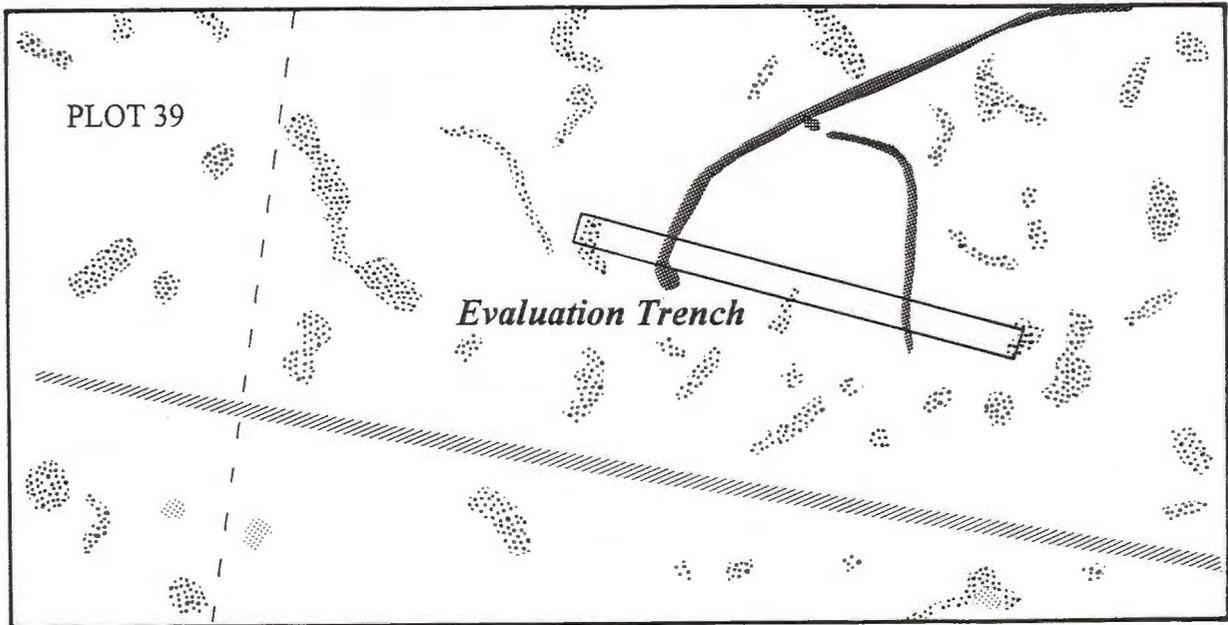


Figure 5: Plot 39; Results of Geophysical Survey and location of Evaluation Trench

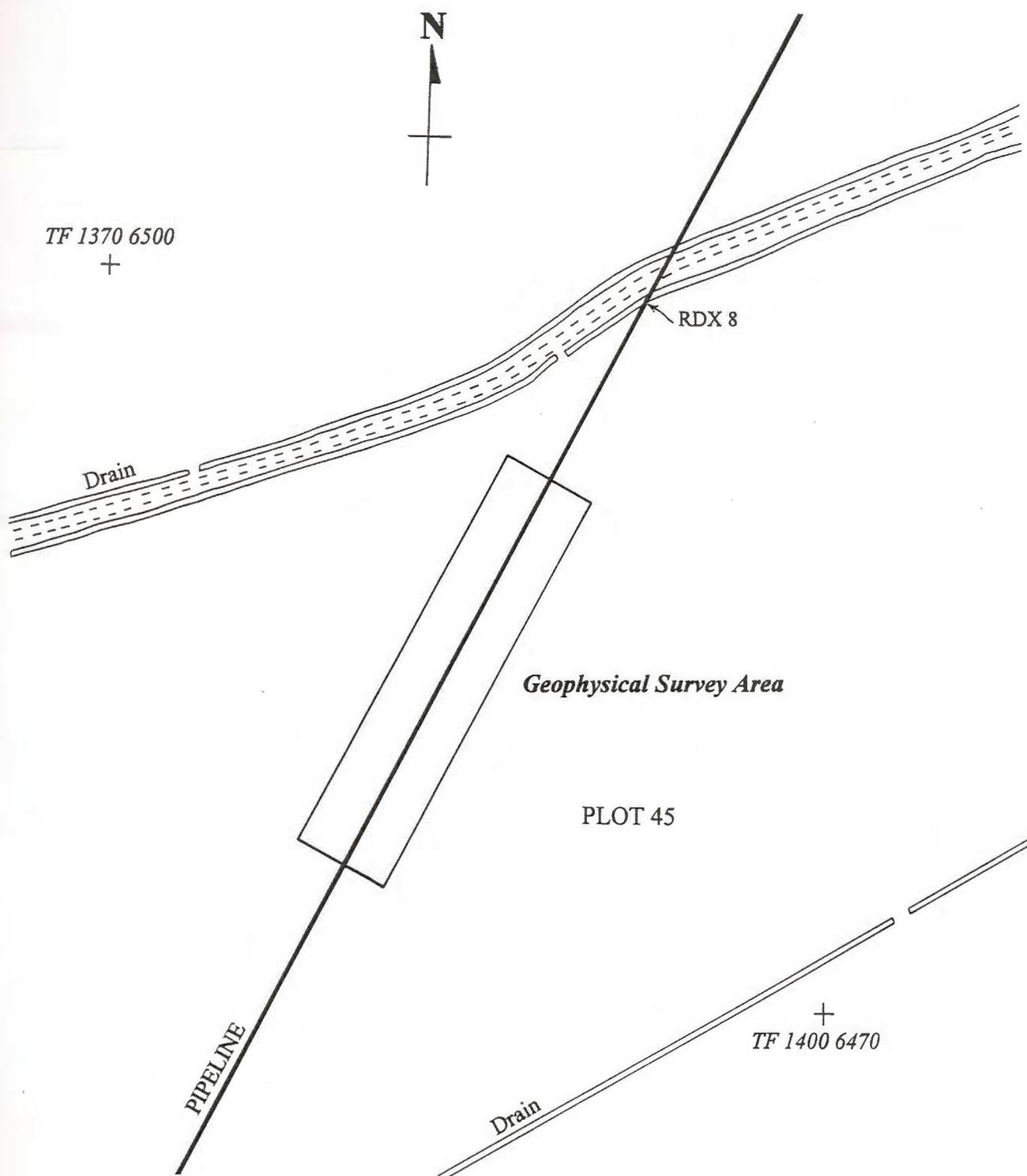
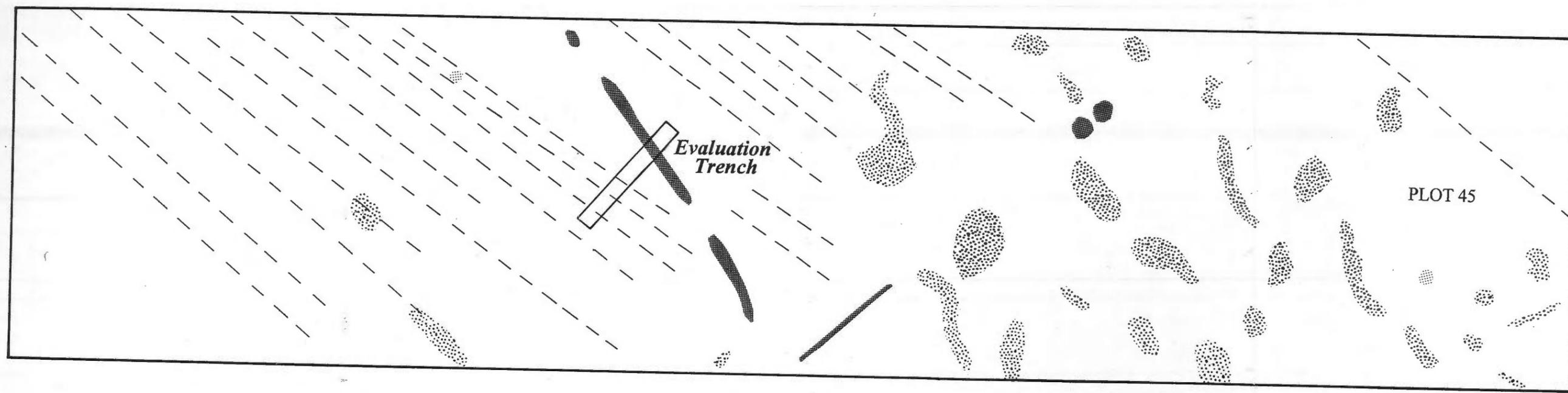


Figure 6: Plot 45; Location of Geophysical Survey Area [scale 1:2500]



 ?Archaeology

 ?Natural/Archaeology

 Ferrous

 Agriculture



Figure 7: Plot 45; Results of Geophysical Survey and location of Evaluation Trench

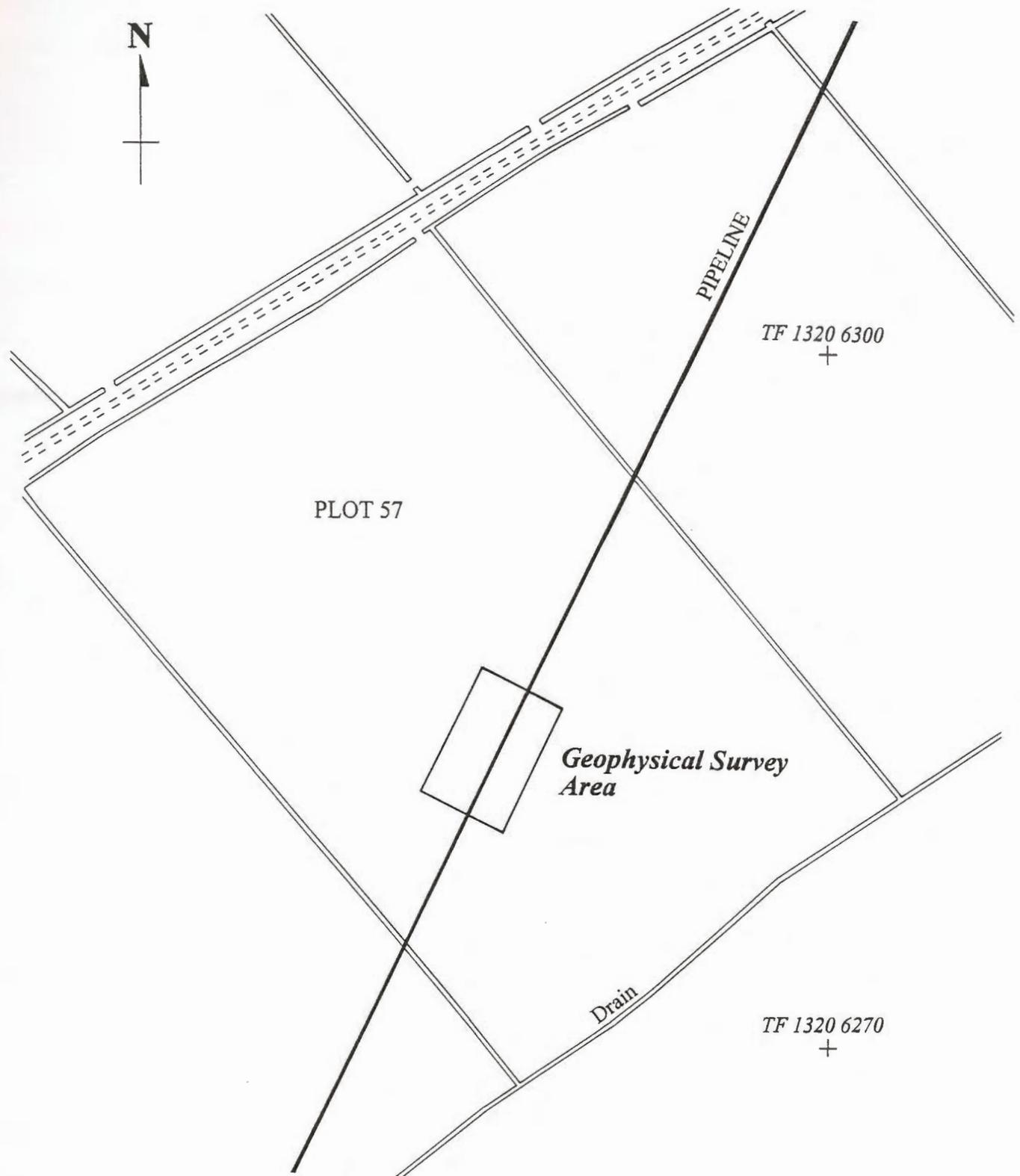
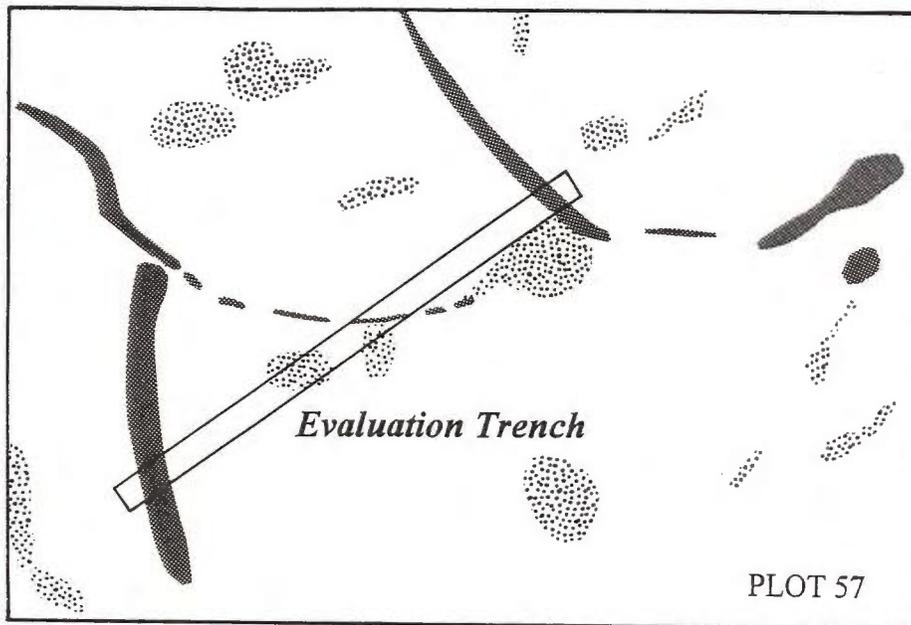


Figure 8: Plot 57; Location of Geophysical Survey Area [scale 1:2500]



?Archaeology



?Natural/Archaeology



Figure 9: Plot 57; Results of Geophysical Survey and location of Evaluation Trench

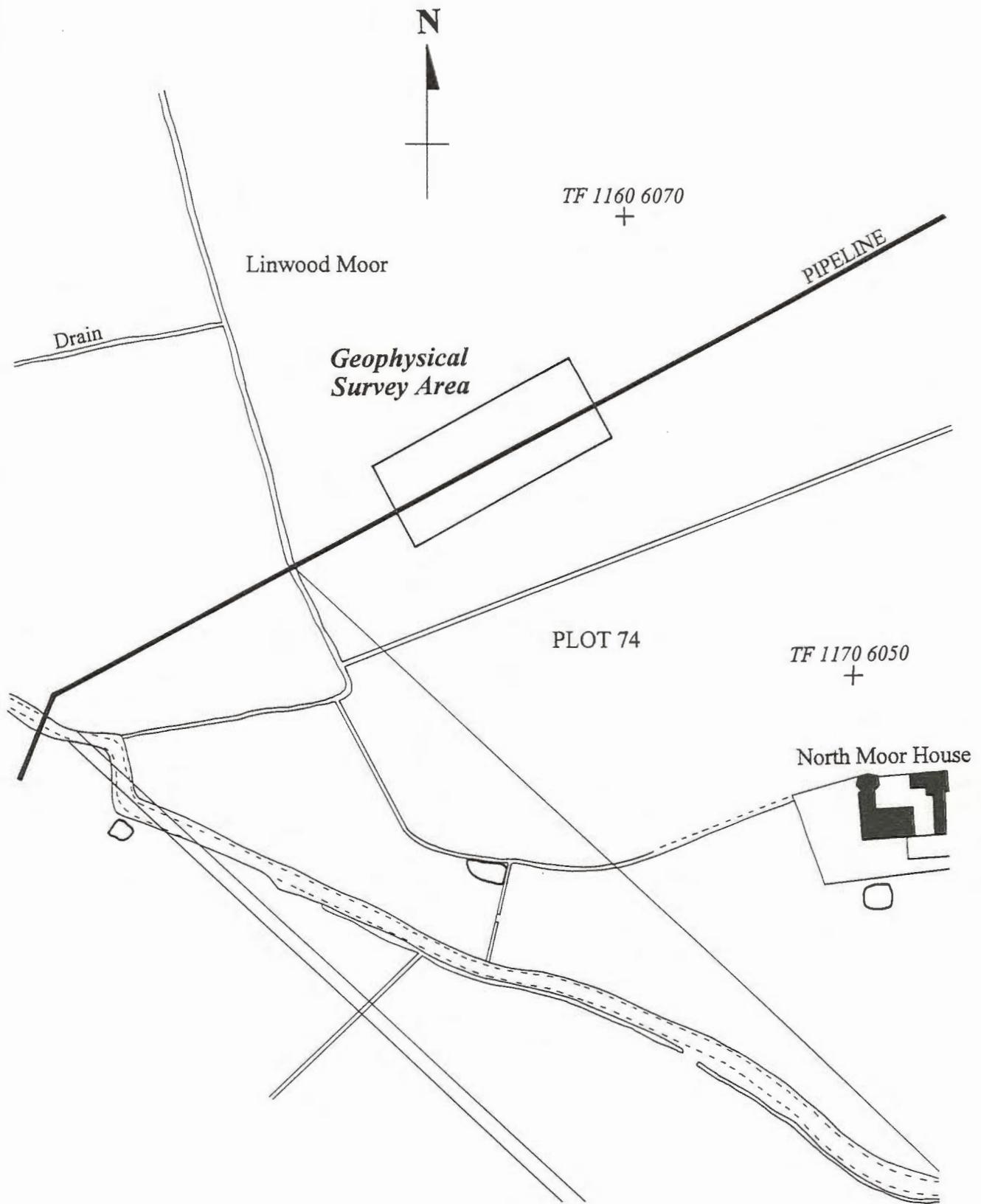
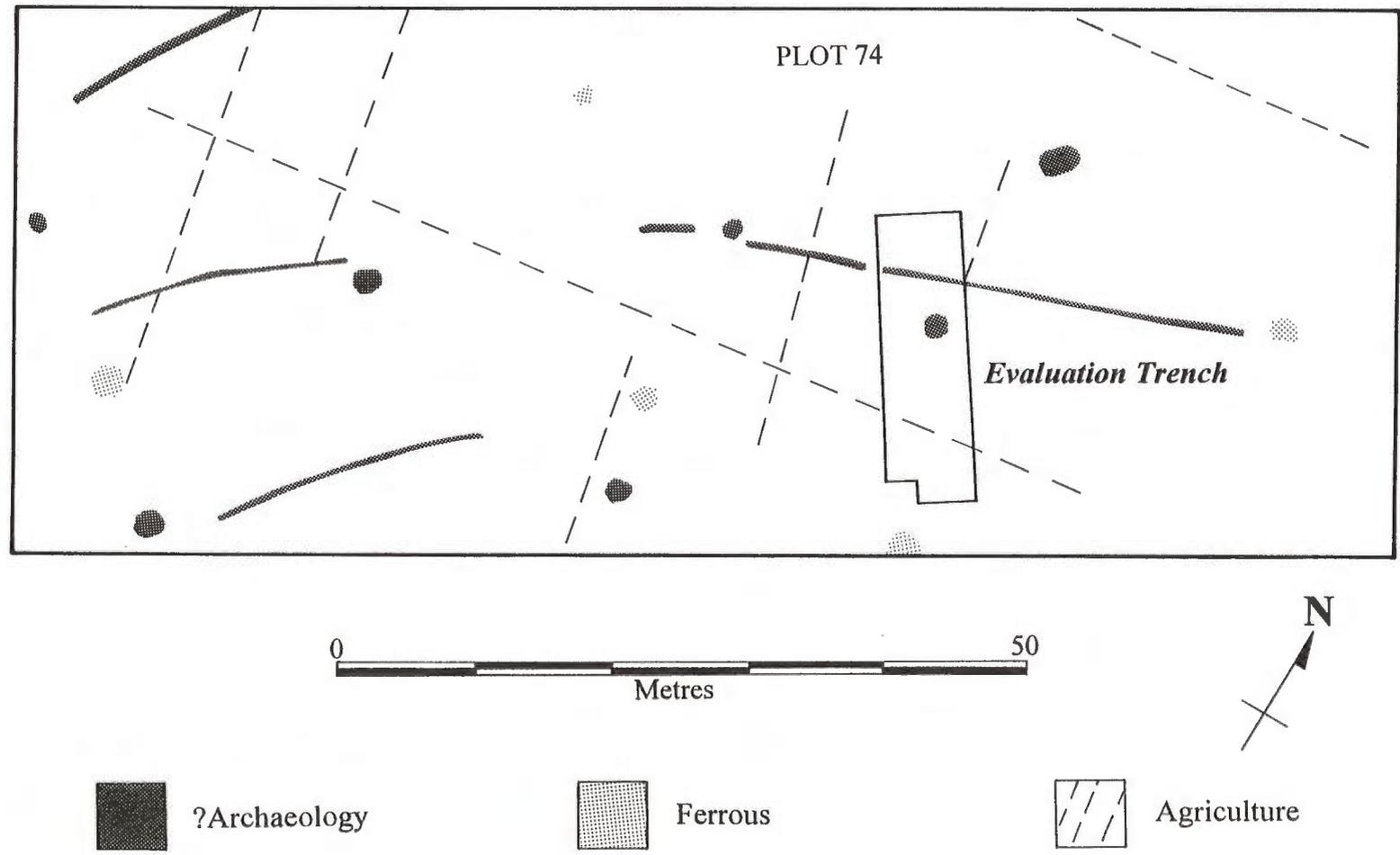


Figure 10: Plot 74; Location of Geophysical Survey Area [scale 1:2500]

Figure 11: Plot 74; Results of Geophysical Survey and location of Evaluation Trench



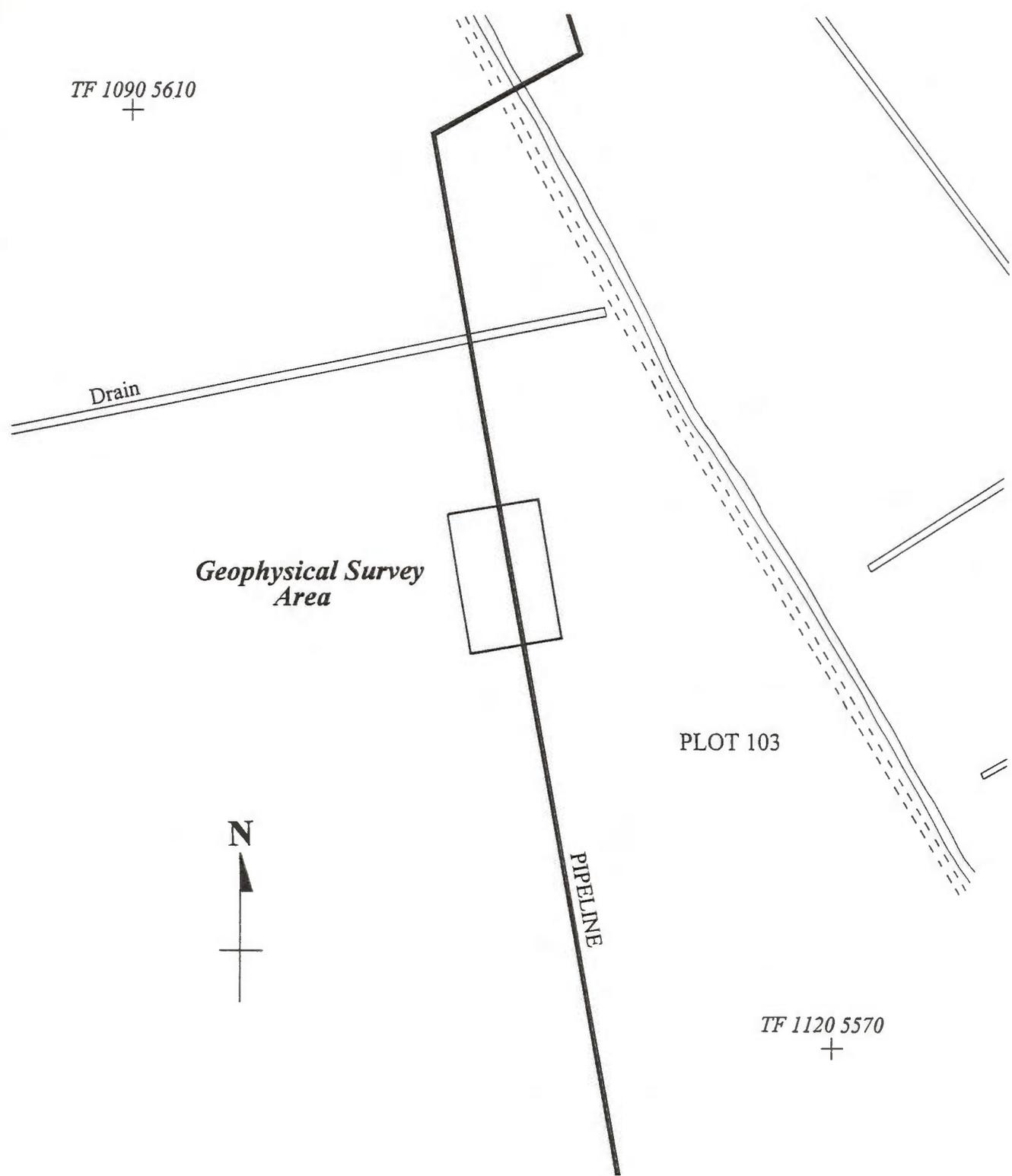


Figure 12: Plot 103; Location of Geophysical Survey Area [scale 1:2500]

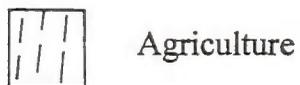
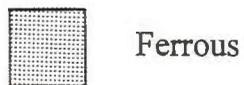
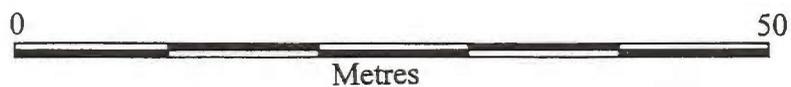
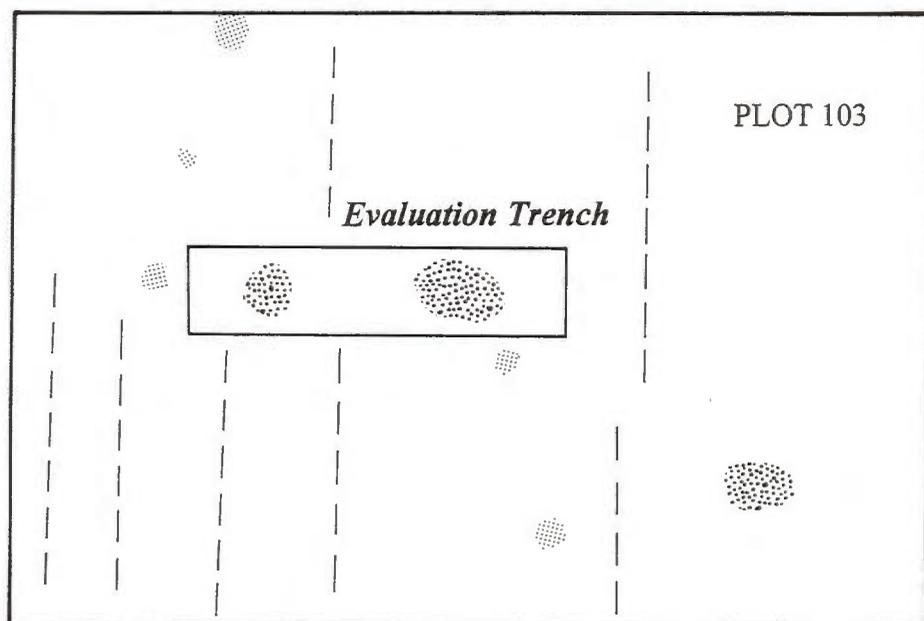


Figure 13: Plot 103; Results of Geophysical Survey and location of Evaluation Trench

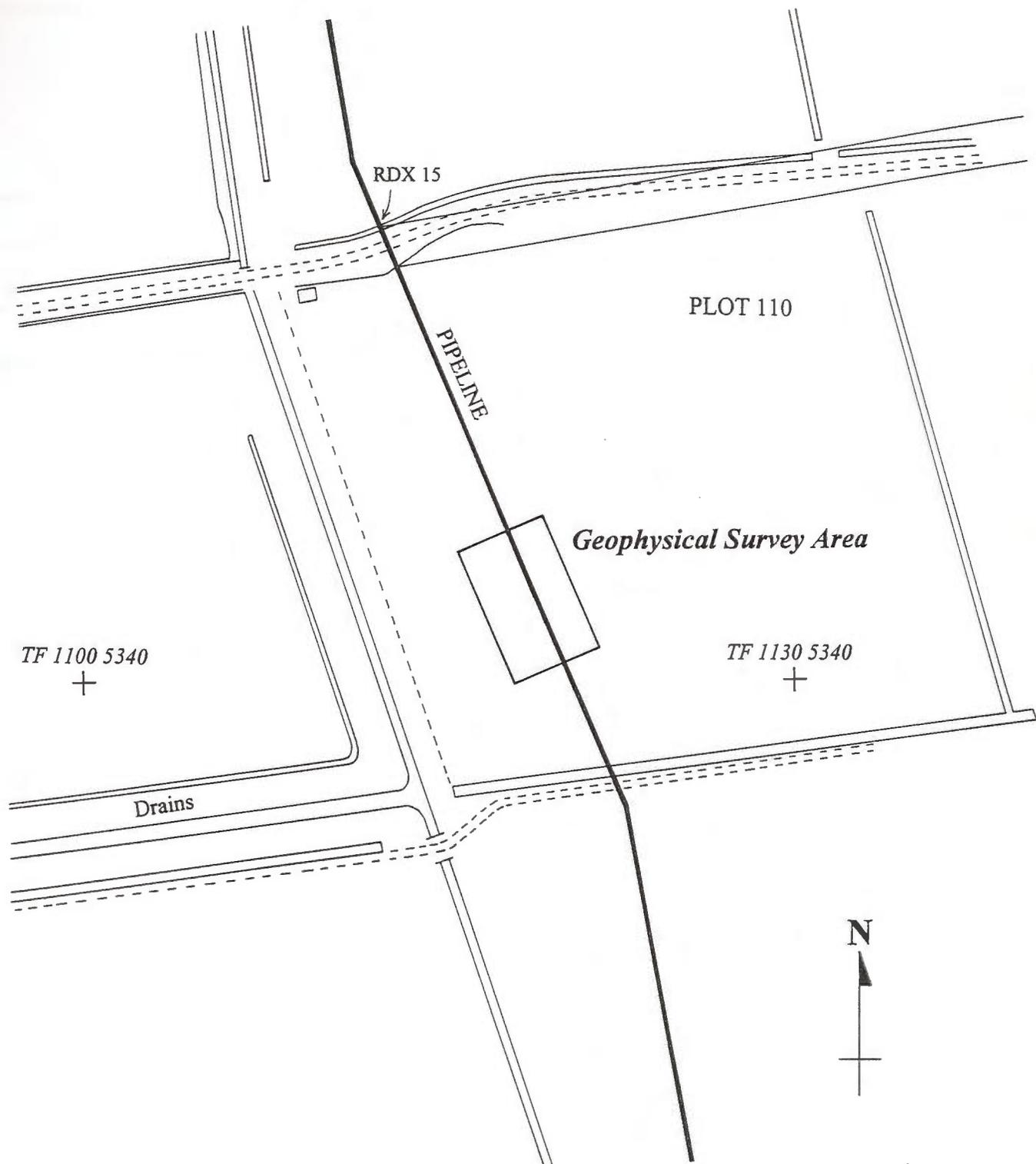


Figure 14: Plot 110; Location of Geophysical Survey Area [scale 1:2500]

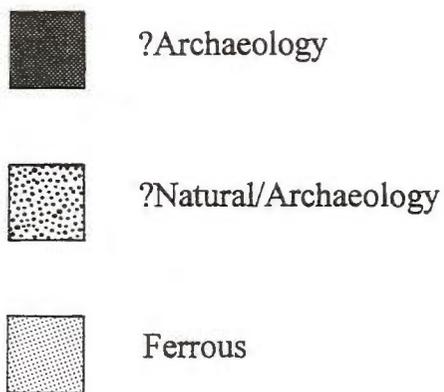
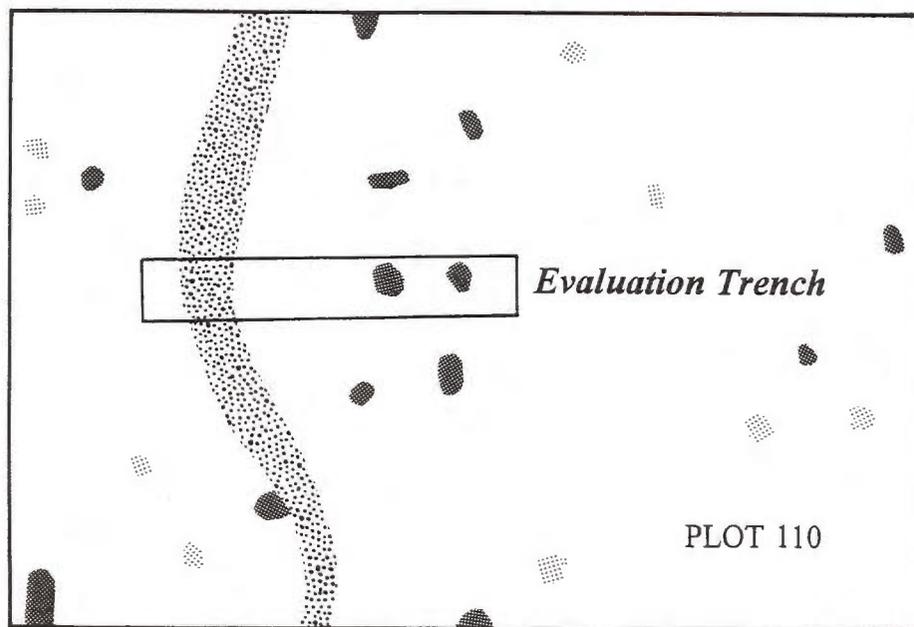


Figure 15: Plot 110; Results of Geophysical Survey and location of Evaluation Trench

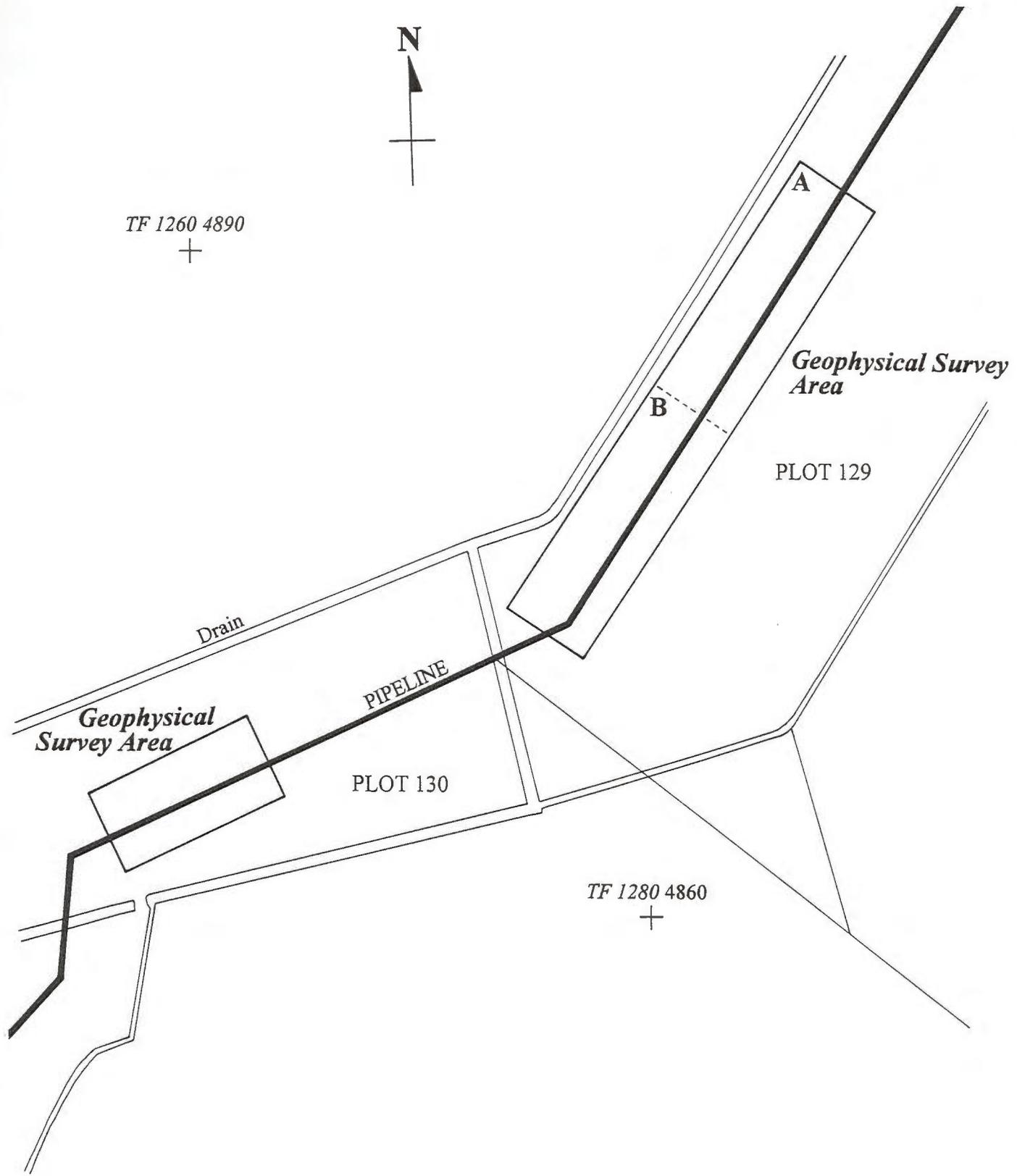


Figure 16: Plots 129 and 130; Location of Geophysical Survey Areas [scale 1:2500]

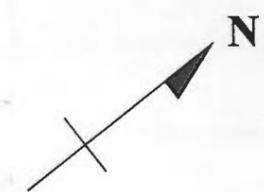
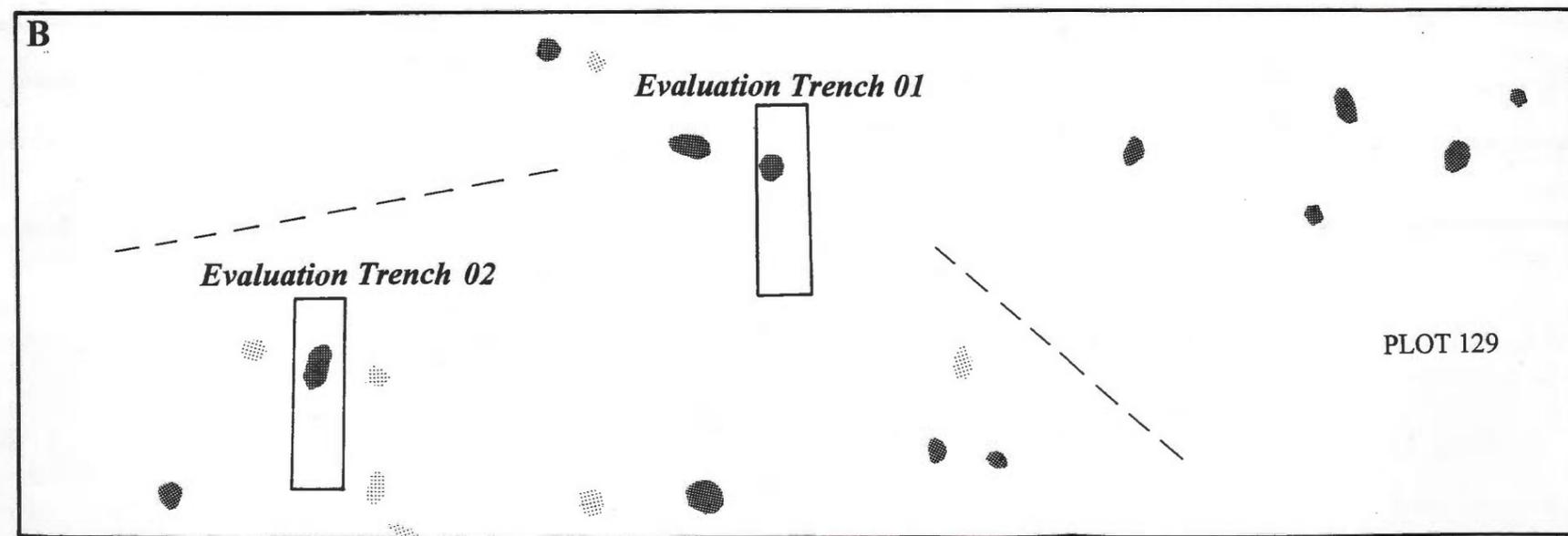
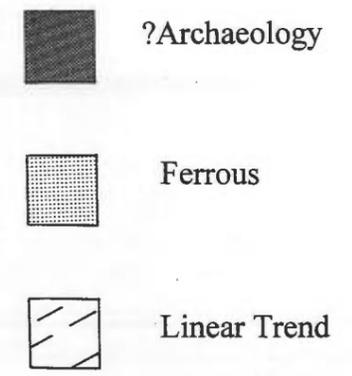
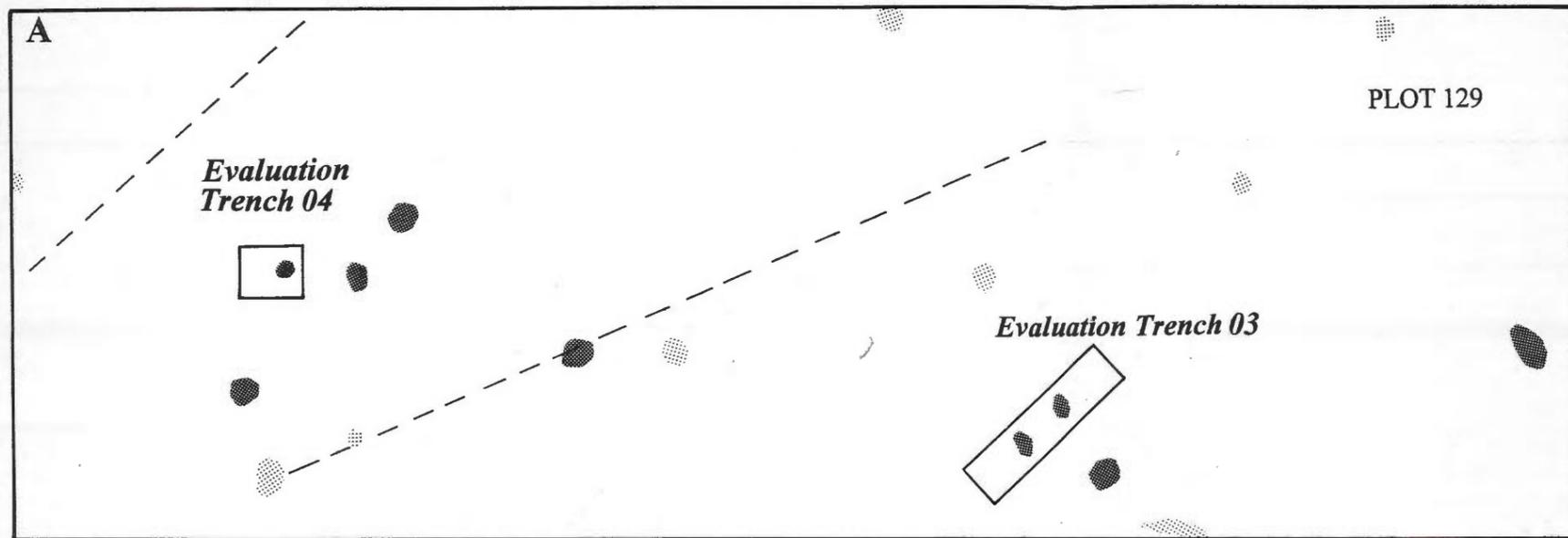
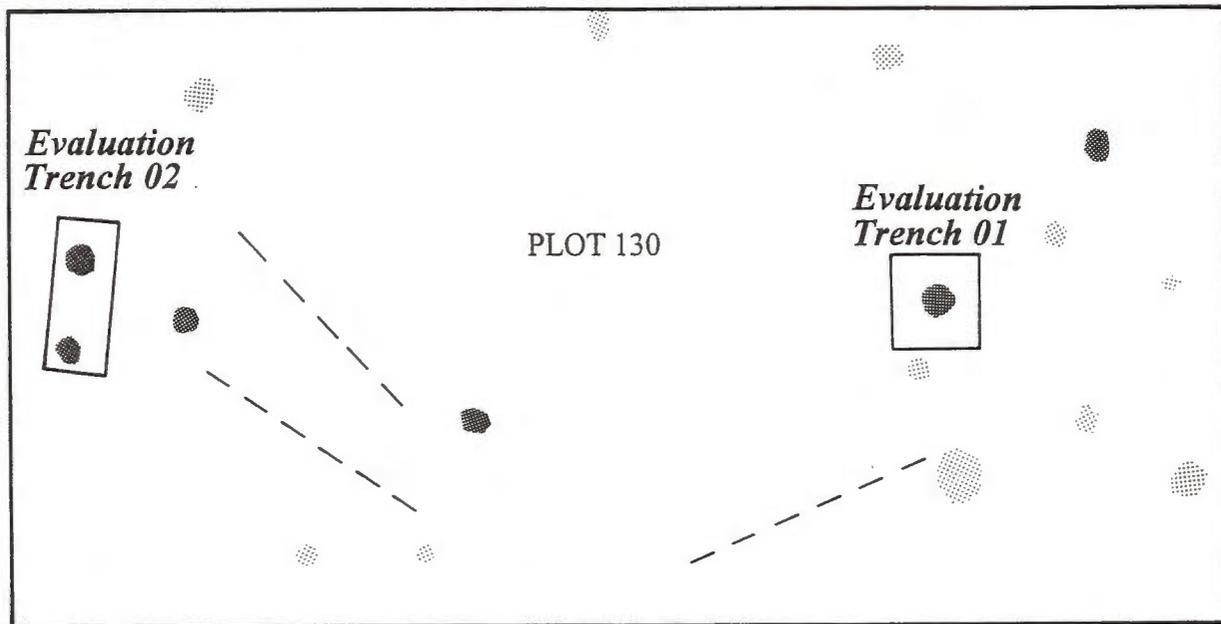


Figure 17: Plot 129; Results of Geophysical Survey in Areas (A) and (B) and location of Evaluation Trenches 01,02, 03 and 04



-  ?Archaeology
-  Ferrous
-  Linear Trend

Figure 18: Plot 130; Results of Geophysical Survey and location of Evaluation Trenches 01 and 02

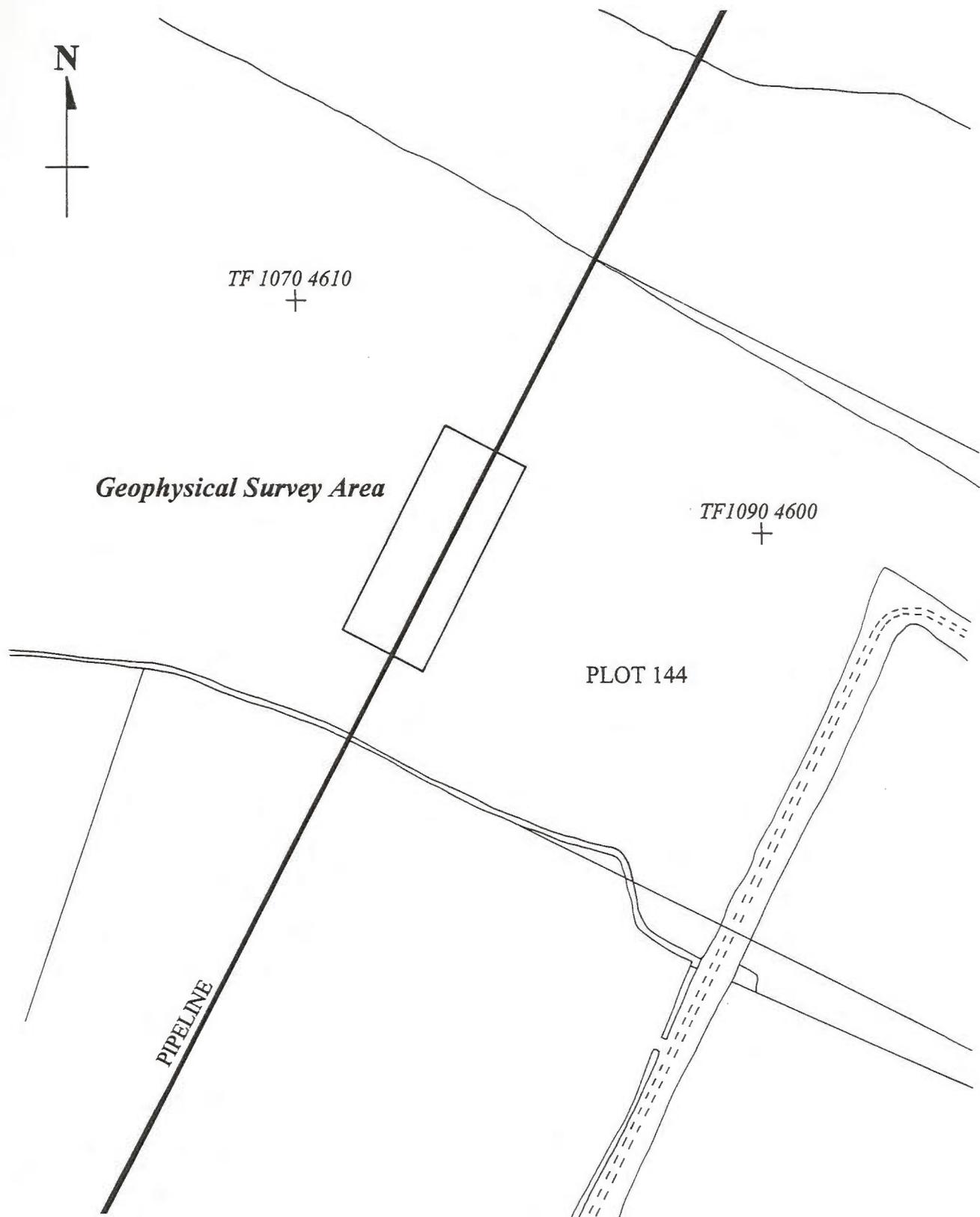


Figure 19: Plot 144; Location of Geophysical Survey Area [scale 1:2500]

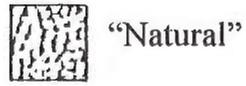
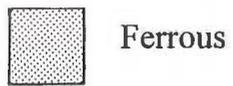
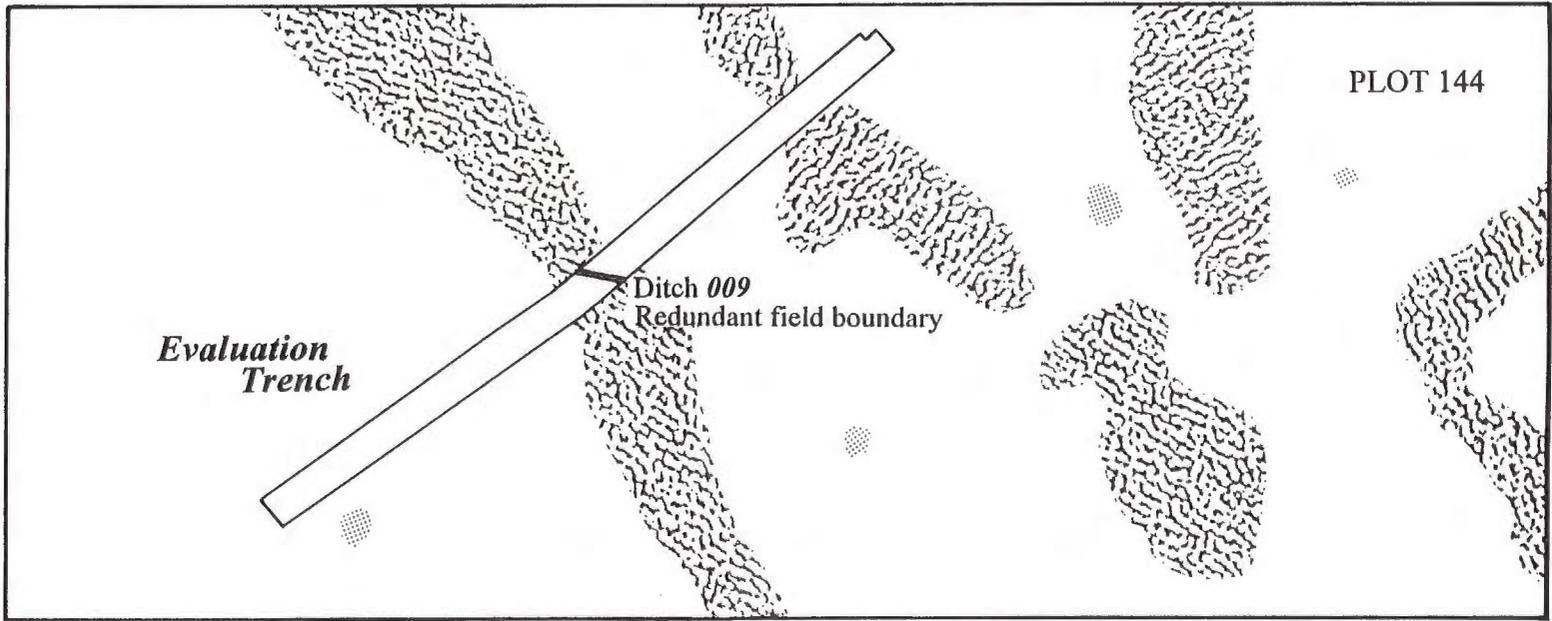


Figure 20: Plot 144; Results of Geophysical Survey and location of Evaluation Trench

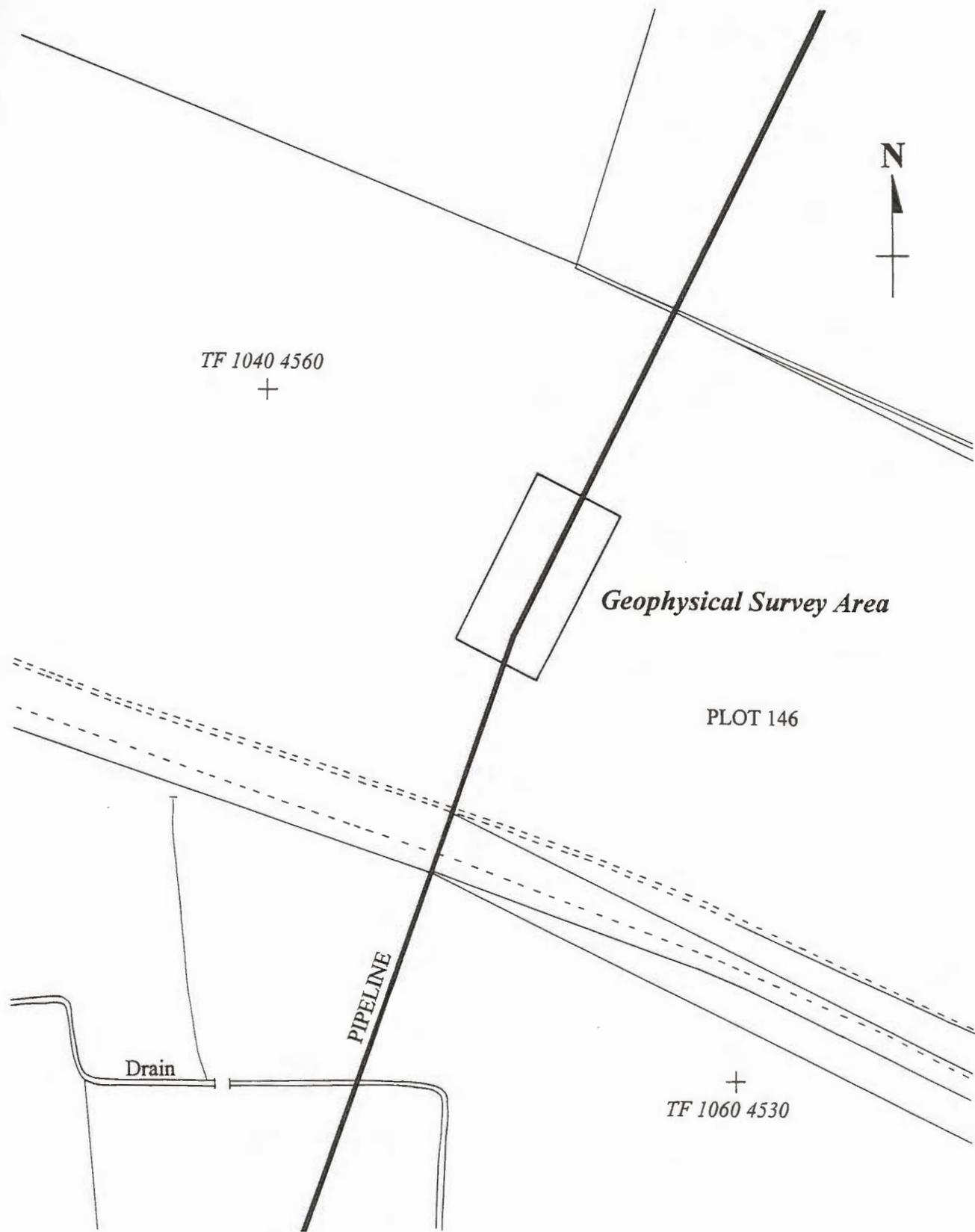


Figure 21: Plot 146; Location of Geophysical Survey Area [scale 1:2500]

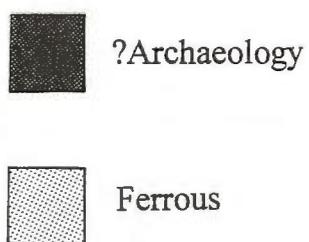
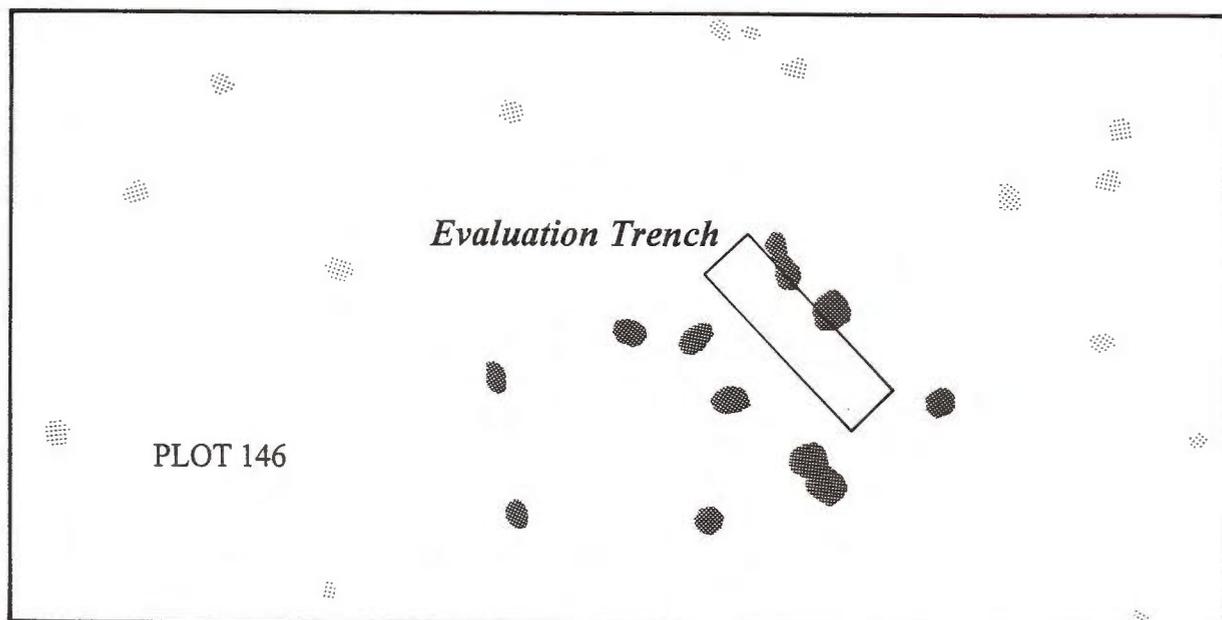


Figure 22: Plot 146; Results of Geophysical Survey and location of Evaluation Trench

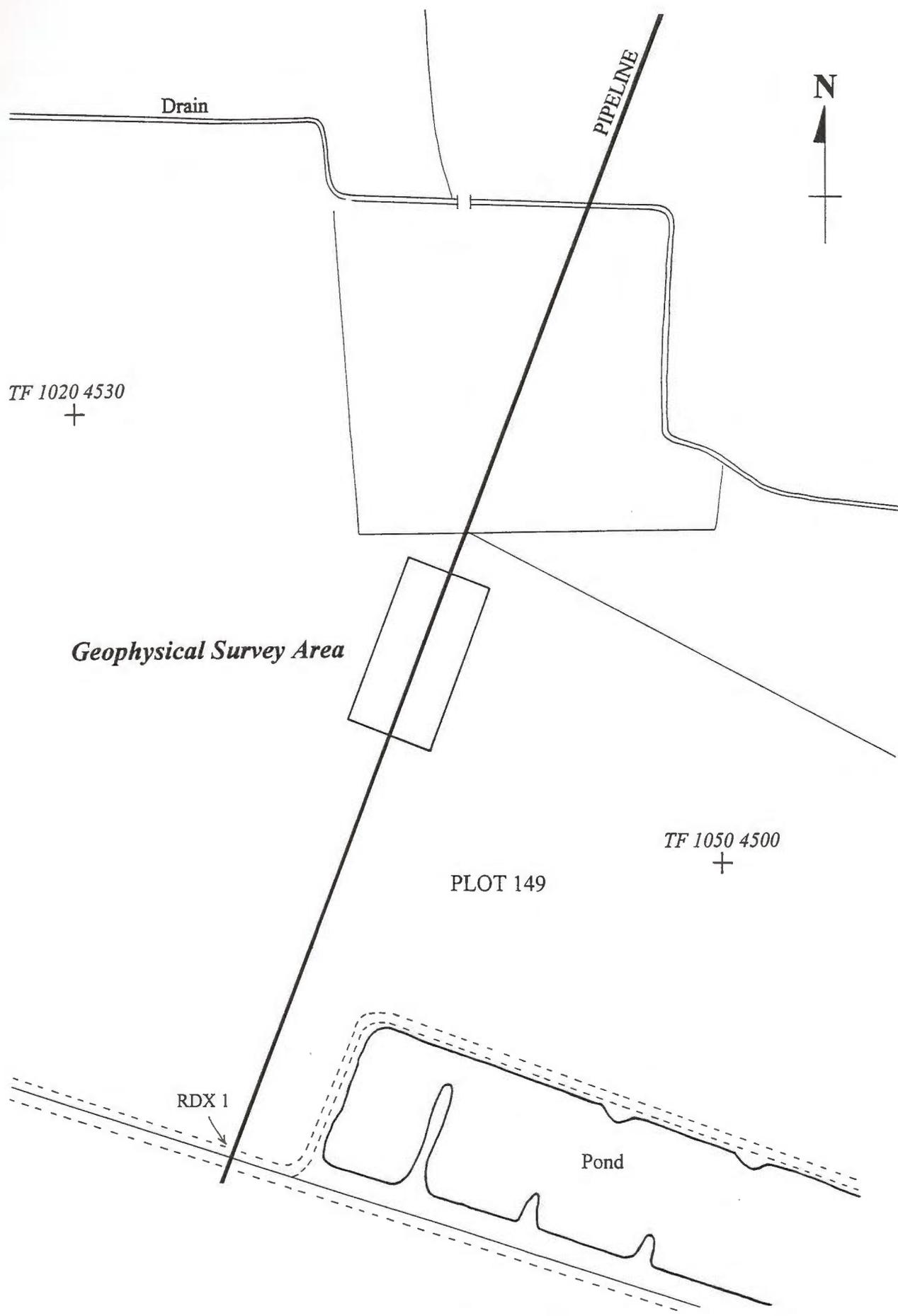


Figure 23: Plot 149; Location of Geophysical Survey Area [scale 1:2500]

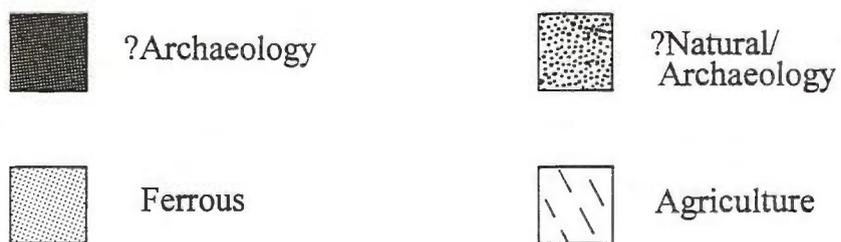
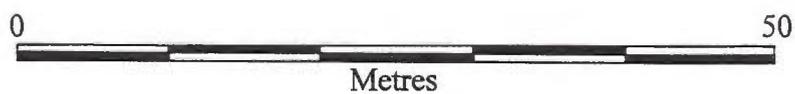
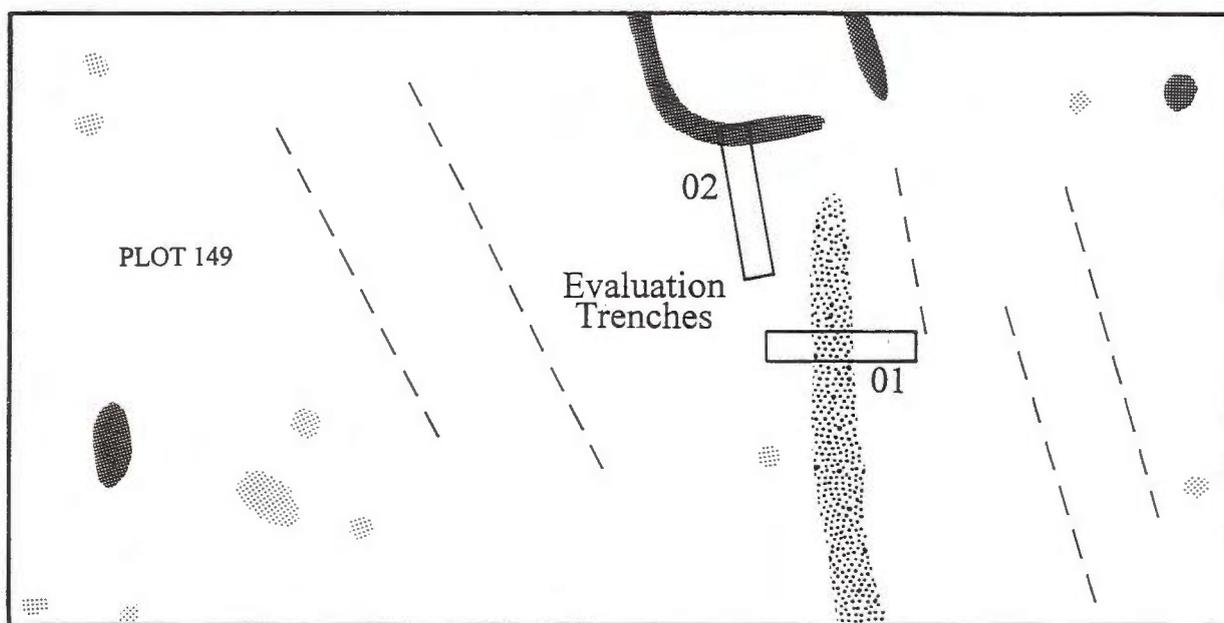


Figure 24: Plot 149; Results of Geophysical Survey and location of Evaluation Trenches 01 and 02

**APPENDIX 14**

**Gazetteer  
of  
Archaeological Features**

## Gazetteer of Archaeological Features

The gazetteer was compiled from the original records prior to the receipt of the specialist pot report and the in depth analysis necessary for production of the site report. Following this analysis a number of alterations have been made to the interpretation of both physical relationships and function of features. Due to time restrictions it has not been possible to adjust the following listings accordingly and, therefore, a number of disparities are likely to exist between these and the text. All alterations and the thoughts behind them are, however, noted on the original context sheets which are stored in the paper archive.

### Site 2, TF 17176 74842 Construction Section 2, Plot 8

The fills of all features are given in the order of primary fill first and top fill last

**Pit 2000** orientated E-W, a linear, elongated oval with convex sides and a narrow 'U'-shaped base, (W 0.60m, D 0.30m)

*Fill 2005* light yellow-grey sand, loose, with occ. flint flakes and nodules

*Finds:* none

*Fill 2004* dark brown-orange sand-silt, loose, with red flint frags., white flint nodules and occ. flecks of charcoal

*Finds:* Roman pottery

*Date:* Romano-British

*Interpretation:* pit

**Pit 2001** circular, concave edges with a 'V'-shaped base (W 0.68m, D 0.24m)

*Fill 2028* light grey sand, loose, with occ. small sub-angular and rounded stones

*Finds:* none

*Date:* Romano-British

*Interpretation:* small pit

**Pit 2002** regular, sub-circular, with sides sloping at 45° and a flat base (W 1.42m, D 0.11m)

*Fill 2003* dark-mid grey, fine-mod. sand, mod. sub-angular chert/flint frags

*Finds:* None

*Date:* Romano-British

*Interpretation:* redeposited natural fill of heavily truncated pit

**Layer 2010** orange-brown, yellow-brown sands and grey-yellow-white clays, with occ. pebbles flint frags

*Finds:* none

*Interpretation:* natural

**Ditch 2011** orientated NW-SE, with steep concave sides and a shallow, depressed bottom (W 1.50 - 2.10m, D 0.38 - 0.50m)

*Fill 2016* mid brown-grey silt-sand, with occ. small to moderate angular, sub-angular and rounded stones (W 1.10 - 1.30m, D 0.10 - 0.21m)

*Finds:* mid C3<sup>rd</sup> AD pottery, Roman tile & animal bone

*Fill 2015* dark brown-grey silt-sand, with frequent small sub-angular and sub-rounded pebbles (W 1.50 - 1.60m, D 0.20 - 0.22m)

*Finds:* ? C3<sup>rd</sup> AD pottery, animal bone & sawn deer antler

*Date:* Romano-British

*Interpretation:* enclosure ditch

**Ditch 2012** orientated NNE-SSW, irregularly sloping edges with a rounded base (W 3.40, D 0.42m)

*Fill 2009* mid-brown sand-silt, very occ. pebbles and flint frags

*Finds:* none

**Recut 2007 of Ditch 2012** orientated NNE-SSW, with irregularly sloping edges and a curved base (W 2.26m, D 0.42m)

*Fill 2008* brown-grey silt-sand, with occ. small rounded pebbles and flint frags

*Finds:* none

*Date:* modern

*Interpretation:* old field boundary / drainage ditch

**Ditch 2013** orientated NNW-SSE, 'U'-shaped sides with a flat base (W 0.64m - 1.00m, D 0.22m)

*Fill 2014* light-mid grey mottled with dark red-brown iron staining, with occ. angular and sub-angular flint gravel

*Finds:* Roman pottery

*Date:* Romano-British

*Interpretation:* enclosure ditch

**Layer 2019** mid-brown, clay-silt loam with occ. small and medium rounded and sub-rounded stones

*Finds:* none

*Interpretation:* topsoil

**Pit 2024** sub-circular, 'U'-shaped with steep sides and a flat bottom (W 2.00m, D 0.79m)

*Fill 2025* mid-dark grey sand, with occ. small sub angular chert frags. and occ. charcoal flecks

*Finds:* Roman pottery and animal bone

*Date:* Romano-British

*Interpretation:* large pit

*Other:* truncated by land drain and furrow

**Pit 2029** circular, with very steep sides gradually sloping down to a rounded base, like an inverted bell (W 3.80m, D 1.70m)

*Fill 2064* light blue-grey clay, stiff, with occ. rounded and sub-angular chalk flecks

*Finds:* none

*Soil Sample Nos.:* 37

*Fill 2065* black-brown sandy-silt, loose (W 2.30m, D 0.60m)

*Finds:* animal bone

*Soil Sample Nos.:* 35

*Fill 2062* mid grey sandy clay, firm, occ. sub-angular stones (W 3.20m, D 0.46m)

*Finds:* animal bone

*Soil Sample Nos.:* 36

*Fill 2055* mid yellow-orange sandy-silt, firm, with moderate sub-angular gravel

*Finds:* none

*Fill 2032* light grey sandy silt, firm, with moderate sub-angular gravel (W 2.90m, D 0.38m)

*Finds:* ?mid C3<sup>rd</sup> AD pottery

*Soil Sample Nos.:* 34

*Fill 2031* mid grey sand with iron staining, loose, and occ. sub-angular gravel (W 3.40m, D 0.30m)

*Finds:* late C3<sup>rd</sup>-C4<sup>th</sup> AD pottery, animal bone and Roman brick/tile

*Soil Sample Nos.:* 33

*Fill 2030* light grey sand with iron staining, loose, and occ. sub-angular gravel (W 3.35m, D 0.25m)

*Finds:* Roman pottery and animal bone

*Date:* Romano-British

*Interpretation:* well

**Pit 2035** orientated NNW-SSE, a shallow irregular depression with the west edge of the cut being steepest (W 0.51m, D 0.11m)

*Fill 2036* dark grey-brown coarse sand, loose, with occ. small sub-rounded pebbles

*Finds:* animal bone (almost entire calf burial)

*Date:* Romano-British

*Interpretation:* small burial pit

**Furrow 2049**

*Fill 2050*

*Finds:* Roman pottery

*Date:* Medieval

*Interpretation:* furrow

## Gazetteer of Archaeological Features

- Ditch 2072** orientated NW-SE, sides shallow at the top and steep at the bottom, with a concave base (W 1.5m, D 0.55m)  
*Fill 2120* mid grey silty-sand firm  
*Finds:* none  
*Fill 2119* light orange-grey silty-sand, firm  
*Finds:* none  
*Fill 2118* light grey-orange silty-sand, firm, with very occ. small sub-angular stones  
*Finds:* none  
*Fill 2117* light grey-brown silty-sand, firm, with occ. sub-angular stones (W 1.30m, D 0.30m)  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* enclosure ditch
- Gully 2076** orientated NE-SW, shallow 'V'-shaped profile with a rounded base (W 0.82m - 1.29m, D 0.20m - 0.24m)  
*Fill 2077* mid grey-brown silt-sand, loose, with occ. small sub-angular flint frags  
*Finds:* late C3<sup>rd</sup>-C4<sup>th</sup> AD pottery  
*Date:* Romano-British  
*Interpretation:* enclosure gully
- Layer 2096** surface collection of finds over possible unexcavated pit cut into enclosure ditch F[2101]  
*Finds:* mid C3<sup>rd</sup> + AD pottery and brick/tile  
*Date:* Romano-British  
*Interpretation:* surface collection
- Layer 2097** surface collection of finds in area of grey charcoal rich silt  
*Finds:* late C4<sup>th</sup> AD pottery  
*Date:* Romano-British  
*Interpretation:* surface collection
- Layer 2098** surface collection of finds over unexcavated section of linear towards centre of easement  
*Finds:* late C3<sup>rd</sup>-C4<sup>th</sup> AD pottery  
*Date:* Romano-British  
*Interpretation:* surface collection
- Layer 2099** surface collection of finds over unexcavated section of linear towards eastern edge of easement  
*Finds:* late C4<sup>th</sup> AD pottery  
*Date:* Romano-British  
*Interpretation:* surface collection
- Ditch 2101** orientated NE-SW, steeply sloping sides with a flat base (W 1.61m, D 0.58 - 0.90m)  
*Fill 2113* mid grey silt-sand, loose, with occ. medium sub-angular flint pebbles (W 1.00m, D 0.16m)  
*Finds:* none  
*Fill 2102* mid orange-grey/brown silty-sand, loose, with moderate medium rounded and angular flint pebbles (W 1.61m, D 0.85m)  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* enclosure ditch
- Site 6, TF 17064 70624**  
 Construction Section 4, Plot 20
- The fills of all features are given in the order of primary fill first and top fill last
- Layer 4000** mid-dark brown silty-clay loam, with occ. sub-angular flint frags  
*Finds:* U/S material, mostly 4th C pot  
*Interpretation:* topsoil
- Layer 4001** mid grey-yellow and blue clay with occ. patches of yellow gravel  
*Finds:* none  
*Interpretation:* natural
- Pit 4003** sub-circular, with steeply sloping sides and a rounded bottom (W 0.66m, D 0.28m)  
*Fill 4005* mid blue-grey mixed with light red-brown silty-clay with very occ. flecks of charcoal  
*Finds:* late Iron Age  
*Fill 4004* dark red-grey silty-clay, firm, with frequent charcoal frags. and occ. medium burnt limestone frags (W 0.49m, D 0.23m)  
*Soil Sample Nos.:* 21  
*Finds:* ?late Iron Age/early Roman pottery  
*Date:* ?late Iron Age/early Romano-British  
*Interpretation:* small pit ? hearth/posthole
- Gully 4006** orientated SW-NE, shallow profile with moderate concave sides and base, the base becoming flat at the terminus (W 1.05m, D 0.12m)  
*Fill 4015*  
*Finds:* late Iron Age pottery and burnt & fired clay  
*Fill 4007* dark brown-grey silty-clay, firm, with occ. small rounded pebbles (W 0.14m, D 0.12m)  
*Finds:* ?late Iron Age/early Roman pottery  
*Date:* ?late Iron Age/Romano-British  
*Interpretation:* ? construction slot
- Pit 4008** shallow profile with irregular sides and base (W 0.45m, D 0.05m)  
*Fill 4406* orange-grey clay-silt, extremely waterlogged  
*Finds:* burnt/fired clay  
*Date:* Romano-British  
*Interpretation:* small pit (from area between 'Site A' & 'Site B' and therefore not on plans)
- Gully 4009** orientated N-S, steeply sloping sides with a rounded base (W 0.35m, D 0.28m)  
*Fill 4010* mid grey-orange silty-clay, firm, with moderate small charcoal frags. and occ. angular and sub-angular flint pebbles (W 0.24m, D 0.12m)  
*Finds:* none  
*Fill 4034* dark brown-grey silty-clay, firm, with frequent charcoal frags, and occ. angular flint frags  
*Finds:* none
- Gully 4086** orientated N-S, flat 'U'-shaped profile (W 0.56m, D 0.13m)  
*Fill 4103* mid orange-brown silty-clay, with occ. charcoal frags  
*Finds:* none
- Gully 4011** orientated N-S, very steep sides with an almost pointed base (W 0.40m, D 0.35m)  
*Fill 4012* light orange-grey silty-clay, firm, with moderate small charcoal frags. and occ. small angular and sub-angular flint frags  
*Finds:* none  
*Fill 4035* dark orange-grey silty-clay, with frequent charcoal frags. (W 0.40m, D 0.18m)  
*Finds:* slag  
*Date:* Romano-British  
*Interpretation:* three inter-cutting gullies
- Ditch 4013** (Section B) orientated NW-SE, very steep sided with a flat base (W 0.60m, D 0.35m)  
*Fill 4145* mid grey-brown clay mixed with orange sand, firm (W 0.15m, 0.10m)  
*Finds:* none  
*Fill 4144* mid blue-grey clay mixed with orange clay and orange sand, firm (W 0.06m, D 0.15m)  
*Finds:* none  
*Fill 4141* light blue-grey silty-clay with pockets of white sand and orange clay (W 0.20m, D 0.05m)  
*Finds:* none

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**Fill 4140** light brown-gray silty-clay with pockets of white sand and orange clay, firm (W 0.23m, D 0.09m)

*Finds:* none

**Fill 4143** mid blue-grey silty-clay, firm, with occ. small sub-rounded pebbles (W 0.10m, D 0.05m)

*Finds:* none

**Fill 4142** mid blue-grey silty-clay with pockets of white sand, orange clay and mid grey-brown silty-clay (W 0.45m, D 0.20m)

*Finds:* none

**Fill 4072** light grey-brown clay, with occ. small sub-rounded pebbles and small patches of mid blue silty-clay (W 0.29m, D 0.07m)

*Finds:* late Iron Age/? Roman pottery

**Fill 4138** dark blue-grey silty-clay, with occ. small sub-rounded pebbles (W 0.32m, D 0.28m)

*Finds:* none

**Fill 4073** mid blue-grey silty-clay, with occ. small sub-rounded pebbles (W 0.36m, D 0.13m)

*Finds:* none

**Fill 4016** mid blue-grey silty-clay, firm, with occ. small sub-rounded pebbles

*Soil Sample Nos.:* 23

*Finds:* ?late Iron Age/Roman pottery and animal bone

**Fill 4139** mid blue-grey silty-clay, with occ. small sub-rounded stones (W 0.50m, D 0.05m)

*Finds:* none

*Date:* ?late Iron Age/Romano-British

*Interpretation:* possible construction trench for palisade/wall

**Ditch 4014** orientated E-W, moderately steep sides with a slightly curved base (W 0.40m, D 0.26m)

**Fill 4037** light grey-yellow silty-clay, firm, with occ. flecks of charcoal (W 0.20m, D 0.10m)

*Finds:* none

**Fill 4036** dark grey silty-clay, with occ. charcoal flecks

*Finds:* ?early Roman pottery, animal bone and burnt/fired clay

*Date:* ?early Romano-British

*Interpretation:* palisade trench

**Post hole 4017** sub-circular, with rounded sloping sides and base (W 0.44m, D 0.12m)

**Fill 4045** dark grey mixed with red-brown silty-clay, firm, with occ. charcoal frags. and occ. small chert frags

*Finds:* late Iron Age/? Roman pottery

*Date:* ?late Iron Age/Romano-British

*Interpretation:* one of a line of post holes

**Post hole 4018** sub-circular, with rounded sloping sides and base

**Fill 4046** dark grey mixed with red-brown silty-clay, firm, with occ. small chert frags

*Finds:* ?late Iron Age pottery

*Date:* ?late Iron Age/early Romano-British

*Interpretation:* one of a line of post holes

**Post hole 4019** sub-circular, with steeply sloping sides and a flat base (W 0.49m, D 0.18m)

**Fill 4047** dark grey mixed with reddish brown silty-clay, firm, with occ. small chert frags

*Finds:* none

*Date:* ?late Iron Age/early Romano-British

*Interpretation:* one of a line of post holes

**Gully 4020** orientated NE-SW, gradually sloping sides with a rounded base (W 0.82m, D 0.14m)

**Fill 4021** light grey-orange clay, firm, with occ. charcoal frags (W 0.07m, D 0.06m)

*Finds:* none

**Fill 4031** light orange-grey silty-clay, firm, with occ. charcoal frags. and occ. small sub-angular flint frags

*Finds:* none

**Recut 4022** of Gully 4020 orientated NE-SW, steeply sloping sides with an irregularly rounded base (W 0.42m, D 0.20m)

**Fill 4023** dark brown-grey silty-clay, firm, with frequent charcoal frags. and occ. small sub-angular flint frags

*Finds:* ?late Iron Age/early Roman pottery

*Date:* ?late Iron Age/early Romano-British

*Interpretation:* circular enclosure gully with one recut

**Gully 4024** orientated NW-SE, shallow profile with moderately sloping concave sides and a flat base (W 0.42m, D 0.36m)

**Fill 4102** mid orange-grey silty-clay, with occ. charcoal flecks

*Finds:* none

**Fill 4098** mid orange-grey silty-clay, with occ. charcoal flecks

*Finds:* none

**Fill 4099** light grey silty-clay with occ. iron staining

*Finds:* none

**Fill 4097**

*Finds:* none

**Fill 4101** mid grey-orange silty-clay, firm

*Finds:* late Iron Age/?early Roman pottery

**Fill 4100** light-mid grey silty-clay, with occ. iron staining

*Finds:* none

**Fill 4096** light-mid grey silty-clay, with occ. iron staining

*Finds:* none

**Fill 4077** mid grey-brown silty-clay, with occ. iron staining, charcoal flecks and small sub-angular stone frags

*Finds:* late Iron Age/?early Roman pottery

*Date:* Romano-British

*Interpretation:* enclosure gully. 4102 is the same as 4098

**Ditch 4025** orientated NW-SE, almost vertical sides with a flat base (W 0.42m, D 0.36m)

**Fill 4093** mid orange clay mixed with light grey silty sand, with occ. charcoal flecks

*Finds:* none

**Fill 4092** light grey sandy-clay mixed with orange clay, firm, with occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch

**Post hole 4104** vertical edges with a flat base (W 0.30m, D 0.32m)

**Fill 4091** light grey-orange sandy-silt

*Finds:* none

**Fill 4090** light grey silty-clay

*Finds:* none

**Fill 4089** black silty-clay, firm

*Finds:* none

**Fill 4088** mid grey silty-clay, firm

*Finds:* none

**Fill 4094** mid grey sandy-clay, firm, with moderate charcoal flecks (W 0.30m, D 0.10m)

*Finds:* none

**Fill 4095** dark grey sandy-clay, firm (W 0.10m, D 0.06m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch with a post hole cut into it

**Post hole 4026** sub-circular, with gently sloping sides and a rounded base (W 0.60m, D 0.16m)

**Fill 4048** mixed mid red-grey and mid yellow-grey silty-clay, firm, with moderate small charcoal frags. and occ. small chert frags

*Finds:* burnt/fired clay loom weights

*Date:* Romano-British

*Interpretation:* post hole

**Ditch 4027** orientated NE-SW, with a 'U'-shaped profile (W 0.36m, D 0.19m)

**Fill 4110** mottled yellow-orange-grey clay, with occ. charcoal flecks (W 0.36m, D 0.06m)

*Finds:* none

**Fill 4028** mid-dark grey, mottled with orange, silty-clay, with frequent charcoal flecks (W 0.29m, D 0.18m)

*Finds:* late Iron Age/?early Roman pottery and animal bone

*Date:* ?late Iron Age/early Romano-British

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*Interpretation:* circular enclosure

**Ditch 4029** orientated NW-SE, with a 'U'-shaped profile (W 0.78m, D 0.30m)

*Fill 4030* dark grey clay-silt mottled with orange clay-silt, with frequent flecks of charcoal and occ. larger frags. and occ. small stones

*Finds:* mid-late C1<sup>st</sup> AD pottery, slag and animal bone

*Date:* early Romano-British

*Interpretation:* ditch

**Gully 4032** orientated E-W, moderately steep sided with a shallow rounded base (W 0.50m, D 0.20m)

*Fill 4105* mid orange-grey clay, firm

*Finds:* none

*Date:* Romano-British

*Interpretation:* gully

**Ditch 4038** orientated E-W, gently sloping sides with a rounded bottom (W 1.10m, D 0.32m)

*Fill 4054* orange-grey sandy-clay, firm (W 0.20m, D 0.10m)

*Finds:* none

*Fill 4039* light orange-grey clay, firm, with frequent charcoal flecks and occ. small flint nodules (W 0.70m, D 0.16m)

*Finds:* none

*Fill 4052* mid orange-grey clay, firm, with very occ. small sub-angular stones, (W 0.20m, D 0.10m)

*Finds:* none

*Fill 4049* light grey clay, firm, with very occ. small sub-angular stones (W 0.30m, D 0.10m)

*Finds:* none

*Fill 4053* mid orange-grey clay, firm, with very occ. small sub-angular stones, (W 0.30m, D 0.10m)

*Finds:* late Iron Age/early Roman pottery and animal bone

*Fill 4051* light grey clay, firm (W 0.40m, D 0.10m)

*Finds:* none

*Fill 4050* mid grey silty-clay, firm (W 0.30m, D 0.20m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* circular enclosure ditch

**Ditch 4040** orientated E-W, with moderately steep sides and a shallow curved base (W 0.24m, D 0.18m)

*Fill 4041* orange-grey clay, firm, with occ. sub-rounded chalk frags. (W 0.20m, D 0.05m)

*Finds:* none

*Fill 4042* mid grey silty-clay, firm, with occ. small sub-angular stones (W 0.45m, D 0.16m)

*Finds:* late Iron Age/early Roman pottery

*Date:* ?late Iron Age/early Romano-British

*Interpretation:* possible palisade construction trench

**Gully 4043** orientated N-S, with shallow sloping sides and a flattish base (W 0.15m, D 0.02m)

*Fill 4044* mid grey mixed with red-brown silty-clay, firm, with occ. charcoal frags. and occ. small chert frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* shallow gully containing a line of post holes (see cuts 4017, 4018, 4019 & 4026)

**Ditch 4055** orientated E-W, very steeply sloping sides with a flat base (W 0.62m, D 0.22m)

*Fill 4056* mid grey-orange silty-clay, firm, with occ. charcoal frags. (W 0.12m, D 0.15m)

*Finds:* none

*Fill 4146* mid orange-grey silty-clay, firm, with occ. charcoal frags. (W 0.06m, D 0.21m)

*Finds:* none

**Recut 4057 of Ditch 4055** orientated E-W, irregularly sloping sides with a flat base (W 0.62m, D 0.22m)

*Fill 4058* light orange-grey silty-clay, firm, with occ. charcoal frags. and occ. small sub-angular flint frags. (W 0.42m, D 0.17m)

*Finds:* ?late Iron Age pottery

*Fill 4059* mid grey-orange silty-clay, firm, with occ. charcoal frags. (W 0.40m, D 0.06m)

*Finds:* none

*Date:* ?late Iron Age

*Interpretation:* enclosure ditch with one recut

**Post hole 4060** sub-circular, with gently sloping sides and a rounded base (W 0.41m, D 0.10m)

*Fill 4153* dark red-grey sandy-clay, firm, with moderate charcoal frags. and occ. small chert frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* one of a line of post holes

**Post hole 4061** sub-circular, with steeply sloping sides and a flattish base (W 0.32m, D 0.17m)

*Fill 4390* dark red-grey sandy-clay, firm, with occ. small chert frags. and moderate charcoal frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* one of a line of post holes

**Post hole 4062** sub-circular, with steeply sloping sides and a flattish base

*Fill 4391* dark red-grey sandy-clay, firm, with occ. small chert frags. and moderate charcoal frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* one of a line of post holes

**Ditch 4063** orientated E-W, moderately sloping sides with a flat base (W 0.65m, D 0.20m)

*Fill 4154* light red/blue-gray silty-clay, firm, with occ. small chert frags. and frequent charcoal frags

*Finds:* none

*Fill 4155* mid red/blue-gray silty-clay, firm, with occ. small chert frags. and frequent charcoal frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* circular enclosure ditch containing a possible line of post holes (see 4060, 4061, 4062, 4170 & 4171) contained burnt/fired clay

**Ditch? 4067** orientated NW-SE, convex sloping sides with a rounded base (W 1.74m, D 0.31m)

*Fill 4066* mid grey silty-clay mottled with dark orange (W 1.10m, D 0.21m)

*Finds:* none

*Fill 4065* dark grey silty-clay, with very occ. small rounded pebbles (W 1.38m, D 0.10m)

*Finds:* late Iron Age/early Roman pottery and slag

*Date:* late Iron Age/early Romano-British

*Interpretation:* possibly a ditch terminus. Uncertainty due to cutting of feature by modern land drain

**Pit 4068** sub-circular, with moderately steeply sloping sides and a flat base (W 0.61m, D 0.11m)

*Fill 4069* mid grey-orange clay, firm, with occ. charcoal flecks (W 0.50m, D 0.10m)

*Finds:* none

*Fill 4070* mid red-brown clay-silt, with occ. small limestone frags (W 0.23m, D 0.02m)

*Finds:* none

*Fill 4071* mid orange-grey clay-silt, firm, with occ. charcoal frags. (W 0.23m, D 0.02m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* Pit

**Ditch 4074** orientated NW-SE, near vertical sides with a flat base

*Fill 4274* mid orange clay, firm, with occ. charcoal flecks

*Finds:* none

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- Fill 4076* mid grey sandy-silt  
 *Finds:* late Iron Age/early Roman pottery  
*Fill 4272* mid grey-orange clay, firm  
 *Finds:* none  
*Fill 4271* dark grey silty-clay, firm, with occ. charcoal flecks  
 *Finds:* none  
*Fill 4270* mid orange-grey/brown silty-clay, firm, with occ. sub-angular stones  
 *Finds:* none  
 *Date:* ?late Iron Age/Romano-British  
 *Interpretation:* ditch. 4074 is the same as 4025
- Gully 4075** orientated NW-SE, fairly shallow concave sides with a flat base  
*Fill 4324* mid orange clay, firm, with occ. charcoal flecks  
 *Finds:* none  
*Fill 4277* light orange-grey sandy-silt, firm  
 *Finds:* none  
*Fill 4276* light grey sandy-silt, firm, with occ. charcoal flecks  
 *Finds:* none  
*Fill 4275* light grey sandy-silt, firm, with frequent iron staining  
 *Finds:* none  
 *Date:* Romano-British  
 *Interpretation:* gully
- Gully 4078** orientated E-W, 'V'-shaped profile with shallowly sloping sides  
*Fill 4079* mid blue-grey silty clay, firm, with occ. charcoal frags  
 *Finds:* none  
 *Date:* Romano-British  
 *Interpretation:* gully
- Gully 4080** orientated E-W, 'V'-shaped profile with shallowly sloping sides (W 0.28m, D 0.08m)  
*Fill 4081* mid blue-grey silty clay, firm, with occ. charcoal frags. and occ. small chert frags  
 *Finds:* burnt/fired clay  
 *Date:* Romano-British  
 *Interpretation:* gully
- Gully 4082** orientated E-W, 'V'-shaped profile with shallowly sloping sides (W 0.37m, D 0.06m)  
*Fill 4083* dark brown-grey silty clay, firm, with occ. charcoal frags. and occ. small sub-angular chert frags  
 *Finds:* baked clay, slag and burnt stone  
 *Date:* Romano-British  
 *Interpretation:* gully
- Gully 4084** orientated E-W, 'V'-shaped profile with shallowly sloping sides  
*Fill 4085* mid blue-grey silty clay, firm, with occ. small chert frags  
 *Finds:* none  
 *Date:* Romano-British  
 *Interpretation:* gully
- Ditch 4087** orientated N-S, with a 'U'-shaped profile (W 0.90m, D 0.25m)  
*Fill 4106* light yellow-grey silty-clay, firm, with occ. charcoal flecks  
 *Finds:* none  
*Fill 4107* mid grey silty-clay, firm, with occ. small sub-angular stones  
 *Finds:* none  
*Fill 4108* mid grey clay, firm, with occ. sub-angular stones  
 *Finds:* none  
 *Date:* Romano-British  
 *Interpretation:* circular enclosure gully
- Pit 4109** sub-circular, irregular sloping sides and base (W 0.32m, D 0.06m)  
*Fill 4407* mid orange-brown silty clay, with very occ. charcoal flecks  
 *Finds:* none
- Date:* Romano-British  
 *Interpretation:* pit, probably a natural feature
- Gully 4111** orientated E-W, very steep sided (D 0.48m)  
*Fill 4336* mid grey-brown silty-clay, firm, with occ. charcoal flecks  
 *Finds:* none  
*Fill 4335* light grey-orange silty-clay, with occ. small sub-angular stones  
 *Finds:* none  
 *Date:* Romano-British  
 *Interpretation:* gully
- Gully 4112** orientated E-W, concave sides tapering to an almost pointed base (W 1.00m, D 0.60m)  
*Fill 4343* mid grey-brown silty-clay, with frequent iron staining, firm  
 *Finds:* none  
*Fill 4338* mid orange-grey silty-clay, with very occ. sub-angular stones  
 *Finds:* none  
*Fill 4113* mid grey-brown silty-clay, with frequent iron staining, firm (W 0.80m, D 0.20m)  
 *Finds:* Roman pottery and animal bone  
*Fill 4337* mid grey-orange silty-clay, firm, with occ. charcoal flecks (W 0.98m, D 0.18m)  
 *Finds:* none  
 *Date:* Romano-British  
 *Interpretation:* gully
- Ditch 4114** (Section A) orientated ENE-WSW, with a broad 'V'-shaped profile (W 1.90m, D 0.52m)  
*Fill 4161* mid-light grey clay-silt with heavy iron staining and occ. charcoal flecks (W 1.08m, D 0.11m)  
 *Finds:* none  
*Fill 4157* blue-grey clay-silt with heavy yellow clay-silt mottling, and occ. small rounded and sub-angular chalk and limestone pebbles (W 0.60m, D 0.25m)  
 *Finds:* none  
**Recut 4401** of **Ditch 4114** orientated ENE-WSW, very steeply sloping concave sides with a flat base  
*Fill 4160* light grey clay-silt with heavy iron staining and occ. charcoal flecks (W 0.52m, D 0.04m)  
 *Finds:* none  
*Fill 4159* mid grey clay-silt, with very heavy iron staining and occ. charcoal flecks (W 0.62m, D 0.08m)  
 *Finds:* none  
*Fill 4158* light-mid grey clay-silt with heavy iron staining and occ. charcoal flecks (W 0.98m, D 0.10m)  
 *Finds:* ?mid-late C1<sup>st</sup> AD pottery and quern stone (S.F 009)  
*Fill 4156* blue-grey silty-clay heavily mottled with yellow clay (W 1.32m, D 0.20m)  
 *Finds:* ?mid-late C1<sup>st</sup> AD pottery and animal bone  
 *Date:* early Romano-British  
 *Interpretation:* ditch with one recut
- Ditch 4114** (Section B) orientated ENE-WSW, with a broad 'V'-shaped profile (W 1.90m, D 0.52m)  
*Fill 4347* dark blue-grey silty-clay, firm, with moderate iron staining and occ. charcoal flecks  
 *Finds:* none  
 *Date:* early Romano-British  
 *Interpretation:* ditch
- Pit 4115** orientated NE-SW, steep sides with an irregular base (W 1.25m, D 0.31m)  
*Fill 4219*  
 *Finds:* none  
*Fill 4218* mid grey-brown silty-clay, firm (W 0.14m, D 0.13m)  
 *Finds:* none  
*Fill 4212* dark grey silty-clay, with frequent charcoal flecks, occ. larger charcoal frags., and mortar fragments (W 1.12m, D 0.17m)  
 *Finds:* none  
*Fill 4220* mid grey-brown silty-clay, firm, (W 0.28m, D 0.12m)

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*Finds:* none

*Fill 4211* dark grey-brown clay, firm, with occ. charcoal flecks and mortar frags. (W 0.38m, D 0.10m)

*Finds:* none

*Fill 4210* very dark grey silty-clay, with frequent charcoal flecks and occ. small mortar frags (W 0.14m, D 0.08m)

*Finds:* none

*Fill 4116* dark grey silty-clay, with moderate charcoal flecks and frequent small mortar frags (W 0.60m, D 0.12m)

*Finds:* plaster

*Fill 4209* dark brown-grey silty-clay, firm, with occ. small mortar frags. and charcoal flecks (W 0.12m, D 0.14m)

*Finds:* none

*Fill 4208* mid yellow-brown silty-sand, loose, with occ. charcoal flecks and occ. small mortar frags

*Finds:* none

*Fill 4207* dark grey-brown silty-clay, firm, with occ. mortar frags. and moderate charcoal flecks (W 0.16m, D 0.18m)

*Finds:* none

*Fill 4117* dark grey silty-clay, with moderate mortar frags., frequent charcoal flecks and some larger frags (0.54m, D 0.27m)

*Finds:* none

*Fill 4217* mid grey-brown silty-clay, firm, with occ. charcoal fragments (W 0.22m, D 0.17m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit. 4211 is the same as 4220

**Gully 4118** orientated NW-SE, moderately steeply sloping sides with a rounded base (W 0.45m, D 0.24m)

*Fill 4119* mid brown-orange clay, firm, with occ. charcoal frags (W 0.10m, D 0.14m)

*Finds:* none

**Recut 4120 of Gully 4118** orientated NW-SE, steeply sloping sides with a rounded base (W 0.30m, D 0.24m)

*Fill 4121* mid orange-grey silty clay, firm, with occ. charcoal frags (W 0.27m, D 0.20m)

*Finds:* late Iron Age/Romano pottery

*Fill 4122* mid grey-orange silty-clay, firm, with occ. charcoal flecks (W 0.30m, D 0.04m)

*Finds:* late Iron Age/?early Roman pottery and burnt/fired clay

*Date:* ?late Iron Age/early Romano-British

*Interpretation:* circular enclosure gully containing one recut

**Pit 4123** orientated E-W, shallow profile with a sub-circular base

*Fill 4402*

*Finds:* none

*Fill 4131* dark brown-black, with frequent charcoal flecks

*Finds:* none

*Fill 4129* white silty-clay with 60% chalk pebbles, with 10% burnt natural orange silty-clay and frequent charcoal flecks (W 0.15m, D 0.26m)

*Finds:* none

*Fill 4130* dark brown-grey silty-clay, with frequent charcoal flecks (W 0.42m, D 0.12m)

*Finds:* none

*Fill 4185* mid orange-grey silty-clay, with occ. small sub-angular stones (W 1.00m, D 0.12m)

*Finds:* late Iron Age/?early Roman pottery and slag

*Date:* ?late Iron Age/early Romano-British

*Interpretation:* pit

**Pit 4124** no orientation, vertical sided with a slightly rounded base (W 0.71m, D 0.41m)

*Fill 4125* mid grey silt-sand mottled with orange silt-sand, frequent charcoal flecks

*Finds:* Roman pottery and burnt/fired clay

*Date:* Romano-British

*Interpretation:* pit

**Ditch 4126** orientated E-W, steep sided

*Fill 4215* mid grey-brown silty-clay, firm, with occ. charcoal flecks

*Finds:* late Iron Age/early Roman pottery, animal bone and shell

**Recut 4128 of Ditch 4126** orientated E-W, concave sides tapering to almost a 'V'-shape (W 0.14m, D 0.13m)

*Fill 4137* light red-brown silty-clay mixed with blue-grey clay, firm, with occ. charcoal frags and occ. small chert frags

*Finds:* none

*Fill 4136* mid gray-brown silty-clay with <10% sand, moderate charcoal frags., and occ. small sub-angular chert frags

*Finds:* ?late C1<sup>st</sup>-early C2<sup>nd</sup> AD pottery, animal bone and shell

*Fill 4135* mixed yellow-blue grey mid brown silty-clay with <10% sand, firm, with moderate charcoal frags. and occ. small sub-rounded limestone frags (W 0.50m, D 0.095m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* Ditch containing one recut

**Gully 4127** orientated N-S, steeply sloping sides with a flat base (W 0.27m, D 0.12m)

*Fill 4134* dark brown-grey silty-clay, firm, with frequent charcoal frags., occ. small limestone pebbles and occ. small sub-angular chert frags. (W 0.55m, D 0.24m)

*Finds:* ?early Roman pottery and animal bone

*Date:* ?early Romano-British

*Interpretation:* gully

**Pit 4132**

*Fill*

*Finds:*

*Date:* Romano-British

*Interpretation:*

**Post-pipe 4133**

*Fill*

*Finds:*

*Date:* Romano-British

*Interpretation:*

**Gully 4148** orientated N-S, concave sides with a rounded base (W 1.12m, D 0.28m)

*Fill 4147* mixed dark grey and dark red-brown clay-silt, very occ. small rounded pebbles (W 1.12m, D 0.28m)

*Finds:* pottery, animal bone and shell

*Date:* Romano-British

*Interpretation:* gully

**Gully 4150** orientated N-S, concave sides with a rounded base (W 0.36m, D 0.20m)

*Fill 4149* light grey clay-silt, very occ. small angular flint frags

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* gully

**Layer 4151** mixed yellow-brown and yellow-orange clay, with very occ. small pebbles

*Finds:* none

*Date:* Romano-British

*Interpretation:* natural, the same as 4001

**Pit 4152** orientated NE-SW, very shallow profile with steep sides and a flat base (W 0.30m, D 0.05m)

*Fill 4400* mid grey silt-sand mottled with orange silt-sand, with frequent charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* truncated pit

**Pit 4164** sub-circular with gently sloping sides and a rounded base (W 0.62m, D 0.26m)

*Fill 4163* yellow-brown silty-clay mixed with blue-grey silty-clay, firm, with occ. charcoal flecks and occ. small angular flint frags. (W 0.50m, D 0.26m)

*Finds:* none

*Fill 4162* blue-grey mottled with yellow silty-clay, with charcoal flecks (W 0.40m, D 0.27m)

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*Finds:* slag

*Date:* Romano-British

*Interpretation:* small pit

**Pit 4166** sub-circular, very steep sided with a flat base (W 0.59m, D 0.28m)

*Fill 4204* mid grey-green silty-clay, firm, with occ. charcoal flecks and occ. limestone frags (W 0.51m, D 0.14m)

*Soil Sample Nos.:* 25

*Finds:* plaster

*Fill 4229* mid grey-green silty-clay, firm, with occ. charcoal flecks and occ. limestone frags (W 0.33m, D 0.09m)

*Finds:* none

*Fill 4167* mid green-grey silty-clay heavily mottled with yellow-orange-pink, firm, with occ. charcoal flecks, occ. small angular flint frags., and frequent deteriorated building materials (W 0.56m, D 0.17m)

*Finds:* shell and burnt flint

*Date:* Romano-British

*Interpretation:* pit

**Pit 4168** sub-circular, steeply sloping sides with a flat base (W 0.54m, D 0.17m)

*Fill 4169* mixed mid blue-grey and light red-brown silty-clay, with moderate charcoal frags. and moderate building material frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* small pit

**Post hole 4170** sub-circular, moderately sloping sides with a flat base

*Fill 4392* dark red-grey sandy-clay, firm, with occ. chert frags and occ. charcoal frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* post-hole

**Post hole 4171** sub-circular, moderately sloping with a flat base (W 0.30m, D 0.10m)

*Fill 4393* dark red-grey sandy clay, firm, with occ. small chert frags. and moderate charcoal frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole

**Ditch 4172** moderately sloping sides with a rounded base (W 0.42m, D 0.25m)

*Fill 4173* mid grey mottled with orange silt-clay, occ. charcoal flecks and very occ. rounded pebbles

*Finds:* pottery

*Fill 4174* dark grey silt-clay, frequent charcoal flecks (W 0.34m, D 0.08m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* circular enclosure ditch

**Pit 4175** orientated N-S, irregular 'V'-shaped profile (W 0.40m, D 0.11m)

*Fill 4374* light grey clay-silt, with significant amount of ash

*Finds:* none

*Fill 4176* very dark grey clay-silt, soft, with very occ. small angular flint frags. and frequent charcoal flecks

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* small pit

**Gully 4178** convex sides with a rounded base (W 0.64m, D 0.24m)

*Fill 4177* dark grey-brown clay-silt, with occ. small rounded pebbles, occ. chalk frags. and very occ. charcoal flecks

*Finds:* pottery, clay loom weights and shell

*Date:* Romano-British

*Interpretation:* gully

**Gully 4179** orientated N-S, steeply sloping sides with a flat base (W 0.55m, D 0.15m)

*Fill 4180* mixed mid blue-grey and light red-brown silty-clay, with moderate charcoal flecks and moderate rounded limestone frags

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* gully

**Ditch 4181** orientated E-W, steep sided with a shallowly rounded base (W 0.42m, D 0.27m)

*Fill 4182* mid grey silt-clay mottled with orange silt-clay, occ. charcoal flecks and very occ. sub-angular flint frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* circular enclosure ditch, group no. 2

**Layer 4183** burnt natural immediately between the edge of cut 4184 and the natural

*Finds:* none

*Date:* Romano-British

*Interpretation:* burnt natural

**Pit 4184** orientated N-S, ovoid, with shallow sloping sides and a flat base (W 1.00m, D 0.12m)

*Fill 4221* dark brown-grey silty-clay, firm

*Finds:* none

*Fill 4394* dark brown silty-clay, firm (W 0.20m, D 0.08m)

*Finds:* none

*Fill 4185* mid orange-grey silty-clay, with occ. small sub-angular stones (W 1.00m, D 0.12m)

*Finds:* slag

*Date:* Romano-British

*Interpretation:* pit

**Gully 4187** orientated NE-SW, shallow concave sides with a rounded base (W 0.34m, D 0.10m)

*Fill 4186* black-grey clay-silt, with moderate small angular flint frags

*Finds:* pottery, slag, and foreign stone

*Date:* Romano-British

*Interpretation:* gully

**Gully 4188** orientated N-S, no profile as longitudinal section

*Fill 4189* mid grey-brown mottled with orange, firm, with occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* gully

**Gully 4190**

*Fill 4191*

*Finds:* fired clay

*Fill 4192*

*Finds:* none

*Date:* Romano-British

*Interpretation:* gully

**Ditch 4194 (Section A)** steeply sloping concave sides with a flat base

*Fill 4223* light grey-orange silty-clay, firm, with occ. charcoal flecks (W 0.19m, D 0.28m)

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* circular enclosure ditch

**Ditch 4194 (Section B)** steeply sloping concave sides with a flat base

*Fill 4222* light grey-orange silty-clay, firm, with occ. charcoal flecks (W 0.14m, D 0.25m)

*Finds:* pottery

*Date:* Romano-British

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*Interpretation:* circular enclosure ditch

**Ditch 4194** (Section C) steeply sloping concave sides with a flat base

*Fill 4197* mid grey silty-sand, firm, with occ. charcoal flecks

*Finds:* none

*Fill 4196* mid grey-orange silty-clay with occ. iron staining

*Finds:* pottery

*Fill 4195* mid grey sandy-silt, firm, with occ. iron staining

*Finds:* none

*Date:* Romano-British

*Interpretation:* circular enclosure ditch

**Ditch 4194** (Section D) steeply sloping concave sides with a flat base

*Fill 4244* mid grey sandy-silt with occ. iron staining, firm

*Finds:* pottery and slag

*Date:* Romano-British

*Interpretation:* circular enclosure ditch

**Gully 4203** orientated N-S, irregular shallow profile (W 0.54m, D 0.18m)

*Fill 4198* light grey clay, with occ. charcoal flecks and frequent small limestone fragments

*Finds:* none

*Fill 4199* mid brown-grey silty-clay, with occ. limestone frags

*Finds:* none

*Fill 4201* black sandy-silt (95% charcoal)

*Finds:* none

*Fill 4200* mixed mid brown, light orange and light grey silty-clay, firm, with occ. charcoal flecks and moderate small limestone fragments

*Finds:* pottery

*Fill 4202*

*Finds:* none

*Date:* Romano-British

*Interpretation:* possible internal feature of circular enclosure

**Ditch 4205** orientated E-W, steep sided on the N, shallow sided on the S, with a base sloping to the N (W 0.40m, D 0.15m)

*Fill 4206* mid orange-grey silty-clay, firm, with occ. sub-angular stone frags

*Finds:* pottery, shell and burnt/fired clay

*Date:* Romano-British

*Interpretation:* ditch

**Pit 4216** regular sub-circular, steep sided with a pointed base (W 0.70m, D 0.23m)

*Fill 4213* dark grey silty-clay mixed with sand, frequent charcoal flecks and occ. mortar frags (W 0.37m, D 0.18m)

*Finds:* none

*Fill 4214* dark grey silty-clay mixed with sand, with mortar frags. as over 80% of the deposit and charcoal flecks (W 0.38m, D 0.23m)

*Finds:* plaster

*Date:* Romano-British

*Interpretation:* recut of pit 4115

**Post hole 4224** circular, with concave sides and an irregular base (W 0.22m, D 0.07m)

*Fill 4225* dark grey-brown silty-clay, firm, with moderate iron staining

*Finds:* none

*Date:* Romano-British

*Interpretation:* possible post hole

**Gully 4226** orientated N-S and E-W, moderately sloping sides with a rounded base (W 0.46m, D 0.16m)

*Fill 4227* mid brown-orange slightly silty-clay, firm, with very occ. charcoal frags. and occ. angular flint frags (W 0.04m, D 0.02m)

*Finds:* none

*Fill 4228* mid grey-brown silty-clay with orange mottling, firm, with moderate charcoal flecks and angular and sub-angular flint frags (W 0.46m, D 0.14m)

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* square enclosure gully with section located at one corner

**Gully 4230** orientated N-S, moderately sloping sides with a flat base (W 0.34m, D 0.15m)

*Fill 4231* blue-grey clay with iron staining

*Finds:* none

*Date:* Romano-British

*Interpretation:* small, rectangular enclosure gully

**Gully 4232** orientated N-S, 'U'-shaped with a flat base (W 0.45m, D 0.19m)

*Fill 4233* grey silty-clay mottled with iron staining, with pockets of yellow clay-silt and very occ. small sub-angular flint and chert frags

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* possible enclosure ditch. 4232 is the same as 4234, and 4233 is the same as 4235

**Gully 4234** orientated E-W, with a 'U'-shaped profile (W 0.40m, D 0.12m)

*Fill 4235* grey silty-clay with iron staining and occ. very small angular flint frags

*Finds:* pottery and brick/tile

*Date:* Romano-British

*Interpretation:* possible enclosure ditch. 4232 is the same as 4234, and 4233 is the same as 4235

**Pit 4236** orientated N-S, an elongated oval with shallow sloping sides and a flat base (W 0.40m, D 0.14m)

*Fill 4259* orange-red silty-clay, firm

*Finds:* none

*Fill 4238* black charcoal/silty-clay, firm

*Finds:* none

*Fill 4237* light orange-yellow silty-clay mixed with a burnt deposit

*Finds:* none

*Fill 4258* yellow-orange clay, firm, with patches of burnt deposit

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit

**Gully 4239** steep sided with a rounded base (W 0.50m, D 0.21m)

*Fill 4240* light-mid grey silty-clay, loose, with moderate charcoal flecks and frequent iron panning

*Finds:* pottery, animal bone and slag

*Date:* Romano-British

*Interpretation:* possible circular gully

**Layer 4241** dark grey-brown silty-clay with occ. iron staining and occ. charcoal flecks (D 0.10m)

*Finds:* pottery, shell, slag and burnt/fired clay

*Date:* Romano-British

*Interpretation:* deposit in a shallow depression, very irregular

**Gully 4242** orientated E-W, with convex, near vertical edges and a flat base (W 0.45m, D 0.35m)

*Fill 4243* mid grey silty-clay mixed with orange clay, firm, occ. iron staining, occ. charcoal flecks, and occ. sub-angular and rounded stone frags

*Finds:* pottery and slag

*Date:* Romano-British

*Interpretation:* gully

**Gully 4245** shallow 'U'-shaped profile (W 0.48m, D 0.16m)

*Fill 4312* dark grey silty-clay

*Finds:* none

*Fill 4246* dark grey silty-clay, with moderate-frequent sub-angular small stones, moderate charcoal flecks, and frequent iron staining

*Finds:* pottery and burnt/fired clay

*Date:* Romano-British

*Interpretation:* gully

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**Gully 4247** orientated N-S, with a 'U'-shaped profile with steeply sloping sides and a rounded base (W 0.24m, D 0.11m)

*Fill 4248* mid orange-brown silty-clay, firm, with moderate charcoal frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* enclosure gully

**Ditch 4249** orientated E-W, steeply sloping sides with a flat base (W 1.00m, D 0.40m)

*Fill 4250* mid grey silty-clay, firm, with iron staining and occ. small sub-angular stone frags

*Finds:* pottery, animal bone and shell

*Date:* Romano-British

*Interpretation:* ditch

**Gully 4251** orientated N-S, (W 0.16m, D 0.12m)

*Fill 4252* blue-grey clay with iron staining

*Finds:* none

*Date:* Romano-British

*Interpretation:* rectangular enclosure gully. 4251 is the same as 4230, and 4252 is the same as 4231

**Gully 4254** orientated N-S, concave sides with a shallow rounded base (W 0.35m, D 0.12m)

*Fill 4253* mid blue-grey silty-clay, firm, with occ. small sub-rounded stones and occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* possible construction slot

**Gully 4255** orientated E-W, convex sides with a flat base (W 0.55m, D 0.20m)

*Fill 4333* mid orange clay, firm, with charcoal flecks

*Finds:* none

*Fill 4256* mid grey silty-clay, firm, with moderate iron staining and occ. charcoal flecks (W 0.55m, D 0.18m)

*Finds:* pottery and slag

*Date:* Romano-British

*Interpretation:* possible enclosure gully

**Gully 4257** orientated NW-SE, concave sides with a flat base (W 0.40m, D 0.08m)

*Fill 4334* mid grey silty-clay, firm, with moderate iron staining and occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* possible enclosure gully

**Post hole 4260** orientated E-W, steep slightly concave sides with a flat base (W 0.29m, D 0.08m)

*Fill 4261* dark, blue-grey silty-clay, firm, with occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole

**Pit 4262** sub-circular, with gradually sloping sides and flat base (W 0.63m)

*Fill 4263* dark grey-brown silty-clay, firm, with occ. small sub-angular flint frags and occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit

**Ditch 4266** orientated N-S, convex sides with a rounded base, (W 0.70m, D 0.30m)

*Fill 4268* mid yellow clay, firm (W 0.10m, D 0.10m)

*Finds:* none

*Fill 4269* light grey silty-clay, firm (W 0.10m)

*Finds:* none

*Fill 4267* mid grey silty-clay, firm, with occ. small sub-angular stones (W 0.50m, D 0.20m)

*Finds:* pottery and animal bone

*Date:* Romano-British

*Interpretation:* ditch

**Ditch 4278** orientated E-W, moderately sloping sides with a rounded base (W 1.04m, D 0.63m)

*Fill 4165* light-mid grey clay-silt, with mottled iron staining and occ. small chalk pebbles (W 0.62m, D 0.32m)

*Finds:* none

*Fill 4279* mid-dark grey clay-silt mottled with iron staining, with occ. charcoal flecks and occ. small chalk pebbles (W 0.65m, D 0.27m)

*Finds:* pottery and animal bone

*Date:* Romano-British

*Interpretation:* ditch

**Post hole 4280** sub-circular, steeply sloping sides on the S side and gradually sloping sides on the N side with a rounded base (W 0.36m, D 0.06m)

*Fill 4281* mid brown-orange silty-clay, firm, with moderate charcoal flecks and occ. small sub-angular flint frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole

**Gully 4282** orientated N-S, with a shallow 'U'-shaped profile (W 0.47m, D 0.21m)

*Fill 4283* mid grey clay

*Finds:* pottery

**Recut 4284** of Gully 4282 orientated N-S, with a 'U'-shaped profile (W 0.21m, D 0.11m)

*Fill 4285* dark grey silty-clay, moderate-frequent small sub-angular stones, with frequent iron staining and moderate charcoal

*Finds:* none

*Date:* Romano-British

*Interpretation:* gully containing one possible recut

**Pit 4286** orientated NW-SE, steep concave sides on the E, becoming shallower on the S and W with a flat base (W 0.90m, D 0.18m)

*Fill 4288* dark grey silty-clay, firm, with 50% of fill being charcoal frags. (W 0.75m, D 0.18m)

*Soil Sample Nos.:* 26

*Finds:* slag, burnt clay and burnt flint

*Fill 4289* mid grey-brown silty-clay, firm, with occ. charcoal frags (W 0.20m, D 0.08m)

*Finds:* none

*Fill 4290* mid grey-brown silty-clay, firm, with occ. charcoal flecks (W 0.40m, D 0.04m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit

**Post hole 4287** sub-circular orientated E-W, steep sided with a rounded base (W 0.60m, D 0.28m)

*Fill 4291* black silty-clay with a high percentage of charcoal, firm (W 0.20m, D 0.02m)

*Soil Sample Nos.:* 27

*Finds:* none

*Date:* Romano-British

*Interpretation:* large pit

**Ditch 4292** orientated N-S, concave sides with a flat base (W 1.50m, D 0.38m)

*Fill 4346* mid orange-brown silty-clay, firm, with occ. charcoal flecks and occ. small sub-angular limestone frags

*Finds:* none

*Fill 4293* mid blue/grey-brown silty-clay, firm, with moderate iron staining, occ. small sub-angular limestone frags. and occ. charcoal flecks (W 0.80m, D 0.34m)

*Finds:* pottery, animal bone, shell and burnt/fired clay

*Date:* Romano-British

*Interpretation:* ditch

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**Ditch 4294** orientated ENE-WSW, with a rounded 'U'-shaped profile (W 1.04m, D 0.37m)

*Fill 4296* grey-yellow clay-silt, firm, with very occ. small flint and chalk/limestone frags (W 0.86m, D 0.06m)

*Finds:* pottery and flint

*Fill 4295* mid grey coarse clay-silt mottled with yellow-orange sandy-clay, with occ. small flints (W 0.90m, D 0.33m)

*Finds:* pottery

*Fill 4307* mottled yellow and grey sandy-clay, firm (W 0.38m, D 0.13m)

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* ditch

**Gully 4297** longitudinal section cut so no profile (D 0.09m)

*Fill 4298* dark brown-grey silty-clay, firm, with occ. small limestone frags. and occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* gully

**Gully 4299** orientated NW-SE, longitudinal section so no profile (D 0.14m)

*Fill 4300* dark orange-brown silty-clay, firm, with occ. charcoal flecks and occ. small angular and sub-angular flint frags

*Finds:* slag

*Date:* Romano-British

*Interpretation:* gully

**Gully 4301** orientated N-S, longitudinal section so no profile (D 0.06m)

*Fill 4302* mid grey-orange silty-clay, firm, with occ. charcoal flecks and occ. small flint frags

*Finds:* slag

*Date:* Romano-British

*Interpretation:* gully

**Pit 4303** sub-circular with irregular sloping sides, only partially excavated due to time constraints (W 0.21m, D 0.15m)

*Fill 4304* mid grey-orange silty-clay, firm, with occ. charcoal frags., occ. small flint frags. and moderate small limestone frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit

**Pit 4305** shallow, irregular profile (W 0.55m, D 0.11m)

*Fill 4306* dark grey silt-clay mottled with orange and light grey silt-clay, with occ. charcoal frags

*Finds:* pottery and slag

*Date:* Romano-British

*Interpretation:* shallow pit

**Pit 4308** sub-circular with steep sides and a flat base (W 0.60m, D 0.12m)

*Fill 4309* mid blue-grey clay, firm, with occ. large rounded stones

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit or possible post hole

**Pit 4310** circular with concave sides and a slightly rounded base (W 0.44m, D 0.14m)

*Fill 4311* light red chalky-clay, firm (W 0.50m, D 0.12m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit

**Pit 4313** circular with concave near vertical edges and a flat base (W 1.00m, D 0.50m)

*Fill 4350* black sandy-silt, firm, with frequent charcoal flecks, moderately humic

*Finds:* none

*Fill 4349* mid grey-brown silty-clay, firm, with moderate iron staining and occ. charcoal flecks

*Finds:* none

*Fill 4348* mid orange clay mixed with light grey sand-clay, with occ. charcoal flecks and occ. iron staining

*Finds:* none

*Fill 4354* mid grey-brown silty-clay, firm, with moderate iron staining

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* pit

**Post hole 4314** sub-circular with steep sides and a flat base (W 0.41m, 0.18m)

*Fill 4315* dark grey-brown silty-clay, firm, with occ. charcoal frags and occ. small angular and sub-angular flints

*Finds:* none

*Date:* Romano-British

*Interpretation:* posthole or possible pit

**Post hole 4316**

*Fill 4317*

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole or small pit

**Ditch 4318** orientated E-W, unexcavated

*Fill 4319* mid-dark grey silty-clay, firm, with frequent small sub-angular stones and moderate iron staining

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch

**Post hole 4320**

*Fill 4321*

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole

**Post hole 4322**

*Fill 4323*

*Finds:* none

*Date:* Romano-British

*Interpretation:* possible post hole

**Ditch 4325** orientated NNW-SSE, moderately steep sided with a narrow rounded base (W 1.18m, D 0.61m)

*Fill 4327* light-mid grey silty-clay, with heavy iron staining and very occ. small angular flint frags. (W 1.18m, D 0.43m)

*Finds:* none

*Fill 4326* grey-brown clay-silt with moderate iron staining and very occ. small rounded chalk/limestone pebbles (W 0.90m, D 0.18m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch

**Pit 4328** roughly oval, orientated E-W, very steep sided with a flat base (W 1.20m, D 1.13m)

*Fill 4329* dark brown sandy-clay, firm, with occ. small chert frags and moderate charcoal frags

*Finds:* pottery, animal bone and ?clay loom weigh frags

*Fill 4330* light brown-grey sandy-clay, firm, with occ. sub-rounded chalk frags., occ. small sub-angular chert frags. and moderate charcoal frags (W 1.12m, D 0.31m)

*Finds:* pottery and animal bone

*Fill 4331* mid brown-grey silty-clay with up to 10% sand, firm, with frequent charcoal frags

*Finds:* animal bone, slag and shell

*Fill 4332* mid blue-grey silty-clay mixed with mid red-brown silty-clay and up to 10% sand, with occ. small chalk frags. and moderate charcoal frags

*Finds:* pottery, animal bone, shell and slag

*Date:* Romano-British

## Gazetteer of Archaeological Features

*Interpretation:* pit

**Layer 4339** mid grey-orange silty-clay, firm (D 0.08m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* redeposited natural

**Layer 4340** mid orange clay, firm, with occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* same as 4030, primary fill of ditch cut 4029

**Pit 4341** oval, orientated N-S (W 0.53m, D 0.19m)

*Fill 4342* grey clay-silt heavily mottled with orange clay-silt, with occ. angular small flint frags

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* pit

**Ditch 4344** orientated E-W, with a 'V'-shaped profile with a rounded base (W 2.00m, D 1.05m)

*Fill 4383* grey silt-clay mottled with brown-yellow clay and small pockets of sand, firm (W 0.61m, D 0.22m)

*Finds:* none

*Fill 4382* grey clay-silt with heavy iron staining (W 1.00m, D 0.17m)

*Finds:* none

*Fill 4381* grey clay-silt with moderate iron staining, firm, with very occ. pebbles (W 1.2m, D 0.20m)

*Finds:* none

*Fill 4380* grey sand (W 1.00m, D 0.05m)

*Finds:* none

*Fill 4379* dirty yellow sand, (W 0.70m, D 0.12m)

*Finds:* none

*Fill 4345* blue-grey clay-silt, firm, with occ. small rounded flint and chalk frags

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* ditch

**Layer 4351**

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* No. given to machined finds, possibly from pit cut 4313, fill 4348, or ditch cut 4114, fill 4347. Unexcavated

**Layer 4352**

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* No. given to machined finds from rectilinear feature S of section 62, associated with cut 4226, fill 4227. Unexcavated

**Layer 4353** mid grey-brown silty-clay with moderate iron staining, firm, with occ. charcoal flecks

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* No. given to surface finds from ditch cut 4313. Same as layer 4354. Unexcavated

**Layer 4355**

*Finds:* pottery and burnt/fired clay

*Date:* Romano-British

*Interpretation:* No. given to machined finds from E-W linear. See section 76, associated with cut 4255, fill 4256. Unexcavated

**Layer 4356**

*Finds:* pottery, burnt stone and brick/tile

*Date:* Romano-British

*Interpretation:* No. given to machined finds from N-S linear. See sections 40 and 43, associated with cut 4148, fill 4150. Unexcavated

**Layer 4357**

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* No. given to machined finds from circular? ditch. See section 98, associated with cut 4239, fill 4245. Unexcavated

**Layer 4358**

*Finds:* pottery and brick/tile

*Date:* Romano-British

*Interpretation:* No. given to machined finds from curvilinear feature. See section 88, associated with cut 4282. Unexcavated

**Layer 4359**

*Finds:* pottery, slag and shell

*Date:* Romano-British

*Interpretation:* No. given to machined finds from E-W linear. See section 85 and 86. Unexcavated

**Layer 4360**

*Finds:* pottery and slag

*Date:* Romano-British

*Interpretation:* No. given to machined finds from area adjacent to section 96, associated with cut 4297. Unexcavated

**Layer 4361**

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* No. given to machined finds from N-S linear. See section 80 and 81, associated with cut 4266. Unexcavated

**Layer 4362**

*Finds:* pottery and brick/tile

*Date:* Romano-British

*Interpretation:* No. given to machined finds from E-W linear at S end of site. See section 71, associated with cut 4249. Unexcavated

**Layer 4363**

*Finds:* pottery, shell and brick/tile

*Date:* Romano-British

*Interpretation:* No. given to machined finds from possible pit 11.00E, 71.00N. Unexcavated

**Layer 4364**

*Finds:* pottery and shell

*Date:* Romano-British

*Interpretation:* No. given to machined finds from E-W linear. See section 71, associated with cut 4114. Unexcavated

**Layer 4365**

*Finds:* pottery and animal bone

*Date:* Romano-British

*Interpretation:* No. given to machined finds from E-W linear. See sections 37 and 47, associated with cuts 4127 and 4112. Unexcavated

**Slot 4366** orientated NW-SE, with vertical sides and a flat base (W 0.38m, D 0.70m)

*Fill 4369* mid grey silty-sand (W 0.38m, D 0.18m)

*Finds:* pottery

*Fill 4395* mid grey-orange silty-clay (W 0.38m, D 0.52m)

*Finds:* none

*Date:* Romano-British

*Interpretation:* beam slot

**Layer 4367**

*Finds:* pottery

*Date:* Romano-British

*Interpretation:* No. given to machined finds from N-S linear. See section 69, associated with cut 4247. Unexcavated

**Layer 4368**

*Finds:* brick/tile

*Date:* Romano-British

*Interpretation:* No. given to surface finds from possible post hole next to ring ditch, group no. 004. Unexcavated

## Gazetteer of Archaeological Features

**Ditch 4370** moderately steeply sloping sides with a flat base (W 2.90m, D 0.77m)

*Fill 4396* yellow-grey silty-clay with occ. small patches of sand, occ. charcoal flecks, occ. small rounded pebbles and moderate grit

*Finds: none*

*Fill 4373* sandy, gritty clay-silt, with moderate chalk pebbles and grit

*Finds: pottery and animal bone*

*Fill 4372* grey clay-silt with iron staining and occ. charcoal flecks

*Finds: none*

*Fill 4371* grey clay-silt streaked with yellow clay and iron staining

*Finds: pottery*

*Date: Romano-British*

*Interpretation: ditch*

**Pit 4375** very steep sides, slightly convex, with a flat base (W 0.49m, D 0.27m)

*Fill 4376* sandy, gritty clay-silt with lenses of sand, with moderate chalk pebbles and grit and occ.-moderate charcoal flecks

*Finds: pottery and shell*

*Date: Romano-British*

*Interpretation: pit*

**Pit? 4377** irregular oblong in plan, orientated NW-SE (L 1.50m, W 0.70m)

*Fill 4378* grey clay-silt, firm, with moderate to frequent charcoal flecks and frags. and small flint and chalk pebbles

*Finds: pottery*

*Date: Romano-British*

*Interpretation: possible pit. Unexcavated*

**Ditch 4384** orientated E-W, gradually sloping sides with a rounded base (W 0.61m, D 0.22m)

*Fill 4385* grey silty-clay mottled with brown-yellow clay and lenses of sand

*Finds: none*

*Date: Romano-British*

*Interpretation: ditch*

**Ditch 4386** orientated N-S (W 0.70m, D 0.53m)

*Fill 4387*

*Finds: none*

*Date: Romano-British*

*Interpretation: ditch*

**Gully 4388** orientated NNE-SSW (W 0.70m, D 0.30m)

*Fill 4389*

*Finds: none*

*Date: Romano-British*

*Interpretation: gully, not fully excavated*

**Post hole 4399** circular, with near vertical sides and a flat base (W 0.28m, D 0.18m)

*Fill 4050* mid grey silty-clay, firm (W 0.30m, D 0.20m)

*Finds: none*

*Date: Romano-British*

*Interpretation: post hole*

### Site 7, TF 12042 60950

Construction Section 9, Plot 71

**Layer 901** mid brown grey silty clay loam, compact, with small and medium rounded and sub-rounded gravel and patches of peaty deposits (D 0.30-0.40m)

*Interpretation: topsoil*

**Layer 902** mixed grey/blue and orange clay, very compact, with lenses of siltier bands and peat deposits visible at regular intervals across the easement. Occ. small rounded and sub-rounded calcareous limestone and chalk inclusions

*Interpretation: natural*

**Road 922** linear, running NNW-SSE across easement, (L 0.65m, W 9.00m). Road set slightly into the hillside as a 'terrace'

*Element of road 929* mid brown grey silty clay, compact, with very frequent small and medium rounded and sub-rounded gravel, representing the metalling of the road surface

*Finds: none*

*Element of road 928* mid orange brown silty clay, very compact, with very occ. small rounded gravels, possibly contemporary/same as 927

*Finds: none*

*Element of road 927* mid orange brown silty clay, very compact, with very occ. small rounded gravels, possibly hill wash/medieval ploughsoil

*Finds: none*

*Element of road 926* dark grey black sandy silt, friable, with occ. small and medium rounded and sub-rounded gravels (W 0.12m, D 0.10-0.30m). Possibly representing leveling layer of hollow

*Finds: none*

*Date: medieval (13<sup>th</sup>/14<sup>th</sup> Century AD)*

*Interpretation: medieval (13<sup>th</sup>/14<sup>th</sup> Century AD) road*

**Ditch 931** linear, orientated NNW-SSE, moderately steep sides with a flattish base

*Fill 932* mid orange brown grey silty clay, very compact, with occ. small and medium rounded and sub-rounded gravels

*Finds: 13<sup>th</sup>/14<sup>th</sup> Century AD pottery sherd and animal bone*

*Soil Sample Nos.: 43*

*Fill 941* mid brown grey silty clay, compact, with very frequent small and medium sized rounded and sub-rounded gravel - shows slump of road surface into ditch

*Finds: none*

*Fill 934* mid-dark brown grey silty clay, compact with occ. small and medium sized rounded and sub-rounded stones

*Finds: none*

*Date: 13<sup>th</sup>/14<sup>th</sup> Century AD*

*Interpretation: drainage ditch running parallel with road F[922]*

**Ditch 935** linear, orientated NNW-SSE, vertical edges with a flat base (W 0.62m, D 0.45m)

*Fill 936* mid orange brown silty clay, compact, with occ. small and medium rounded and sub-rounded gravel

*Finds: none*

*Date: 13<sup>th</sup>/14<sup>th</sup> Century AD*

*Interpretation: part of a sequence of ditches to South of road, possibly for drainage*

**Ditch 937** linear, orientated NNW-SSE, fairly steep, slightly concave sides, with a flattish base (W 0.88m, D 0.34m)

*Fill 938* mid orange brown silty clay, compact, with occ. small and medium rounded gravel

*Finds: none*

*Date: 13<sup>th</sup>/14<sup>th</sup> Century AD*

*Interpretation: part of a sequence of ditches to South of road F[922]*

**Ditch 939** linear, orientated NNW-SSE, with gradual, concave sides and a flat base (W 1.10m, D 0.28m)

*Fill 940* mid orange brown silty clay, compact, with occ. small and medium rounded gravel

*Finds: none*

*Date: 13<sup>th</sup>/14<sup>th</sup> Century AD*

*Interpretation: part of sequence of ditches to South of road F[922]*

### Site 9, TF 10770 58928

Construction Section 11, Plot 88

The fills of all features are given in the order of primary fill first and top fill last

## Gazetteer of Archaeological Features

- Layer 1101** mid-dark brown sandy-silt, friable, frequent charcoal flecks, rounded pebbles and flint frags  
*Finds:* none  
*Date:* modern  
*Interpretation:* topsoil
- Layer 1102** mid orange-brown mixed with sandy gravel, with areas of high clay content and iron pan mottling, very firm, with frequent small and medium rounded and sub-rounded pebbles and flint frags  
*Finds:* none  
*Date:* N/A  
*Interpretation:* natural
- Gully 1103** orientated N-S, fairly steep sides and a rounded base (W 0.42m, D 0.13m)  
**Fill 1104** mid brown-grey sand-silt, firm, with occ. small rounded stones  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* gully
- Ditch 1105** orientated N-S and E-W, with moderately sloping sides and a gently rounded base (W 0.88m, D 0.20m)  
**Fill 1106** mid-dark brown sandy-silt with orange flecks, firm, with frequent small and medium rounded and sub-rounded pebbles and flint frags., with very occ. charcoal flecks  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* enclosure ditch
- Gully 1107** orientated E-W, with very shallow gradually sloping sides and a slightly rounded base (W 0.38m, D 0.11m)  
**Fill 1108** light-mid grey-brown sandy-silt, firm, with occ. small rounded pebbles  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* gully
- Ditch 1109** orientated N-S and E-W, with shallow concave sides and a slightly rounded base (W 0.78m, D 23m)  
**Fill 1110** mid-dark brown sandy-silt, firm, with occ. small pebbles  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* enclosure ditch
- Post hole 1111** sub-circular with moderately sloping sides and a slightly rounded base (W 0.27m, D 0.13m)  
**Fill 1112** dark grey sandy-silt, fairly firm, charcoal rich with very occ. small pebbles  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* post hole
- Ditch 1113** orientated N-S, gently sloping on the S side and steeply sloping on the W and E sides (W 0.57m, D 0.23m)  
**Fill 1114** mid grey-brown sandy-silt with occ. orange sand flecks, firm, with moderate small sub-rounded pebbles and flint frags. and very occ. charcoal flecks  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* ditch, possibly a recut of ditch 1109
- Pit 1115** sub-circular with shallow slightly concave sides and an irregular base (W 0.61m, D 0.12m)  
**Fill 1116** light grey-brown sandy-silt, firm, with occ. small rounded pebbles  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* shallow pit
- Pit 1117** sub-oval orientated N-S, with moderately sloping sides and an irregular base (W 0.65m, D 0.13m)
- Fill 1118** light-mid grey sandy-silt, firm, with occ. small rounded pebbles  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* shallow pit
- Post hole 1119** sub-circular with vertical sides and a flat base (W 0.15m, D 0.27m)  
**Fill 1120** light-mid grey sandy-silt, loose, with occ. small rounded pebbles  
*Finds:* none  
**Fill 1149** light grey-brown sandy-silt, firm, with occ. small rounded pebbles  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* post hole
- Ditch 1121** orientated N-S, with moderately sloping sides and a flat base (W 1.34m, D 0.38m)  
**Fill 1122** light-mid orange-grey sandy-silt, loose, with occ. small rounded pebbles and occ. charcoal flecks (W 1.34m, D 0.07m)  
*Finds:* pottery and worked stone  
**Recut 1151 of Ditch 1121** orientated N-S, with moderate irregularly sloping sides and a rounded base (W 0.96m, D 0.31m)  
**Fill 1150** mid orange-brown sandy-silt, loose, with occ. small rounded pebbles (W 0.45m, D 0.10m)  
*Finds:* pottery  
**Fill 1152** mid grey-brown sandy-silt, fairly firm, with occ. small rounded pebbles (W 0.96m, D 0.21m)  
*Soil Sample Nos.:* 39  
*Finds:* pottery, animal bone and brick/tile  
*Date:* Romano-British  
*Interpretation:* Roman field division ditch, containing one recut
- Ditch 1123** orientated E-W, shallow with fairly steep sides and a flat base (W 0.84m, D 0.26m)  
**Fill 1124** mid brown sandy-silt, fairly firm, with occ. small rounded pebbles (W 0.84m, D 0.15m)  
*Finds:* none  
**Fill 1153** mid brown-grey sandy-silt, firm, with occ. small rounded pebbles (W 0.84m, D 0.11m)  
*Finds:* pottery  
*Date:* Romano-British  
*Interpretation:* Roman field division ditch, possibly contemporary with gully 1125
- Gully 1125** orientated E-W, shallow with gradually sloping concave sides and a flat base (W 0.58m, D 0.08m)  
**Fill 1126** mid brown-grey sandy-silt, firm, with occ. small rounded pebbles and occ. charcoal flecks  
*Finds:* pottery  
*Date:* Romano-British  
*Interpretation:* possible fence line gully
- Ditch 1127** orientated N-S, shallow with steep sides and a slightly rounded base (W 0.76m, D 0.23m)  
**Fill 1128** light brown-grey sandy-silt with orange flecks, firm, with occ. small rounded pebbles (W 0.76m, D 0.13m)  
*Finds:* pottery  
**Fill 1154** mid-dark grey sandy-silt, firm, with very occ. small rounded pebbles (W 0.57m, D 0.09m)  
*Finds:* pottery, animal bone and brick/tile  
*Soil Sample Nos.:* 38  
*Date:* Romano-British  
*Interpretation:* possible boundary ditch
- Gully 1129** orientated N-S, shallow gradually sloping sides with a flat base (W 0.53m, D 0.12m)  
**Fill 1130** mid orange-brown sandy-silt, firm, with occ. small rounded pebbles  
*Finds:* none  
*Date:* Romano-British  
*Interpretation:* fence line gully

## Gazetteer of Archaeological Features

- Pit 1131** sub-rectangular with steep sides and a flat base (D 0.42m)  
*Fill 1132* lenses of mid yellow-brown, light grey and mid orange-brown sandy-silt, firm, very occ. small rounded pebbles  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: truncated tree bole*
- Pit 1133** near vertical sides with a rounded base  
 *Fill 1134* dark-mid grey sandy-silt  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: animal disturbance*
- Post hole 1135** sub-circular with moderately sloping sides and a rounded base (W 0.71m, D 0.25m)  
 *Fill 1136* light-mid grey sandy-silt, fairly loose, with occ. small rounded pebbles  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: post hole*
- Post hole 1137** sub-oval, orientated E-W, with vertical sides to the S and W, moderately sloping sides to the N and an irregular base (W 0.90m, D 0.35m)  
 *Fill 1138* mid grey-brown sandy-silt, firm, with very occ. small rounded pebbles  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: post hole*
- Post hole 1139** sub-circular, with irregular sides and a rounded irregular base (W 1.60m, D 0.34m)  
 *Fill 1140* mottled yellow and grey sandy-silt, firm, with very occ. small rounded pebbles (W 0.35m, D 0.15m)  
 *Finds: none*  
 *Fill 1155* mid orange-brown sandy-silt, firm, with occ. small rounded pebbles (W 0.98m, D 0.19m)  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: post hole*
- Ditch 1141** orientated E-W, with moderately sloping sides and a flat base (W 0.83m, D 0.39m)  
 *Fill 1142* mid grey sandy-silt, firm, with occ. small rounded pebbles and occ. charcoal flecks  
 *Finds: pottery and animal bone*  
 *Date: Romano-British*  
 *Interpretation: boundary ditch*
- Ditch 1143** orientated N-S, shallowly sloping sides with an irregular flat base (W 0.85m, D 0.30m)  
 *Fill 1144* light-mid grey sandy-silt, firm, with occ. small rounded pebbles and occ. charcoal flecks  
 *Finds: pottery*  
 *Date: Romano-British*  
 *Interpretation: shallow Roman boundary ditch*
- Pit 1145** sub-rectangular with gradually sloping sides becoming steep with a slightly rounded base (D 0.36m)  
 *Fill 1146* light-mid brown sandy-silt, firm, with very occ. small rounded pebbles and very occ. charcoal flecks  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: pit*
- Ditch 1147** orientated N-S and E-W, fairly steep concave sides and a flat base  
 *Fill 1148* mid grey sandy-silt, firm, with occ. small rounded pebbles  
 *Finds: pottery*  
 *Date: Romano-British*  
 *Interpretation: ditch*
- Gully 1156** orientated E-W, with shallowly sloping sides and a flat base (W 0.75m, D 0.13m)  
 *Fill 1157* mid grey-brown sandy-silt mottled with orange sand, firm, with occ. small rounded pebbles  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: gully, possibly a recut of ditch 1158*
- Ditch 1158** orientated E-W, gently sloping with a flat base  
 *Fill 1159* light-mid brown sandy-silt, with occ. small rounded stones  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: boundary/enclosure ditch*
- Ditch 1160** orientated E-W, with a broad 'V'-shaped profile (W 0.90m, D 0.28m)  
 *Fill 1161* light-mid brown-grey sandy-silt, with frequent small rounded stones  
 *Finds: pottery, burnt/fired clay and brick/tile*  
 *Date: Romano-British*  
 *Interpretation: boundary/enclosure ditch*
- Post hole 1162** sub-circular with steeply sloping sides on the S, shallowly sloping sides on the N and a gently rounded base  
 *Fill 1163* light-mid grey silty-clay, with occ. small stones  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: post hole*
- Gully 1164** orientated E-W, with shallowly sloping sides and a shallow rounded base (W 0.35m, D 0.06m)  
 *Fill 1165* mid brown-grey sandy-silt, with frequent small rounded stones  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: possible gully*
- Ditch 1166** orientated E-W, with moderately sloping sides and a gently rounded base (W 0.75m, D 0.28m)  
 *Fill 1167* mid brown-grey sandy-silt mottled with light grey-brown silt, with occ. frequent small stones  
 *Finds: pottery*  
 *Date: Romano-British*  
 *Interpretation: possible enclosure ditch*
- Ditch 1168** orientated E-W, with moderately sloping sides and a slightly rounded base (W 0.75m, D 0.34m)  
 *Fill 1169* light-mid brown-grey sandy-silt, firm, with occ. small rounded stones and very occ. charcoal flecks  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: boundary ditch*
- Post hole 1170** circular with near vertical sides and a rounded base (W 0.28m, D 0.10m)  
 *Fill 1171* mid brown-grey sandy-silt with orange flecks, firm  
 *Finds: none*  
 *Date: Romano-British*  
 *Interpretation: post hole*
- Ditch 1172** orientated E-W, moderately sloping on the S side, near vertical on the N, and a fairly flat base  
 *Fill 1173* light grey-brown sandy-silt, firm, with very occ. small stones  
 *Finds: pottery, animal bone and brick/tile*  
 *Date: Romano-British*  
 *Interpretation: boundary ditch*
- Post hole 1174** orientated E-W, with vertical sides and a flat base (W 0.26m, D 0.29m)

## Gazetteer of Archaeological Features

*Fill 1175* light grey-brown sandy-silt, fairly loose, with occ. small stones

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole

*Pit 1176* rectilinear, orientated N-S, with moderately sloping concave sides and a rounded base (W 0.65m, D 0.17m)

*Fill 1177* light grey-brown sandy-silt, fairly loose, with very occ. small stones

*Finds:* none

*Date:* Romano-British

*Interpretation:* possible shallow linear pit

*Ditch 1178* orientated E-W, with moderately sloping sides and a flat base (W 0.78m, D 0.27m)

*Fill 1179* mid grey sandy-silt, firm, with occ. small rounded stones and occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* boundary ditch

*Post hole 1180* sub-oval, orientated NW-SE, moderately sloping to the W, near vertical to the E, with a 'V'-shaped base (W 0.44m, D 0.23m)

*Fill 1181* light grey sandy-silt, firm, with occ. small rounded stones

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole

*Post hole 1182* sub-circular with near vertical sides and a 'V'-shaped base (W 0.42m, D 0.25m)

*Fill 1183* light grey sandy-silt, firm, with occ. small rounded stones and very occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* post hole

*Ditch 1184* orientated E-W, steep sides with a slightly rounded base (W 0.52m, D 0.40m)

*Fill 1185* dark grey-brown sandy-silt, firm, with frequent small stones and pockets of light grey silt

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch. 1184 is the same as 1141

*Ditch 1186* orientated N-S, steep sided with a flat base (W 0.70m, D 0.50m)

*Fill 1189* light-mid grey-brown sandy-silt, with occ. sub-rounded pebbles

*Finds:* none

*Date:* Romano-British

*Interpretation:* boundary ditch

*Ditch 1187* orientated N-S, steep sided with a flat base (W 0.90m, D 0.50m)

*Fill 1190* mid grey-brown sandy-silt, with occ. sub-rounded stones and occ. charcoal flecks

*Finds:* none

*Date:* Romano-British

*Interpretation:* boundary ditch, possibly a recut

*Ditch 1188* orientated N-S, steep concave sides with a flat base (W 0.30m, D 0.20m)

*Fill 1191* light-mid grey-brown sandy-silt

*Finds:* none

*Date:* Romano-British

*Interpretation:* boundary ditch, possibly a recut

#### Site 10, TF 11050 54120

Construction Section 14, Plot 109

*Layer 1401* dark brown peaty loam, friable, with occ. small to medium stones (D 0.30-0.35m)

*Finds:* Bronze Age pottery and flints

*Interpretation:* topsoil

*Layer 1402* orange silty sand overlying blue grey clay

*Interpretation:* natural clay

? *Natural channel 1403* irregular, possibly linear

*Fill 1408* mid yellow orange silty sand, fairly loose

*Finds:* none

*Fill 1407* grey silty clay with occ. medium to large stones

*Finds:* none

*Fill 1406* orange yellow to grey mottled silty sand with occ. small stones and charcoal flecks

*Finds:* none

*Fill 1405* pale grey silty clay, firm, with occ. charcoal flecks

*Finds:* Bronze Age pottery, animal bone and flint

*Fill 1404* dark brownish black peat, with frequent charcoal flecking

*Finds:* none

*Interpretation:* probable natural channel

#### Site 11, TF126000 49974

Construction Section 17, Plot 125

*Ditch 1708* seen in pipetrench, (c.W .1.30m, D 0.60m).

*Fill:* 1709 carbonised branch or tree root.

*Fill:* 1710 contained buckle pin Reg .Find no. 47.

*Date:* ?Roman

*Interpretation:* Field Ditch?, associated with Roman pottery scatter

*Post hole 1711* seen in pipetrench, 1.10m south of [1708]. Elliptical (W0.85m, D 0.5m). Vertical sides and gently rounded base.

*Fill 1713:* heavily charcoaled stained clay

*Fill 1713:* fairly homogenous clay

*Date:* ?Roman

*Interpretation:* post hole

#### Site 15, TF 11900 47884

Construction Section 17, Plot 132

*Ditch 1737* linear, orientated NNW-SSE, moderately steep sides and a flat base (W 1.10m, D 0.50m)

*Fill 1738* orange clay with grey mottling, compact, with very occ. small sub-angular and sub-rounded stones and occ. charcoal

*Finds:* pottery, animal bone and clay loom weight frags and burnt clay

*Fill 1739* dark grey silty clay with brown mottling, compact, with occ. small to medium sub-rounded and sub-angular stones with frequent charcoal flecks (D 0.36m)

*Finds:* none

*Fill 1740* dark grey brown clay silt, compact, with occ. small to medium sub-angular and sub-rounded stones and charcoal flecks (D 0.40m)

*Finds:* none

*Date:* Iron Age

*Interpretation:* ditch/field boundary

*Ditch 1741* semi-circular, (if ditch terminus has NW-SE orientation) moderately steep sides with a flat base

*Fill 1745* mid-dark grey clay silt, compact, with occ. small and large sub-rounded and sub-angular stones and charcoal flecks

*Finds:* pottery and animal bone

*Fill 1744* lenses of mid orange/grey and dark grey silty clay, compact, with occ. small and medium sub-rounded and sub-angular stones and charcoal

*Finds:* none

*Recut 1746* of Ditch 1741 moderately sloping sides and a rounded base (W 1.54m, D 0.28m)

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*Fill 1743* dark grey clayey silt, compact, with occ. small to medium sub-angular and sub-rounded stones and very frequent stones

*Finds:* pottery, animal bone and fired clay

*Fill 1742* mid grey clay silt, compact, with occ. small and medium sub-rounded and sub-angular stones and frequent charcoal flecks

*Finds:* pottery, burnt/fired clay, daub and animal bone

*Date:* Iron Age

*Interpretation:* possible ditch terminus or pit

**Ditch 1747** linear, orientated N-NW-SSE, with moderately sloping sides and a flattish base (W 1.20m, D 0.25m)

*Fill 1748* orange/very light grey clay, compact, with very occ. small sub-angular and sub-rounded stones and very occ. charcoal (D 0.07m)

*Finds:* none

*Fill 1749* dark grey brown clay silt, compact, with frequent small sub-angular and sub-rounded stones and charcoal (D 0.20m)

*Finds:* animal bone

*Date:* Iron Age

*Interpretation:* probable ditch/gully

**Layer 1750** mid grey brown clay silt, with occ. orange mottling, compact, with occ. small to medium sub-rounded and sub-angular stones and charcoal flecks (D 0.40m).

*Finds:* Medieval and Iron Age pottery

*Interpretation:* part of undulating subsoil

### Site 16, TF 11612 47472

#### Construction Section 18, Plot 135

The fills of all features are given in the order of primary fill first and top fill last

**Layer 1801** mid brown silty-clay loam, firm, with occ.-moderate rounded, sub-rounded and angular stone frags

*Finds:* none

*Interpretation:* topsoil

**Layer 1802** mid blue-grey clay with very frequent orange mottling, very firm, with frequent small limestone frags. and occ. small-medium sub-angular-rounded stones

*Interpretation:* natural

**Pit 1803** sub-circular, with shallow near vertical sides and a 'V'-shaped base (W 0.26m, D 0.11m)

*Fill 1804* dark grey silty-clay, very firm, with occ. small rounded stones and frequent charcoal flecks

*Finds:* clay ?loom weight frags

*Date:* late Iron Age

*Interpretation:* shallow pit

**Pit 1805** sub-circular, with near vertical sides and an irregular base (W 0.65m, D 0.18m)

*Fill 1807* dark red clay, very firm (W 0.02m, D 0.05m)

*Finds:* none

*Fill 1806* dark grey-black silty-clay, very firm, with very occ. small and medium stone frags. and frequent charcoal frags (W 0.63m, D 0.13m)

*Finds:* burnt/fired clay

*Date:* late Iron Age

*Interpretation:* possible fire pit

**Gully 1808** orientated E-W, near vertical sides with a flat base (W 0.30m, D 0.18m)

*Fill 1809* mid grey silty-clay, firm, with very occ. small stone frags

*Finds:* ?late Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* possible gully

**Ditch 1810** orientated NE-SW, with vertical sides and a flat base (W 0.90m, D 0.60m)

*Fill 1811* light grey-brown silty-clay, firm, with occ. small stone frags and occ. charcoal flecks

*Finds:* late Iron Age pottery

*Date:* late Iron Age

*Interpretation:* boundary ditch

**Gully 1812** orientated N-S, with steeply sloping sides and a rounded base (W 0.40m, D 0.20m)

*Fill 1813* mid green-brown sandy-silt, firm, with occ. small sub-angular chert frags

*Finds:* ?Iron Age pottery

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully. Cut 1812 is the same as 1814, 1816, 1826 & 1828, and fill 1813 is the same as 1815, 1817, 1827 & 1829

**Gully 1814** orientated NE-SW, near vertical sides with a rounded base (W 0.32m, D 0.19m)

*Fill 1815* mottled mid green-brown sandy-silt, firm, with occ. sub-angular chert frags

*Finds:* late Iron Age pottery

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully. Cut 1812 is the same as 1814, 1816, 1826 & 1828, and fill 1813 is the same as 1815, 1817, 1827 & 1829

**Gully 1816** orientated NW-SE, near vertical sides with a rounded base (W 0.37m, D 0.20m)

*Fill 1817* mottled mid green-brown sandy-silt, firm, with occ. sub-angular chert frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully. Cut 1812 is the same as 1814, 1816, 1826 & 1828, and fill 1813 is the same as 1815, 1817, 1827 & 1829

**Gully 1818** orientated E-W, moderately sloping to the N, near vertical to the S, with a slightly rounded base (W 0.40m, D 0.30m)

*Fill 1819* mottled mid grey and light brown sandy-clay mixed with sandy-silt, firm, with occ. charcoal flecks and occ. small angular chert frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* gully

**Pit 1820** orientated NW-SE, 'U'-shaped concave edges

*Fill 1821* mid grey-brown sandy-silt, firm, with occ. sub-rounded pebbles and angular chert frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* possible pit - not planned and therefore lost

**Gully 1822** orientated N-S and E-W, moderately sloping sides with a flat base (W 0.34m, D 0.20m)

*Fill 1823* dark grey-brown sandy-clay, firm, with frequent charcoal frags. and occ. medium sub-angular flint frags

*Finds:* late Iron Age pottery, animal bone and fired clay

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully. Cut 1822 is the same as 1824, and fill 1823 is the same as 1825

**Gully 1824** Orientated N-S and E-W, moderately sloping sides with a flat base (W 0.34m, D 0.14m)

*Fill 1825* light-mid yellow-brown sandy-clay with <10% silt, firm, with occ. small sub-rounded pebbles and moderate charcoal frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully

**Gully 1826** orientated E-W, with moderately sloping sides and a flat base (W 0.36m, D 0.17m)

*Fill 1827* mid grey-brown silty-clay, with frequent charcoal flecks, medium sub-rounded stone frags. and small sub-angular chert frags

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*Finds: animal bone*

*Date: late Iron Age*

*Interpretation: possible penannular drainage gully. Cut 1812 is the same as 1814, 1816, 1826 & 1828, and fill 1813 is the same as 1815, 1817, 1827 & 1829*

**Gully 1828** orientated N-S, with shallowly sloping sides and a flat base (W 0.32m, D 0.11m)

*Fill 1829 light-mid brown sandy-clay, firm, with frequent charcoal frags. and occ. small sub-angular chert frags*

*Finds: none*

*Date: late Iron Age*

*Interpretation: possible penannular drainage gully. Cut 1812 is the same as 1814, 1816, 1826 & 1828, and fill 1813 is the same as 1815, 1817, 1827 & 1829*

**Pit 1830** sub-circular, with irregular sloping sides and an irregular base (W 0.53m, D 0.15m)

*Fill 1831 mottled dark grey-brown and light red-brown silty-clay, firm, with moderate charcoal frags. and occ. small sub-angular chert frags*

*Finds: none*

*Date: late Iron Age*

*Interpretation: possible shallow pit*

**Pit 1832** sub-oval, orientated NW and SE, near vertical sides with a slightly rounded base (W 0.26m, D 0.17m)

*Fill 18125 mottled dark grey-brown with mid red-brown patches, with occ. charcoal frags., occ. small sub-rounded frags. and occ. small sub-angular chert frags*

*Finds: post-Roman pot sherd (intrusive)*

*Date: late Iron Age*

*Interpretation: pit/gully*

**Gully 1833** orientated N-S, moderately sloping sides with a shallow rounded base (W 0.34m, D 0.20m)

*Fill 1835 mid green-brown sandy-silt with iron staining, firm, with occ. charcoal frags. and occ. small sub-rounded pebbles*

*Finds: ?Iron Age pottery and animal bone*

*Date: late Iron Age*

*Interpretation: recut of penannular drainage gully*

**Gully 1834** orientated N-S, moderately sloping sides with a rounded base (D 0.32m)

*Fill 1836 mid green-grey/brown fading to light yellow-brown sandy-silt with <10% clay, firm, with occ. charcoal frags. and occ. sub-rounded pebbles*

*Finds: Iron Age pottery and animal bone*

*Date: late Iron Age*

*Interpretation: penannular drainage gully. Cut 1834 is the same as 1837 & 1838*

**Gully 1837** orientated NE-SW, near vertical sides with a flat base (W 0.25m, D 0.20m)

*Fill 18119 mid green grey-brown fading to light yellow-brown sandy-silt, firm, with occ. small sub-rounded pebbles*

*Finds: none*

*Date: late Iron Age*

*Interpretation: eaves drip gully. Cut 1837 is the same as 1838 & 1834*

**Gully 1838** orientated NW-SE, moderately sloping sides with a rounded base (W 0.30m, D 0.15m)

*Fill 1839 dark grey-brown sandy-silt with <10% clay, firm, with moderate charcoal frags. and occ. small sub-rounded pebbles*

*Finds: none*

*Date: late Iron Age*

*Interpretation: eaves drip gully. Cut 1838 is the same as 1837 & 1834*

**Gully 1840** orientated N-S, near vertical sides with a flat base (W 0.45m, D 0.32)

*Fill 1855 mid grey-brown sandy-silt with <10% clay, firm, with moderate iron staining, occ. charcoal frags. and occ. small sub-rounded stones*

*Finds: late Iron Age pottery and clay loom weight frags*

*Date: late Iron Age*

*Interpretation: gully*

**Gully 1841** extremely shallow profile (W 0.40m, D 0.04m)

*Fill 18120 mid grey-brown silty-clay, with occ. sub-angular limestone frags*

*Finds: none*

*Date: late Iron Age*

*Interpretation: ring gully. Unexcavated*

**Ditch 1842** orientated NW-SE, steeply sloping sides with a flat base, (W 1.42m, D 0.42m)

*Fill 1843 dark grey-brown sandy-silt <10% clay, firm, with occ. small sub-angular chert frags. frequent charcoal frags. and occ. medium fire cracked pebbles*

*Finds: late Iron Age & Roman pottery, animal bone, burnt/fired clay and ?loom weight frags and slag*

*Date: late Iron Age/transitional*

*Interpretation: ditch/pit*

**Ditch 1844** orientated NE-SW, concave SW side, near vertical SE side and a flat base (W 0.64m, D 0.25m)

*Fill 1856 mid grey-brown clayey sandy-silt, firm, with occ. small sub-rounded stones and occ. charcoal flecks*

*Finds: none*

*Date: late Iron Age*

*Interpretation: ditch*

**Post hole 1845** circular (W 0.40m, D 0.16m)

*Fill 18121 mid grey-brown sandy-silt, firm, with occ. small sub-rounded stones and occ. charcoal flecks*

*Finds: none*

*Date: late Iron Age*

*Interpretation: possible post hole*

**Post hole 1846** circular, with concave sides and a flat base (W 0.30m, D 0.16m)

*Fill 18122 mid grey-brown sandy-silt, firm, with occ. charcoal flecks*

*Finds: none*

*Date: late Iron Age*

*Interpretation: possible post hole*

**Pit 1847** sub-rectangular, orientated NW-SE, moderately sloping sides with a rounded base (W 0.59m, D 0.30m)

*Fill 1849 mid-dark brown sandy-clay, firm, with moderate charcoal frags. and occ. small sub-angular chert frags*

*Finds: animal bone and clay loom weight frags*

*Date: late Iron Age*

*Interpretation: possible pit*

**Gully 1848** orientated E-W, moderately sloping sides with a flat base (W 0.23m, D 0.13m)

*Fill 1850 mid grey-brown sandy-silt with <10% clay, firm, with occ. small sub-angular chert frags. and moderate charcoal frags*

*Finds: none*

*Date: late Iron Age*

*Interpretation: possible ring gully*

**Pit 1851** sub-rectangular, orientated NW-SE, moderately sloping to the S, steeply sloping to the N, with a flat base (W 0.80m, D 0.42m)

*Fill 1853 dark grey sandy-clay, firm, with very frequent charcoal frags. and moderate small sub-rounded stones*

*Finds: ?Iron Age pottery*

*Date: late Iron Age*

*Interpretation: pit*

**Post hole 1852** circular, very shallow moderately sloping sides with a flat base (W 0.46m, D 0.04m)

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*Fill 18124* charcoal, fairly loose (W 0.46m, D 0.02m)

*Find:* none

*Fill 18123* light brown sandy-clay, firm (W 0.46m, D 0.02m)

*Find:* none

*Date:* late Iron Age

*Interpretation:* post hole

**Gully 1854** orientated NW-SE, near vertical edges with a flat base (W 0.56m, D 0.58m)

*Fill 1857* mid green-brown sandy-silt, firm, with occ. charcoal flecks

*Find:* animal bone and flint

*Date:* late Iron Age

*Interpretation:* gully

**Ditch 1858** orientated NW-SE, moderately steep sides with a flat base (W 0.81m, D 0.46m)

*Fill 1859* mid yellow-brown sandy-silt, firm, with occ. charcoal frags. and occ. small sub-rounded pebbles

*Find:* animal bone and shell

*Date:* late Iron Age

*Interpretation:* ditch

**Ditch 18111** orientated NE-SW, moderately sloping sides and a flat base

*Fill 18113* mid yellow-brown silty-clay, firm, with occ. charcoal flecks and occ. small sub-angular limestone frags (W 0.18m, D 0.30m)

*Find:* none

*Date:* late Iron Age

*Interpretation:* settlement enclosure ditch

**Ditch 18112** orientated NE-SW, moderately sloping sides with a flat base (W 0.70m, D 0.40m)

*Fill 18114* mid grey-brown sandy-silt, firm, with occ. charcoal flecks, occ. small sub-angular limestone frags. and occ. medium sub-rounded pebbles

*Find:* late Iron Age pottery, animal bone and clay loon weight frags

*Date:* late Iron Age

*Interpretation:* settlement enclosure ditch

**Gully 18115** orientated E-W, shallowly sloping sides with a rounded base (W 0.54m, D 0.12m)

*Fill 18116* mid grey-brown sandy-silt

*Find:* late Iron Age pottery

*Date:* late Iron Age

*Interpretation:* gully

**Gully 18117** orientated N-S, moderately sloping sides with a flat base, (W 0.44m, D 0.12m)

*Fill 18118* mid-dark grey-brown sandy-silt, firm, with occ. charcoal flecks and occ. small sub-angular chert and limestone frags

*Find:* none

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully

### Site 17, TF 11320 47018

#### Construction Section 18, Plot 139

The fills of all features are given in the order of primary fill first and top fill last

**Ditch 1860** orientated NW-SE, gently sloping sides with a rounded base (W 0.99m, D 0.31m)

*Fill 18103* mid yellow-brown sandy-clay, firm, with occ. charcoal frags. and occ. small sub-angular chert frags. (W 0.68m, D 0.17m)

*Find:* none

*Fill 1875* mid grey-brown sandy-silt, firm, with moderate charcoal frags. (W 0.74m, D 0.16m)

*Find:* ?Iron Age pottery and animal bone

*Fill 18102* light yellow-brown silty-clay, firm, occ. charcoal frags. and occ. small sub-rounded chert frags

*Find:* none

*Date:* late Iron Age

*Interpretation:* ditch - same as ditch 1877

**Gully 1861** orientated E-W, steeply sloping sides with a flat base (W 0.25m, D 0.21m)

*Fill 1873* dark grey-brown sandy-silt with <10% clay, with occ. small sub-rounded stones and occ. charcoal frags

*Find:* ?Iron Age-Roman pottery and animal bone

*Date:* late Iron Age

*Interpretation:* gully

**Ditch 1862** orientated E-W, with gradually rounded sides and a rounded base (W 0.90m, D 0.40m)

*Fill 1874* dark grey-brown sandy-silt with <10% clay, firm, with moderate charcoal frags. and occ. small sub-rounded pebbles

*Find:* late Iron Age-Roman pottery, animal bone and burnt clay

*Date:* late Iron Age/transitional

*Interpretation:* ditch

**Pit 1863** circular, moderately sloping side to the N, near vertical side to the S and a flat base (W 0.58m, D 0.24m)

*Fill 1864* dark grey-brown sandy-silt, with occ. charcoal flecks and occ. small angular chert frags

*Find:* animal bone

*Date:* late Iron Age

*Interpretation:* pit

**Gully 1865** orientated NW-SE, irregular steeply sloping sides with a flat base (W 0.67m, D 0.50m)

*Fill 1889* mid orange-brown silty-clay, firm, with occ. charcoal frags (W 0.67m, D 0.10m)

*Find:* none

*Fill 1866* dark grey-brown sandy-silt, firm, with moderate charcoal flecks, occ. small rounded pebbles and sub-angular limestone frags (W 0.67m, D 0.40m)

*Find:* pottery, animal bone and clay ?loom weight frags

*Date:* late Iron Age

*Interpretation:* gully

**Gully 1867** orientated N-S, shallowly sloping sides with a flat base (W 0.86m, D 0.19m)

*Fill 1868* mid grey-green brown sandy-silt, firm, with occ. charcoal flecks., occ. small limestone frags. and occ. small sub-rounded pebbles

*Find:* late Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* possible ring gully

**Gully 1869** orientated E-W, near vertical sides with a rounded base (W 0.35m, D 0.32m)

*Fill 1871* dark grey-brown sandy-silt with < 10% clay, firm, with occ. charcoal frags. and occ. sub-angular chert frags

*Find:* ?late Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* ?penannular drainage gully - same as 1876 & 1881

**Pit 1870** sub-oval, orientated E-W, with moderately sloping sides and a rounded bottom (W 1.02m, D 0.48m)

*Fill 18110* light yellow-brown silty-clay, firm, with occ. medium chert frags. and occ. charcoal frags. (W 1.01m, D 0.12m)

*Find:* none

*Fill 1872* dark grey-brown sandy-silt, firm, with moderate charcoal frags. and moderate small sub-angular chert frags. (W 0.97m, D 0.32m)

*Find:* ?late Iron Age pottery, animal bone and fired clay

*Date:* late Iron Age

*Interpretation:* pit

**Gully 1876** orientated E-W, steeply sloping sides with a rounded base (W 0.29m, D 0.24m)

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*Fill 1878* mid grey-brown silty-clay, firm, with moderate medium sub-angular chert frags. and moderate charcoal flecks

*Finds:* ?Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully - same as gully 1869 & 1881

*Ditch 1877* orientated NW-SE, steeply sloping sides with a flat base (W 0.56m, D 0.12m)

*Fill 1879* mid yellow-brown sandy-clay, firm, with occ. charcoal frags. and moderate medium sub-angular chert frags

*Finds:* Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* gully - same as ditch 1860

*Ditch 1880* orientated NW-SE, with steeply sloping sides and a flat base (W 1.02m, D 0.68m)

*Fill 1891* mid orange-brown silty-clay, firm, with occ. charcoal flecks and occ. small limestone frags

*Finds:* late Iron Age pottery, animal bone and flint

*Recut 18126 of Ditch 1880* linear, orientated NW-SE with steep sides and a rounded base

*Fill 1892* mid grey-brown sandy-silt, firm, with occ. charcoal flecks, occ. sub-rounded pebbles and 6 large possible river stones, some of which were heat affected

*Finds:* late Iron Age pottery, animal bone, brick/tile and shell

*Fill 1893* mid orange-grey brown sandy-silt, with occ. charcoal flecks, and occ. limestone frags

*Finds:* late Iron Age pottery and animal bone

*Fill 1894* light grey-orange brown silty-clay, firm, with occ. charcoal flecks and occ. limestone frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* settlement boundary ditch

*Gully 1881* orientated NW-SE, moderately sloping sides with a rounded base (W 0.28m, D 0.13m)

*Fill 18106* dark grey-brown sandy-silt with < 10% clay, occ. charcoal flecks

*Finds:* none

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully - same as gullies 1869 & 1876

*Gully 1882* orientated NE-SW, steeply sloping sides with a rounded base (W 0.43m, D 0.32m)

*Fill 1895* mid brown sandy-clay, firm

*Finds:* animal bone

*Fill 1896* mid grey-brown sandy-silt, firm, with occ. small sub-rounded pebbles and small limestone frags. (W 0.40m, D 0.20m)

*Finds:* late Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* gully

*Pit 1883* sub-oval, orientated NW-SE, with a rounded 'V'-shape profile (W 0.73m, D 0.25m)

*Fill 18109* dark grey-brown silty-clay, firm, with occ. charcoal frags. and moderate sub-rounded frags. of burnt stone

*Finds:* none

*Date:* late Iron Age

*Interpretation:* pit - not planned and therefore lost

*Pit 1884* orientated E-W, irregular steep sides and a flat base (W 1.48m, D 0.50m)

*Fill 1897* mid orange-brown sandy-clay, firm, with occ. charcoal flecks

*Finds:* none

*Fill 1898* mid grey-brown sandy-silt, firm, with occ. small limestone frags

*Finds:* late Iron Age pottery and animal bone

*Fill 1899* dark grey-brown sandy-silt, firm, with occ. charcoal flecks and occ. small limestone frags (W 1.48m, D 0.24m)

*Finds:* late Iron Age pottery, animal bone, fired clay, modern glass (intrusive) and a loom weight

*Date:* late Iron Age

*Interpretation:* pit

*Gully 1885* orientated NE-SW, steeply sloping sides with a flat base (W 0.33m, D 0.26m)

*Fill 18108* mid grey-brown sandy-silt, firm, with occ. charcoal frags. and occ. small sub-angular chert frags

*Finds:* late Iron Age pottery, animal bone and loom weight frags

*Date:* late Iron Age

*Interpretation:* gully

*Pit 1886* sub-oval, orientated NE-SW, with shallow sloping sides (W 1.37m, D 0.18m)

*Fill 1888* dark grey-brown silty-clay, firm, with frequent charcoal frags. and moderate medium sub-angular chert frags

*Finds:* late Iron Age pottery, animal bone and shell

*Date:* late Iron Age

*Interpretation:* pit

*Gully 1890* orientated E-W, steeply sloping sides with a flat base (W 0.24m, D 0.14m)

*Fill 18107* mid brown-gray sandy clay, firm, with occ. charcoal frags. and occ. small flint frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully - same as 18104

*Gully 18100* orientated NW-SE, moderately steep sides with a rounded base (W 0.32m, D 0.19m)

*Fill 18101* dark grey-brown sandy-silt, firm, with moderate charcoal frags. and occ. medium sub-angular chert frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* gully

*Gully 18104* orientated E-W, moderately sloping sides with a flat base (W 0.24m, D 0.13m)

*Fill 18105* mid grey-brown sandy-clay, firm, with occ. charcoal flecks

*Finds:* none

*Date:* late Iron Age

*Interpretation:* possible penannular drainage gully - same as 1890

*Layer 18127* mid brown silty-clay loam, firm, with occ.-moderate rounded, sub-rounded and angular stone frags

*Finds:* none

*Date:* modern

*Interpretation:* topsoil

*Layer 18128* mid blue-grey clay with very frequent orange mottling, very firm, with frequent small limestone frags. and occ. small-medium sub-angular-rounded stones

*Finds:* none

*Date:* N/A

*Interpretation:* natural

## Site 18, TF 10647 45772

## Construction Section 19, Plot 145

The fills of all features are given in the order of primary fill first and top fill last

*Layer 1900* mid grey-brown sandy-silty loam, very firm, with occ. small and medium rounded and sub-rounded pebbles

*Finds:* ?Iron Age & late medieval pottery and animal bone

*Date:* modern

*Interpretation:* topsoil

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**Layer 1901** orange clay-silt with pockets of blue-grey clay, with small rounded gravel and occ. medium rounded pebbles

*Finds: none*

*Date: N/A*

*Interpretation: natural*

**Post hole 1902** circular, with steeply sloping sides and a narrow slightly rounded base (W 0.25m, D 0.20m)

*Fill 1903* mid grey-brown sandy-silt, firm, with occ. small sub-angular limestone frags

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Feature 1904** sub-circular, irregular-concave sides and base

*Fill 1905* mid grey-brown sandy-silt, loose, with occ. small sub-angular limestone frags

*Finds: animal bone and flint*

*Date: N/A*

*Interpretation: probable natural hollow*

**Post hole 1906** sub-circular, steep sides with an irregular base

*Fill 1907* mid brown silty-sand, loose, with moderate limestone frags. and occ. charcoal flecks

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: probable post hole*

**Post hole 1908** sub-circular, steep sides with an irregular base (W 0.30m, D 0.08m)

*Fill 1909* mid brown silty-sand, loose, with moderate small limestone frags. and occ. charcoal flecks

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: possible post hole*

**Feature 1910** circular, steep-sided with a flat base (W 0.25m, D 0.07m)

*Fill 1911* mid-dark grey-brown silty-clay, fairly loose, with occ. small rounded pebbles

*Finds: burnt clay*

*Date: N/A*

*Interpretation: probable natural hollow*

**Post hole 1912** sub-circular, moderately sloping sides with a flat base (W 0.61m, D 0.28m)

*Fill 1914* red-brown sandy-gravel, loose (W 0.42m, D 0.12m)

*Finds: none*

*Fill 1913* mid brown silty-sand, loose, with occ. small sub-rounded pebbles and occ. charcoal flecks (W 0.61, D 0.16m)

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Post hole 1915** sub-circular, with steeply sloping sides and a rounded base (W 0.20m, D 0.13m)

*Fill 1916* dark-mid brown silty-sand, loose, with occ. charcoal frags. and medium sub-rounded pebbles

*Finds: possible Iron Age pottery and flint*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Post hole 1917** sub-circular with moderately sloping sides and a flat base (W 0.23m, D 0.07m)

*Fill 1918* mottled mid brown silty-sand, with occ. charcoal frags. and occ.-moderate small limestone frags

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Post hole 1919** sub-circular with moderately sloping sides and a flat base (W 0.24m, D 0.09m)

*Fill 1920* mid-dark brown silty-sand, loose, with occ. medium sub-rounded pebbles and moderate small limestone frags

*Finds: Bronze Age pottery*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Ditch 1921** orientated NW-SE, shallowly sloping sides to the N, steeply sloping sides to the S, and a slightly curved base (W 1.51m, D 0.26m)

*Fill 1922* mid orange-red brown silty-clay, fairly loose, with occ. small rounded pebbles and occ. small gravel frags

*Finds: Roman pottery, animal bone and medieval tile*

*Date: medieval*

*Interpretation: possible field boundary ditch - same as 1965*

**Post hole 1923** circular, with near vertical sides and a flat base (W 0.30m, D 0.23m)

*Fill 1924* mid grey-brown sandy-silt, firm, with occ. charcoal flecks and occ. small sub-angular limestone frags

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Post hole 1925** sub-circular, near vertical sides and a flat base (W 0.34m, D 0.28m)

*Fill 1926* mid brown sandy-silt, loose, with moderate medium sub-rounded stones

*Finds: animal bone*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Post hole 1927** sub-circular, with near vertical sides and a flat base (W 0.28m, D 0.21m)

*Fill 1928* mid brown sandy-silt, loose, with occ. medium sub-rounded stones

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Pit 1929** circular, moderately steep sided with a flat base (W 0.90m, D 0.16m)

*Fill 1930* mid orange-brown sandy-silt heavily mottled with dark grey sandy-silt, fairly loose, with occ. small rounded pebbles, occ. charcoal flecks and occ. small sub-angular flint frags

*Finds: Bronze Age pottery, animal bone, clay loom weight frags, flint, shell and daub with wattle impressions*

*Date: ?middle Bronze Age*

*Interpretation: shallow pit*

**Post hole 1931** sub-circular with steeply sloping sides and a flat base (W 0.25m, D 0.26m)

*Fill 1932* mid brown sandy-silt, loose, with occ. medium sub-rounded stone frags. and moderate small limestone frags

*Finds: none*

*Date: Saxon*

*Interpretation: post hole - part of fenceline No. 2*

**Post hole 1933** circular, with moderately sloping sides and a flat base (W 0.32m, D 0.14m)

*Fill 1934* mid grey-brown sandy-silt, firm, with occ. charcoal flecks and occ. small sub-rounded pebbles

*Finds: none*

*Date: Saxon*

*Interpretation: post hole - part of fenceline No. 2*

**Post hole 1935** circular, with steeply sloping sides and a flat base (W 0.22m, D 0.23m)

*Fill 1936* mid grey-brown sandy-silt, firm, with occ. small sub-rounded pebbles and occ. charcoal flecks

*Finds: none*

*Date: Saxon*

*Interpretation: post hole - part of fenceline No. 2*

## Gazetteer of Archaeological Features

**Post hole 1937** circular, with steeply sloping sides and a narrow sharply rounded base (W 0.26m, D 0.16m)

*Fill 1938* light-mid grey-brown sandy-silt, firm, with occ. charcoal flecks and occ. small limestone frags

*Finds:* none

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 2

**Post hole 1939** circular, with moderately steep sides and a rounded base (W 0.20m, D 0.10m)

*Fill 1940* mid orange-brown silty-sand, fairly loose, with occ. small sub-rounded pebbles and occ. small angular flint frags

*Finds:* burnt clay

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 2

**Post hole 1941** circular, with steep sides and a rounded base (W 0.25m, D 0.16m)

*Fill 1942* mid grey-brown sandy-silt, firm, with occ. sub-angular and rounded stone frags

*Finds:* pottery, animal bone and flint

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 1

**Post hole 1943** circular, with steep sides and a rounded base (W 0.17m, D 0.15m)

*Fill 1944* mid grey-brown sandy-silt, firm, with occ. small sub-angular stone frags

*Finds:* animal bone

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 1

**Post hole 1945** circular, with steep sides and a rounded base (W 0.30m, D 0.15m)

*Fill 1946* mid brown-grey silty-sand, firm, with occ. small sub-angular stone frags

*Finds:* pottery

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 1

**Post hole 1947** circular, with steep sides and a rounded base (W 0.30m, D 0.10m)

*Fill 1948* mid grey-brown silty-clay, firm, with occ. sub-angular stone frags

*Finds:* animal bone

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 1

**Post hole 1949** circular, with moderately steep sides and a flat base (W 0.24m, D 0.12m)

*Fill 1950* mid red-brown sandy-silt, fairly loose, with occ. small sub-rounded pebbles and occ. small sub-angular flint frags

*Finds:* none

*Date:* late Iron Age

*Interpretation:* post hole - part of fenceline No. 3

**Post hole 1951** circular, with moderately sloping sides and a rounded base (W 0.39m, D 0.12m)

*Fill 1952* mid brown clay-silt, fairly loose, with very occ. large rounded pebbles and moderate small gravel frags

*Finds:* none

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 3

**Post hole 1953** sub-circular, with moderately steep sides and an irregular flat base (W 0.26m, D 0.13m)

*Fill 1954* mid red-brown silty-sand, loose, with occ. medium sub-angular flint frags. and moderate small gravel frags

*Finds:* none

*Date:* Saxon

*Interpretation:* possible post hole - part of fenceline No. 3

**Post hole 1955** circular, with near vertical sides and a flat base, (W 0.20m, D 0.18m)

*Fill 1956* light-mid grey-brown sandy-silt, firm, with occ. small limestone frags. and occ. charcoal flecks

*Finds:* pottery

*Date:* Saxon

*Interpretation:* post hole - part of fenceline No. 2

**Feature 1957** circular, with steep sides and a rounded base (W 0.25m, D 0.16m)

*Fill 1958* mid grey sandy-silt, firm

*Finds:* none

*Date:* N/A

*Interpretation:* probable natural hollow

**Feature 1959** circular, with near vertical sides and a flat base (W 0.12m, D 0.18m)

*Fill 1960* mid brown sandy-silt, firm, with occ. small sub-angular limestone frags

*Finds:* none

*Date:* N/A

*Interpretation:* probable animal disturbance

**Ditch 1961** orientated E-W, with a shallow profile, steeper sloping sides to the S, very gently sloping sides to the N, with a gently curved base (W 3.46m, D 0.48m)

*Fill 1962* mid yellow-brown sandy-silt, loose, with occ. medium rounded pebbles and occ. small angular flint frags

*Finds:* Roman pottery and animal bone

*Date:* N/A

*Interpretation:* hollow used as a boundary ditch in the medieval period - same as 1963 & 1967

**Hollow 1963** orientated E-W, steeply sloping sides with a flat base (W 3.20m, D 0.50m)

*Fill 1973* light orange-brown sandy-gravel, loose, (W 0.20m, D 0.10m)

*Finds:* none

*Fill 1971* mid orange-brown silty-gravel, firm (W 1.50m, D 0.10m)

*Finds:* Bronze and ?Iron Age pottery

*Fill 1972* mid orange-brown silty-sand, firm, with occ. sub-angular gravel frags

*Finds:* none

*Fill 1974* mid grey-brown sandy-silt, firm, with occ. small sub-angular stone frags (W 0.90m, D 0.30m)

*Finds:* none

*Fill 1964* mid orange-brown silty-sand, firm, with occ. sub-angular gravel frags

*Finds:* none

*Date:* N/A

*Interpretation:* hollow used as a boundary ditch in the medieval period - same as 1961 & 1967

**Ditch 1965** orientated E-W, with an irregular shallow profile (W 0.78m, D 0.17m)

*Fill 1966* mid yellow-brown sandy-silt, loose, with occ. medium rounded pebbles

*Finds:* none

*Date:* medieval

*Interpretation:* possible boundary ditch - same as 1921

**Hollow 1967** orientated E-W, moderately sloping sides to the S, shallowly sloping sides to the N, and a flat base

*Fill 1970* mid brown sandy-silt, loose, with occ. small limestone frags. and moderate small sub-angular stone frags

*Finds:* ?Iron Age pottery

*Fill 1969* mid yellow-brown sandy-gravel, loose

*Finds:* none

*Fill 1968* mid brown sandy-silt, loose, with moderate small sub-angular stone frags. and occ. small limestone frags

*Finds:* Bronze Age and Roman pottery, animal bone, medieval brick/tile and flint

*Date:* N/A

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*Interpretation:* hollow used as a boundary ditch in the medieval period - same as 1961 & 1963

**Grave 1975** sub-rectangular, orientated E-W, near vertical sides with a flat base (L 1.60m, W 0.60m, D 0.15m)

*Fill 1977* human skeleton, extended supine position, incomplete

*Finds:* none

*Fill 1976* mid grey-brown sandy-silt, firm, with occ. small sub-angular flint frags

*Finds:* none

*Date:* Saxon (7<sup>th</sup> Century AD)

*Interpretation:* grave

**Grave 1978** sub-rectangular, orientated E-W, with vertical sides and a flat base (L 1.50m, W 0.75m, D 0.10m)

*Fill 1980* human skeleton, supine extended position, disturbed and incomplete

*Finds:* none

*Fill 1979* mid brown clay-silt, firm, with occ. small and medium rounded stones and very occ. charcoal flecks

*Finds:* animal bone, flint and tiny bronze fragments (S.F. 3)

*Date:* Saxon (7<sup>th</sup> Century AD)

*Interpretation:* grave

**Grave 1981** oval, orientated E-W, shallow sloping sides with an irregular flat base (L 1.51m, W 0.70m)

*Fill 2322* human skeleton, extended supine position, disturbed and incomplete

*Finds:* possible seax and knife (S.F. no.002)

*Fill 1982* mid grey sandy-silt, loose, with moderate medium sub-angular stone frags., occ. medium sub-rounded pebbles and frequent small limestone frags

*Finds:* none

*Date:* Saxon (7<sup>th</sup> Century AD)

*Interpretation:* grave

**Layer 1983** mid brown clay-silt, firm, with occ. small, medium and large rounded pebbles (W 3.00m, D 0.15m)

*Finds:* none

*Date:* post-Saxon

*Interpretation:* possible subsoil - colluvium

**Pit 1984** sub-oval, roughly 'U'-shaped with an irregular base

*Fill 1985* mid red-brown silty-clay, firm, with very frequent charcoal flecks

*Finds:* none

*Date:* late Iron Age

*Interpretation:* possible remnants of iron-smelting furnace

**Grave 1986** sub-rectangular, orientated E-W, with near vertical edges and a flat base (L 2.10m, W 0.68m, D 0.18m)

*Fill 1989* human skeleton, extended supine position, complete

*Finds:* none

*Fill 1988* mid grey-brown sandy-silt, firm, with occ.-moderate small sub-angular limestone frags

*Finds:* Roman pottery, animal bone, flint, slag and shell

*Date:* Saxon

*Interpretation:* grave

**Ditch 1990 (Section A)** curvilinear, with slightly convex sides and a rounded base (W 1.70m, D 0.50m)

*Fill 2337* mid yellow-brown sandy-silt, loose, moderate sub-rounded and rounded gravel and moderate small sub-angular limestone frags. (W 0.90m, D 0.20m)

*Finds:* ?daub

**Recut 2385 of Ring Ditch 1990 (Section A)**

*Fill 2338* mid grey-brown sandy-silt, firm, with occ. small rounded, sub-rounded and sub-angular limestone frags. (W 1.00m, D 0.20m)

*Finds:* Bronze and Iron Age pottery, animal bone, fired clay and flint

*Fill 2339* mid grey-brown sandy-silt, firm, with frequent small-medium rounded and sub-rounded pebbles and moderate small sub-angular chert and limestone frags

*Finds:* Iron Age pottery, animal bone, daub and flint

*Fill 2340* mid brown sandy-silt, firm, with occ. charcoal flecks and occ. small sub-rounded pebbles (W 0.90m, D 0.10m)

*Finds:* Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* ring ditch for barrow

**Ditch 1990 (Section B)** curvilinear, with slightly convex sides and a rounded base (W 1.70m, D 0.50m)

*Fill 2365* mid orange-brown silty-sand, with moderate small sub-angular and sub-rounded limestone and gravel frags

*Finds:* none

*Fill 2366* mid-dark grey-brown sandy-silt, with occ. small limestone frags

*Finds:* none

**Recut 2385 of Ring Ditch 1990 (Section B)**

*Fill 2367* mid brown-orange sandy-silt, firm, with occ. small sub-angular limestone frags. and sub-rounded gravel frags. (same as 2371)

*Finds:* none

*Fill 2368* mixed dark grey and orange-brown sandy-silt, with occ. charcoal flecks

*Finds:* pottery and animal bone. (same as 2372)

*Fill 2369* dark grey-brown sandy-silt, firm, with occ. charcoal flecks and occ. small sub-angular limestone frags

*Finds:* late Iron Age pottery and animal bone

*Fill 2370* mid-dark grey-brown sandy-silt, with moderate small sub-angular limestone frags. and small sub-rounded gravel frags

*Finds:* Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* ring ditch for barrow

**Ditch 1990 (Section C)** curvilinear, with slightly convex sides and a rounded base (W 1.70m, D 0.50m)

*Fill 2359* dark orange-brown silt, firm, with frequent limestone frags

*Fill 2360* mid orange-brown silty sand, firm, with v. occ. sub-angular and rounded gravel

*Fill 2361* mid orange-brown silty sand, firm, with frequent gravel

**Recut 2385 of Ring Ditch 1990 (Section C)**

*Fill 2356* dark orange-brown silt, firm, with frequent small limestone frags. and occ. small rounded pebbles (W 0.20m, D 0.10m)

*Finds:* Bronze and Iron Age pottery, animal bone and slag

*Fill 2353* mid-dark orange-brown sandy-silt, firm, with occ. charcoal flecks and occ. small sub-rounded stones

*Finds:* Iron Age pottery, animal bone, fired clay and flint

*Fill 2354* dark brown sandy-silt, firm, with frequent small sub-rounded stone frags (W 0.45m, D 0.20m)

*Finds:* Iron Age pottery, animal bone and brick/tile

*Fill 2355* dark brown sandy-silt, firm, with occ. small sub-rounded stone frags

*Finds:* late Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* ring ditch for barrow

**Ditch 1990 (Section D)** curvilinear, with slightly convex sides and a rounded base (W 1.70m, D 0.50m)

*Fill 2382* mid orange-brown clay-silt, firm, with occ. small, medium and large rounded pebbles and sub-angular limestone frags

*Finds:* Bronze and late Iron Age pottery, animal bone, fired clay, flint and shell

*Fill 2381* dark brown-grey clay-silt, firm, with occ. small and medium rounded and sub-rounded pebbles and occ. charcoal flecks

*Finds:* late Iron Age pottery, animal bone, fired clay and flint

*Fill 2380* mid brown-grey clay-silt, firm, with frequent small, medium and large rounded, sub-rounded and sub-angular pebbles and limestone frags. and very occ. charcoal flecks

*Finds:* late Iron Age pottery, animal bone and flint

*Fill 2377* dark grey silt, firm, with very occ. rounded and sub-angular pebbles and occ. charcoal flecks

*Finds:* Bronze and mid-late Iron Age pottery, animal bone and human bone (intrusive from grave cut 1987)

## Gazetteer of Archaeological Features

*Date:* late Iron Age

*Interpretation:* ring ditch for barrow. Although it is numbered 1990 only the recut 2385 remains

**Ditch 1990** (Section E) curvilinear, with slightly convex sides and a rounded base (W 1.70m, D 0.50m)

*Fill 2376* mid yellow-brown sandy-silt, loose, with occ. charcoal frags. and moderate medium sub-rounded pebbles and sub-angular chert frags

*Finds:* none

*Fill 2375* light yellow-brown sandy-gravel, loose, with frequent small limestone frags

*Finds:* none

**Recut 2385 of Ring Ditch 1990** (Section E)

*Fill 2373* dark grey-brown sandy-silt, loose, with occ. charcoal frags., occ. medium sub-angular chert and flint frags. and occ. medium sub-rounded pebbles (W 1.43m, D 0.64m)

*Finds:* late Iron Age pottery, animal bone and flint

*Fill 2374* mid brown sandy-silt, loose, with occ. charcoal frags., frequent medium sub-angular chert frags., moderate medium sub-rounded pebbles and frequent small limestone frags

*Finds:* Iron Age pottery, animal bone, flint and fired clay

*Date:* late Iron Age

*Interpretation:* ring ditch for barrow

**Layer 1991** mid brown sandy-silt, firm, with occ. small sub-rounded pebbles and occ. charcoal flecks

*Finds:* Roman pottery, animal bone and flint

*Date:* late Iron Age/transitional

*Interpretation:* fill of ring ditch 1990. No. allocated for pre-excavation plan and used for surface finds during cleaning. The same as 2340, 2355 & 2377 but does not appear in section B or E

**Layer 1992** mid grey-brown sandy-silt, firm, with frequent small and medium rounded and sub-rounded pebbles, occ. sub-angular stone frags. and occ. charcoal flecks

*Finds:* Iron Age/Roman pottery, animal bone and quern stone fragment

*Date:* late Iron Age

*Interpretation:* fill of ring ditch 1990. No. allocated for pre-excavation plan and used for surface finds during cleaning. The same as 2339, 2354, 2380, 2373, & 2370

**Ditch 1993** curvilinear, with near vertical slightly concave sides and a flat base (W 0.70m, D 0.35m)

*Fill 2336* mid yellow-brown sandy-silt, firm, with frequent small angular and sub-rounded limestone frags

*Finds:* ?late Iron Age pottery, animal bone, fired clay and flint

*Fill 1994* mid-dark grey-brown sandy-silt, firm, with occ. small and medium rounded and sub-rounded stone frags

*Finds:* Bronze and Iron Age pottery, animal bone, ?daub, flint (some burnt) and shell

*Date:* late Iron Age

*Interpretation:* ring ditch - possible construction trench for roundhouse

**Layer 1995** mid grey-brown sandy-silty loam, firm, with occ. small and medium rounded and sub-rounded pebbles

*Finds:* ?Iron Age pottery

*Date:* modern

*Interpretation:* remnant of topsoil mistakenly identified as a deposit

**Grave 1996** irregular sub-rectangle, orientated E-W, steep sided with a flat base (L 1.98m, W 0.62m, D 0.10m)

*Fill 1998* human skeleton, extended supine burial, incomplete

*Finds:* none

*Fill 1997* mid-dark brown clay-silt, firm, with occ. small, medium and large rounded and sub-rounded pebbles

*Finds:* Bronze and Iron Age/Roman pottery, animal bone, flint and possible bone gaming counter

*Date:* Saxon (7<sup>th</sup> Century AD)

*Interpretation:* grave

**Layer 1999**

*Finds:* ?Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* spread of material overlying ring ditch 1990, originally recorded as the fill of a cut during the pre-excavation plan

**Layer 2301**

*Finds:* animal bone, wattle impressed daub (S.F 004), an iron knife and a quern frag

*Date:* late Iron Age

*Interpretation:* spread of material overlying ring ditch 1990, originally recorded as the fill of a cut during the pre-excavation plan

**Layer 2303**

*Finds:* animal bone and flint

*Date:* Saxon (7<sup>th</sup> Century AD)

*Interpretation:* fill of grave 2319 - same as fill 2321

**Grave 2304** oval, orientated E-W, gently sloping sides with a flat base (L 0.65m, W 0.55m, D 0.03m)

*Fill 2305* mid red-brown silty-sand, fairly loose, with occ. small rounded pebbles and a concentration of 10-15 large rounded pebbles on the surface

*Finds:* ?Iron Age pottery, animal bone and flint

*Date:* N/A

*Interpretation:* natural hollow with concentration of stone and artifacts

**Post hole 2306** irregular sub-circle, with near vertical sides and a flat base (W 0.50m, D 0.28m)

*Fill 2307* mid grey clay-silt, firm, with occ. charcoal flecks and very occ. small and medium rounded stone frags (W 0.30m, D 0.10m)

*Finds:* Bronze Age pottery and flint

*Fill 2334* mid orange-red silty-sand with lenses of mid brown silty-sand, loose, with very occ. small rounded pebbles (W 0.42m, D 0.28m)

*Finds:* none

*Date:* probably late Iron Age or Saxon

*Interpretation:* post hole

**Gully 2308** square linear, orientated N-S, with a 'U'-shaped profile (W 0.40m, D 0.15m)

*Fill 2309* dark orange-brown sandy-silt, firm, with small occ. sub-rounded stones

*Finds:* Bronze and ?mid-late Iron Age pottery and fired clay

*Date:* Saxon

*Interpretation:* possible construction gully for rectangular building

**Gully 2310** (Section A) moderately steep sided with a rounded base

*Fill 2347* mid yellow-orange brown sandy-silt, with occ. small sub-angular limestone frags

*Finds:* none

*Fill 2348* mid grey-brown sandy-silt, firm, with occ. small sub-angular limestone frags (W 0.40m, D 0.20m)

*Finds:* animal bone

*Date:* Saxon

*Interpretation:* possible construction gully for rectangular building

**Gully 2310** (Section C) moderately steep sided with a rounded base

*Fill 2351* mid yellow-orange brown sandy-silt, with occ. small sub-angular limestone frags

*Finds:* Bronze Age pottery and animal bone

*Fill 2352* mid grey-brown sandy-silt

*Finds:* fired clay

*Date:* Saxon

*Interpretation:* possible construction gully for rectangular building

**Ditch 2310** (Section D) moderately steep sided with a rounded base

*Fill 2350* mid yellow-orange brown sandy-silt with occ. small sub-angular limestone frags

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*Finds: none*

*Fill 2349 mid grey-brown sandy-silt*

*Finds: none*

*Date: Saxon*

*Interpretation: possible construction gully for rectangular building*

**Ditch 2310** (Section E) moderately steep sided with a rounded base (L 5.20m W 1.70m)

*Fill 2345 mid yellow-orange brown sandy silt with occ. small sub-angular limestone frags*

*Finds: none*

*Fill 2346 mid greyish-brown sandy silt, firm, with occ. small sub-angular limestone frags and occ. sub-angular chert (D 0.22m)*

*Finds: late Iron Age pottery, animal bone and quern stone fragment*

*Date: Saxon*

*Interpretation: possible construction gully for rectangular building*

**Layer 2311** mid brown sandy silt, firm

*Finds: ?Iron Age pottery, animal bone and ?daub*

*Date: late Iron Age*

*Interpretation: spread of material above ditch 2310 collected during cleaning*

**Furrow 2313** orientated NNW-SSE, irregular shallowly sloping sides with a shallowly curved base

*Fill 2312 mid-dark clayey silt, compact, with some small, medium and large rounded pebbles*

*Finds: Bronze Age pottery, animal bone and flint*

*Date: medieval*

*Interpretation: furrow*

**Grave 2315** oval, orientated E-W, gently sloping sides with a flat base (L 1.90m, W 0.60m, D 0.05m)

*Fill 2316 human skeleton, extended supine burial, incomplete*

*Finds: none*

*Fill 2324 mid orangey-grey brown sandy silt, fairly loose, with occ. rounded pebbles and occ. angular and sub-angular flint frags*

*Finds: animal bone and baked clay*

*Date: Saxon (7<sup>th</sup> Century AD)*

*Interpretation: grave*

**Grave 2319** sub-rectangular, orientated E-W, gently sloping sides with a flat base (L 1.30m, W 0.60m, D 0.10m)

*Fill 2320 human skeleton, extended supine burial, disturbed and incomplete*

*Finds: none*

*Fill 2321 mid brown sandy silt, firm, with occ. limestone frags*

*Finds: animal bone*

*Date: Saxon (7<sup>th</sup> Century AD)*

*Interpretation: grave*

**Grave 2323** sub-rectangular, orientated E-W, gently sloping sides with a slightly rounded base (L 1.62m, W 0.62m, D 0.10m)

*Fill 2317 human skeleton, extended supine burial, disturbed and incomplete*

*Finds: none*

*Fill 2318 dark grey-brown sandy silt, firm, with frequent sub-angular and rounded gravels and occ. flint*

*Finds: none*

*Date: Saxon (7<sup>th</sup> Century AD)*

*Interpretation: grave*

**Grave 2325** sub-oval, orientated E-W, moderately sloping sides with an uneven base (L 1.92m, W 1.20m D 0.17m)

*Fill 2327 human skeleton, extended, laid on left hand side, disturbed and incomplete*

*Finds: none*

*Fill 2326 mid brown sandy silt, loose, with moderate sub-angular limestone, occ. sub-rounded pebbles and occ. charcoal*

*Finds: ?late Iron Age pottery, animal bone, baked clay, flint and worked bone object (S.F. No. 006)*

*Date: Saxon (7<sup>th</sup> Century AD)*

*Interpretation: grave*

**Posthole 2328** sub-oval, orientated E-W, steep sides and rounded base (W 0.28m, D 0.18m)

*Fill 2329 mid grey brown silty sand with lenses of clay, loose, with occ. rounded pebbles*

*Finds: none*

*Date: Saxon*

*Interpretation: posthole associated with rectangular gully 2332*

**Posthole 2330** sub-circular, steep sides with a rounded base (W 0.28m, D 0.12m)

*Fill 2331 mid orange-grey brown sandy silt with some clay content, loose, with occ. rounded pebbles*

*Finds: none*

*Date: Saxon*

*Interpretation: posthole associated with rectangular gully 2332*

**Gully 2332** (sections A-E) rectilinear. square cornered (L 8.00m, W 3.25m)

*Fill 2333 mid orange-brown silty sand with some clay content, loose, with occ. rounded pebbles*

*Finds: animal bone and flint*

*Date: Saxon*

*Interpretation: possible construction gully for rectangular building*

**Posthole 2341** sub-circular, with steep, concave sides and a flat base (Di 0.45m D 0.16m)

*Fill 2342 mid brown-grey clayey silt, compact, with occ. small, medium and large rounded and sub-rounded pebbles*

*Finds: Iron Age pottery and flint*

*Date: late Iron Age or Saxon*

*Interpretation: posthole*

**Feature 2343** sub-circular, with almost vertical sides and a flat base (Di 0.34m D 0.10m)

*Fill 2344 mid-dark grey clayey silt, compact, with very occ. small rounded and sub-rounded pebbles and v. occ. charcoal flecks*

*Finds: none*

*Date: N/A*

*Interpretation: probably a natural hollow/animal disturbance*

**Posthole 2357** sub-circular, with steep sides and a flat base (Di 0.18m D 0.18m)

*Fill 2358 dark brown sandy silt, firm, with occ. sub-angular limestone frags*

*Finds: none*

*Date: Late Iron Age or Saxon*

*Interpretation: posthole*

**Pit 2363** sub-oval, orientated E-W, with steep sides and a concave to flat base (L 1.20m W 0.40m D 0.10m)

*Fill 2364 dark brown sandy silt, firm*

*Finds: none*

*Date: Unknown*

*Interpretation: pit*

**Posthole 2378** sub-circular, with steep sides and a rounded base (Di 0.25m D 0.13m)

*Fill 2379 dark brown sandy silt, firm*

*Finds: none*

*Date: late Iron Age or Saxon*

*Interpretation: post hole*

**Deposit 2383** human bone concentration

*Finds: animal bone*

**Furrow 2384** orientated NNW-SSE, irregular shallowly sloping sides with a shallowly curved base (W 1.35m, D 0.20m)

*Fill 1986 mid-dark brown clay-silt, firm, with occ. small, medium and large rounded pebbles Finds: Bronze Age, Roman, medieval and post-medieval pottery, animal bone, human bone, fired clay, flint, shell and medieval brick/tile*

*Date: medieval*

## Gazetteer of Archaeological Features

Interpretation: furrow

**Site 19, TF 10526 45538**

Construction Section 19, Plot 146

The fills of all features are given in the order of primary fill first and top fill last

**Layer 2400** mid grey brown sandy silty loam, compact, with occ. small and medium sized rounded and sub-rounded pebbles

*Finds: none*

*Date: modern*

*Interpretation: topsoil*

**Layer 2401** mid orange brown sandy silt, fairly compact, with occ. to moderate small and medium rounded and sub-rounded gravels

*Finds: none*

*Date: post-Iron Age*

*Interpretation: subsoil - alluvium and colluvium*

**Layer 2402** mid orange brown sandy silt and gravel, fairly compact, with moderate and frequent small and medium gravels

*Finds: none*

*Date: N/A*

*Interpretation: natural gravels*

**Ditch 2403** (section A) linear, orientated SE-NW, moderately steep sided and fairly flat bottomed (W 0.50m, D 0.20m).

*Fill 2404* orange grey brown silty sand, with very frequent rounded and sub-rounded pebbles and frequent sub-angular limestone frags and angular flint frags.

*Finds: animal bone*

**Recut 2467 of Ditch 2403**

*Fill 2430* orange brown silty sand, fairly loose, with occ. to rounded pebbles and occ. sub-angular limestone frags.

*Finds: none*

*Date: mid-late Iron Age*

*Interpretation: ?enclosure ditch*

**Gully 2403** (section B) linear, orientated SE-NW, moderately steep sided and fairly flat bottomed (W 0.50m, D 0.20m).

*Fill 2427* dark orange brown silty gravel, firm, with frequent rounded and sub-rounded stones and moderate limestone frags.

*Finds: none*

**Recut 2467 of Ditch 2403**

*Fill 2426* dark brown sandy silt, firm, with occ. sub-rounded and sub-angular gravel

*Finds: animal bone and flint*

*Date: mid-late Iron Age*

*Interpretation: ?enclosure ditch*

**Gully 2405** curvilinear, with very shallow, gently sloping sides and a gently rounded base (W 0.30m, D 0.05m).

*Fill 2406* orange grey brown silty sand, fairly loose, with occ. rounded pebbles and occ. sub-angular limestone frags.

*Finds: ?late Iron Age pottery and animal bone*

*Date: late Iron Age*

*Interpretation: possible drainage or penannular gully*

**Ditch 2407** (section A, south facing) linear, orientated NE-SW, near vertical edges tapering down to a flat base. (same as 2453)

*Fill 2444* mid orange yellow sand, loose,

*Finds: none*

*Fill 2445* dark grey sandy silt, loose, with occ. sub-angular limestone frags

*Finds: none*

*Fill 2446* light sand grey brown sandy silt, loose, with occ. sub-angular limestone frags

*Finds: none*

*Fill 2447* light greyish orange brown sandy silt, loose, with moderate sub-angular limestone frags. and sub-rounded gravel (same as 2451).

*Finds: none*

**Recut 2443 of Ditch 2407** (section A) linear, orientated NE-SW, with moderately sloping sides and a rounded base (same as 2408 and 2413).

*Fill 2449* mid brown sandy silt with moderate limestone frags (same as 2450)

*Finds: Bronze Age pottery and animal bone*

*Date: Iron Age*

*Interpretation: ?enclosure ditch*

**Ditch 2407** (section B) linear, orientated E-W, steep sided with a slightly rounded base

*Fill 2416* dark grey brown silty sand, firm, with frequent sub-angular and rounded gravel

*Finds: ?late Iron Age pottery, animal bone and fired clay*

*Fill 2415* mid grey orange silty gravel, firm, with frequent gravel, same as 2414, deposit has been truncated by recut 2413

*Finds: none*

*Fill 2414* mid grey orange silty gravel, firm, with frequent gravel, same as 2415, deposit has been truncated by recut 2413

*Finds: none*

**Recut 2413 of Ditch 2407** (section B) linear, orientated E-W, moderately steep sided with a slightly rounded base (W 1.30m, D 0.50m). (same as 2408 and 2443)

*Fill 2412* mid orange brown sandy silt, firm, with frequent sub-angular gravels, note that this fill is also recorded as 2422

*Finds: none*

*Fill 2411* mid orange brown sandy silt, firm, with occ. sub-angular stones

*Finds: Iron Age pottery and animal bone*

*Date: possible Bronze Age*

*Interpretation: ?enclosure ditch*

**Pit 2409** irregular, sub-circular, with shallow irregular sides and an irregular base

*Fill 2410* very dark grey silty sand and occ. patches of mid reddish orange silty sand with occ. charcoal frags. and rounded fire-cracked pebble frags

*Finds: none*

*Date: mid-late Iron Age*

*Interpretation: pit containing remains of burnt deposits*

**Feature 2419** linear, orientated N-S, shallow concave sides with a rounded base

*Fill 2418* mid brown silt, loose, with rare gravel towards the base

*Finds: none*

*Fill 2417* mid to grey brown silt, loose, with rare gravels towards the base

*Finds: flint and worked stone*

*Date: N/A*

*Interpretation: probable natural hollow*

**Pit 2420** sub-oval, roughly orientated NE-SW, with moderately sloping sides and a slightly rounded base

*Fill 2421* mid reddish brown sandy silt, loose, with moderate sub-angular gravel and occ. charcoal

*Finds: ?late Iron Age pottery, animal bone and fired clay*

*Date: ?late Iron Age*

*Interpretation: rubbish pit*

**Gully 2423** (section A) linear, orientated N-S, with moderately steep sides and a flattish base

*Fill 2424* mid reddish brown sandy silt, loose, with moderate sub-angular gravel

*Finds: none*

*Date: ?late Iron Age*

*Interpretation: enclosure gully (3 sections excavated, A, B and C)*

**Gully 2423** (section B) linear, orientated N-S, with moderately steep sides and a flattish base

## Gazetteer of Archaeological Features

- Fill 2432** mid orange brown sandy silt, soft, with some frequent small and medium sized rounded and sub-rounded stone  
*Finds:* none  
**Fill 2431** mid orange brown clay rich silt, fairly soft, with very occ. small rounded stone  
*Finds:* animal bone  
*Date:* ?late Iron Age  
*Interpretation:* enclosure gully (3 sections excavated, A, B and C)
- Gully 2423** (section C) linear, orientated N-S, with moderately steep sides and a flattish base  
**Fill 2434** mid orange brown sandy silt, fairly soft, with frequent small and medium rounded pebbles  
*Finds:* animal bone  
**Fill 2433** mid orange brown sandy silt, soft, with very occ. very small rounded gravels  
*Finds:* none  
*Date:* ?late Iron Age  
*Interpretation:* enclosure gully (3 sections excavated, A, B and C)
- Ditch 2425** (3 sections excavated, A, B and C) linear, orientated NE-SW, with moderately steep sides and a sub-rounded base  
**Fill 2437** reddish brown sandy silt, compact, with very frequent sub-angular and rounded gravel  
*Finds:* ?late Iron Age pottery  
**Fill 2436** mid reddish brown sandy silt, loose, with moderate sub-angular gravel and occ. charcoal flecks  
*Finds:* late Iron Age pottery, animal bone and fired clay  
*Date:* ?late Iron Age  
*Interpretation:* enclosure boundary ditch
- Ditch 2428** (section A) curvilinear, orientated E-W turning to NW-SE, moderately steep sides with a flattish base  
**Fill 2435** silty sand, loose, with frequent sub-angular gravels and occ. charcoal flecks  
*Finds:* none  
**Recut 2455 of Ditch 2428**  
**Fill 2429** mid reddish brown sandy silt, dry, with moderate charcoal flecks and gravel  
*Finds:* Bronze and Iron Age pottery and animal bone  
*Date:* Iron Age  
*Interpretation:* enclosure ditch
- Ditch 2428** (section B) curvilinear, orientated E-W turning to NW-SE, moderately steep sides with a flattish base  
**Fill 2469** orange brown sandy silt with frequent sub-angular gravels and occ. charcoal flecks  
*Finds:* none  
**Recut 2455 of Ditch 2428**  
**Fill 246** mid orange brown clayey sandy silt, compact, with very occ. small rounded and sub-rounded pebbles  
*Finds:* fired clay  
*Date:* Iron Age  
*Interpretation:* enclosure ditch
- Pit 2438** irregular shape, with near vertical sides and a flattish base  
**Fill 2439** mid grey brown sandy silt, compact, with small sub-rounded gravels and some charcoal flecking  
*Finds:* Iron Age pottery  
*Date:* Iron Age  
*Interpretation:* possible rubbish pit
- Gully 2440** linear, orientated N-S, with steep slightly concave edges  
**Fill 2441** mid orange brown sandy silt, fairly compact, with some small rounded gravels, same as 2462, (2 sections excavated)  
*Finds:* none  
*Date:* Iron Age  
*Interpretation:* gully, forming part of a probable boundary
- Pit 2442** (section A, south facing) linear, orientated NE-SW, with almost vertical edges tapering down towards a flat base
- Fill 2448** light grey brown sandy silt, with moderate sub-angular limestone frags  
*Finds:* none  
*Date:* Iron Age  
*Interpretation:* ?pit
- Ditch 2453** (section A, east facing) linear, orientated E-W, steep sided with a slightly rounded base (same as 2407)  
**Fill 2451** light grey orange brown, sandy silt, loose, with moderate sub-angular limestone frags. and sub-rounded gravel (same as 2447)  
*Finds:* none  
**Fill 2452** mid brown sandy silt, with moderate limestone frags.  
*Finds:* none  
**Recut 2408 of Ditch 2453** linear, with moderately sloping sides and an undulating base (same as 2443)  
**Fill 2450** mid brown sandy silt with moderate limestone frags (same as 2449)  
*Date:* Iron Age  
*Interpretation:* ditch - same as 2407
- Deposit 2454** dark grey silty sand with pockets of orangey red brown silty sand, firm, with occ. rounded pebbles, sub-angular limestone frags. and occ. charcoal flecks  
*Finds:* none  
*Date:* ?Iron Age  
*Interpretation:* deposit of burnt natural, possibly a burnt out tree bole
- Ditch 2456** curvilinear, orientated E-W, with moderately sloping sides and a rounded base  
**Fill 2465** mid orange sandy gravel, fill represents redeposited natural  
*Finds:* none  
**Fill 2459** mid grey brown silty gravel, with frequent small rounded and sub-rounded gravels  
*Finds:* late Iron Age pottery and animal bone  
**Fill 2458** mid grey brown silty gravel, with frequent small rounded and sub-rounded gravels  
*Finds:* late Iron Age pottery, animal bone and clay loom weight frags  
**Fill 2457** mid brown sandy silt, firm, with occ. sub-angular and sub-rounded gravels  
*Finds:* late Iron Age pottery and clay loom weight frags  
*Date:* late Iron Age  
*Interpretation:* ditch
- Furrow 2460** linear, orientation NW-SE, very gently sloping edges with a flattish base  
**Fill 2461** mid yellow orange brown silty sand, moderately firm, with occ. rounded pebbles and sub-angular limestone frags  
*Finds:* none  
*Date:* medieval  
*Interpretation:* furrow
- Furrow 2463** linear, orientated N-S, with shallow gently sloping sides and a flattish base. Fill (not given a separate number) a mid brown sandy silt, loose, with frequent gravel  
*Finds:* none  
*Date:* medieval  
*Interpretation:* most easterly of two parallel furrows, possibly only one furrow, appears as two in plan
- Furrow 2464** linear, orientated N-S, with shallow gently sloping sides and a flattish base. Fill (not given a separate number) a mid brown sandy silt, loose, with frequent gravel  
*Finds:* none  
*Date:* medieval  
*Interpretation:* most easterly of two parallel furrows, possibly only one furrow, but appears as two in plan
- Ditch 2468** linear, orientated E-S, with steep sloping sides and a rounded base

## Gazetteer of Archaeological Features

*Fill 2465* a mid orange sandy gravel with no stone

*Finds:* None

*Fill 2459* mid grey/brown silty gravel with frequent small rounded & sub-rounded gravel

*Finds:* late Iron Age pottery and animal bone

*Date:* late Iron Age

### Site 21, TF 10440 45320-TF 10356 45090

Construction Section 20, Plot 147-149

The fills of all features are given in the order of primary fill first and top fill last

**Layer 2000** light grey brown silt sandy loam, compact, with occ. small and medium gravel (D 0.25m)

*Finds:* none

*Date:* modern

*Interpretation:* topsoil

**Layer 2001** light orangey brown sand, loose, with very frequent very small, small medium and sub-medium gravels

*Finds:* none

*Date:* N/A

*Interpretation:* natural gravel

**Ditch 2002** linear, orientated E-W, moderately steep sided with a flat base (W 1.10m D 0.28m)

*Fill 2044* mid grey brown sandy silt, with occ. sub-rounded pebbles

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch

**Ditch 2003** linear, orientated E-W, moderately steep sided with a flat base (W 1.12m, D 0.43m)

*Fill 2048* mid brown orange silty sand, with moderate sub-rounded and sub-angular pebbles

*Finds:* none

*Fill 2047* mid grey brown sandy silt with occ. sub-angular and sub-rounded pebbles

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch

**Ditch terminus/pit 2004** semi-circular, steep sided with a flat base (W 0.90m, D 0.36m)

*Fill 2046* mid grey brown sandy silt with occ. sub-rounded and sub-angular pebbles and burnt limestone

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch

**Pit 2005** semi-circular, with steep sides and a flat base (W 1.60m, D 0.74m)

*Fill 2009* mid greyish brown silty sand, with a 5% clay content, loose, with occ. charcoal and occ. small gravel

*Finds:* animal bone

*Fill 2008* yellowish brown sandy silt, loose, with small gravel

*Finds:* animal bone

*Fill 2013* mid brown silty sand, loose, with occ. charcoal, occ. flecks of burnt clay and moderate gravel

*Finds:* none

*Date:* Romano-British

*Interpretation:* probable well

**Ditch 2006** linear, orientated NE-SW, with shallow sloping sides and a flat base (W 0.83m, D 0.19m)

*Fill 2042* light brown silty sand, loose, with frequent small gravels (D 0.02m)

*Finds:* none

*Fill 2007* mid brown dry sandy silt, loose, with occ. charcoal and moderate small gravel

*Finds:* Roman pottery and animal bone

*Date:* Romano-British

*Interpretation:* ditch

**Ditch 201** linear, orientated SE-NW, with steep sloping sides and a flattish base

*Fill 2043* light brown silty sand, dry and loose, with frequent gravel (D 0.02m)

*Finds:* none

*Fill 2011* light-mid brown sandy silt, loose and dry, with moderate small gravel (D 0.17m)

*Finds:* late 3<sup>rd</sup> - 4<sup>th</sup> Century AD pottery and animal bone

*Date:* Romano-British

*Interpretation:* ditch

**Ditch 2012** linear, orientated E-W, moderately steep sided with a flat base (W 1.00m D 0.60m)

*Fill 2023* light yellowish grey silty sand, with frequent sub-rounded gravels and sub-angular limestone frags. (D 0.20m)

*Finds:* none

*Fill 2022* mid brown sandy silt, firm, with occ. charcoal flecks and occ. limestone frags

*Finds:* none

*Date:* Romano-British

*Interpretation:* ditch

**Ditch 2014** linear, orientated WSW-ENE, fairly steep concave sides with a flattish base (W 3.15m, D 0.60m)

*Fill 2017* mid-light whitish grey silty sand, loose, with frequent small rounded gravels

*Finds:* none

*Fill 2016* dark grey black clayey silt, compact, with occ.-moderate small and medium sized rounded and sub-rounded stone

*Finds:* none

*Fill 2015* mid brown clayey silt, compact, with occ. small, medium and rounded stone

*Finds:* animal bone

*Date:* ?Romano-British

*Interpretation:* drainage/boundary ditch

**Ditch 2018** linear, orientated E-W, sloping, concave edges and a flat base. (W 1.12m D 0.24m)

*Fill 2019* mid brown sandy silt, firm, with occ.-moderate sub-angular limestone frags.

*Finds:* Roman pottery

*Date:* Romano-British

*Interpretation:* ditch

**Pit 2020** irregular, southern edge has almost vertical side, Northern edge gradually slopes down to a flattish base (L 0.76m, W 0.48m, D 0.13m)

*Fill 2021* dark grey sandy silt, soft, with moderate-frequent heat shattered small rounded pebbles

*Finds:* none

*Date:* Romano-British

*Interpretation:* pit containing burnt material deposited after burning

**Layer 2024** mid orangey brown sandy silt, fairly compact, with occ.-moderate small and medium rounded and sub-rounded gravels (D 0.05-0.30m)

*Finds:* Roman pottery and animal bone

*Date:* post-Roman

*Interpretation:* subsoil - alluvium

**Well 2025** sub-circular, within weathering cone, edges sloping concave, within well itself vertical sided with a flattish base (Di 3.10m, D 0.75m)

*Fill 2030* mix of brown-grey and brown-orange sandy silt and green-grey clay, wet and concreted with some-moderate small rounded and sub-rounded gravel. Deposit represents slumping of natural layers

*Finds:* none

## Gazetteer of Archaeological Features

*Fill 2029* mid brown-grey and orange silty sand, wet and loose, with very occ. small rounded and sub-rounded pebbles

*Finds:* none

*Fill 2028* light grey sandy silt, loose and wet, with occ. small rounded and sub-rounded gravel

*Finds:* none

*Fill 2027* dark grey brown silty sand, loose, with occ. small rounded and sub-rounded gravel

*Finds:* none

*Fill 2026* mid orange brown silty sand, compact, with some small and medium rounded and sub-rounded pebbles and large sub-angular slabs of limestone towards base of fill

*Finds:* Roman pottery

*Date:* Romano-British

*Interpretation:* well

**Pit 2031** semi-circular, orientated E-W, moderately steep sided with a flattish base

*Fill 2035* light greyish brown sandy silt, firm, with frequent rounded gravel

*Finds:* Roman pottery

*Fill 2034* mid brown silt, firm, with rare rounded stones

*Finds:* none

*Fill 2033* mid orange brown sandy silt, firm, with frequent rounded gravel

*Finds:* animal bone

*Fill 2032* light grey brown sandy silt, firm, with occ. rounded gravel

*Finds:* none

*Fill 2036* light orange brown sandy silt, firm, with occ. small gravel

*Finds:* animal bone

**Re-cut 2037** of Pit 2031 steep sided with a rounded base (W 0.90m, D 0.80m)

*Fill 2041* mid grey sandy silt, firm, with frequent gravel (D 0.14m)

*Finds:* none

*Fill 2040* light orange brown sandy silt, firm, with frequent gravel (D 0.12m)

*Finds:* none

*Fill 2039* light orange brown sandy silt, firm, with occ. gravel (D 0.16m)

*Finds:* ?mid 3<sup>rd</sup> Century AD pottery and animal bone

*Fill 2038* light grey brown sandy silt, firm, with occ. rounded gravel (D 0.40m)

*Finds:* ?mid 3<sup>rd</sup> Century AD pottery

*Date:* Romano-British

*Interpretation:* probable well

### Site 22, TF 10200 44734

Construction Section 20, Plot 150

The fills of all features are given in the order of primary fill first and top fill last

**Layer 2500** dark grey brown sandy silt loam, compact, with occ. small, medium and large rounded and sub-rounded gravel

*Finds:* none

*Date:* modern

*Interpretation:* topsoil

**Layer 2501** mix of mid orange and yellow sandy silts, compact, with frequent small and medium rounded and sub-rounded gravel

*Finds:* none

*Date:* N/A

*Interpretation:* natural gravels

**Ditch 2502** linear, orientated E-W, with shallow curved sides and a flat base (W 1.40m, D 0.40m)

*Fill 2533* light brown sandy silt, firm, with occ. rounded gravel (D 0.10m)

*Finds:* animal bone

*Fill 2534* light orange brown sandy silt, firm, with moderate small gravel (D 0.30m)

*Finds:* animal bone

*Date:* ?late Iron Age

*Interpretation:* field boundary ditch

**Ditch 2503** linear, orientated E-W, with shallow curved sides and a flat base (W 1.20m, D 0.10m)

*Fill 2532* light orange brown sandy silt, firm, with moderate gravel (D 0.10m)

*Finds:* animal bone

*Date:* ?late Iron Age

*Interpretation:* field boundary ditch

**Ditch 2504** linear, orientated NW-SE, with moderately steep sides and a flat base. (W 0.75m, D 0.30m)

*Fill 2506* mid brown sandy silt, firm, with occ. sub-angular limestone frags

*Finds:* none

*Date:* ?late Iron Age

*Interpretation:* field boundary ditch

**Feature 2508** sub-circular, with moderately sloping sides and a rounded base. (W 0.15m, D 0.10m)

*Fill 2509* mid greyish brown sandy silt with occ. charcoal

*Finds:* none

*Date:* N/A

*Interpretation:* probable natural hollow/animal disturbance

**Natural feature 2510** linear, orientated E-W, with irregular edges and shallow slightly irregular base (W 0.50m, D 0.10m)

*Fill 2507* mid red sandy silt, with occ. sub-rounded gravel

*Finds:* none

*Date:* N/A

*Interpretation:* stream channel

**Ditch 2511** linear, orientated E-W, with concave edges and an irregular base (W 0.86m, D 0.2m)

*Fill 2512* dark brown sandy silt, loose, with frequent small stones

*Finds:* ?late Iron Age pottery and animal bone

*Date:* ?late Iron Age

*Interpretation:* ?field boundary ditch

**Ditch 2513** linear, orientated E-W, gently sloping concave sides with an irregular base (W 0.86m, D 0.26m)

*Fill 2515* dark brown grey sandy silt, loose, with frequent small rounded gravel (D 0.10m)

*Finds:* animal bone

*Fill 2514* dark brown sandy silt, loose, with frequent small gravel (D 0.16m)

*Finds:* ?late Iron Age pottery and animal bone

*Date:* ?late Iron Age

*Interpretation:* field boundary ditch

**Ditch 2516** linear, orientated NNE-SSW, vertical sides with a slightly undulating base (W 1.75m, D 0.60m)

*Fill 2554* mid grey silty sand, fairly loose, with frequent small and medium sized rounded and sub-rounded stone

*Finds:* Roman pottery (intrusive) and animal bone

*Fill 2553* mid grey clayey sandy silt with mid orangey brown flecks, loose, with very occ. small rounded gravel and occ. charcoal flecks (D 0.06m)

*Finds:* Iron Age pottery and animal bone

*Fill 2552* light grey clayey silty sand, soft, with occ. small rounded gravel and occ. charcoal flecks (D 0.12m)

*Finds:* none

**Recut 2582** of Ditch 2516

*Fill 2551* mid-dark grey sandy silt, compact, with occ. small, medium and large rounded and sub-rounded stone, rare large sub-angular limestone frags. and some large sub-angular heat shattered pebbles (D 0.20m)

*Finds:* ?early-mid Iron Age pottery, animal bone, clay loom weight frags and shell

*Fill 2517* mid orange brown sandy silt, compact, with occ. small and medium rounded and sub-rounded stone (D 0.20m)

## Gazetteer of Archaeological Features

- Finds:*  ?mid-late Iron Age pottery, animal bone and clay loom weight frags  
 *Date:*  early-middle Iron Age  
 *Interpretation:*  terminus of rectangular enclosure ditch
- Ditch 2518** linear, orientated NE-SW, moderately sloping sides with a flat base (W 0.70m, D 0.48m)  
 *Fill 2519*  light-mid grey sandy silt, firm, with frequent sub-angular limestone frags. and sub-rounded gravels (D 0.10m)  
 *Finds:*  none  
 *Fill 2520*  light orange grey sandy silt, with moderate sub-angular and sub-rounded gravels and occ. charcoal flecks (D 0.10m)  
 *Finds:*  none  
 *Fill 2521*  mid grey brown sandy silt with occ. limestone frags. and charcoal flecks (D 0.26m)  
 *Finds:*  late Iron Age pottery and animal bone  
 *Date:*  Iron Age  
**Recut 2522 of Ditch 2518** linear, orientated NE-SW, convex sides tapering down to a flat base (W 1.40m, D 0.60m)  
 *Fill 2523*  mid orange sand, loose (D 0.04m)  
 *Finds:*  none  
 *Fill 2524*  mid grey sand (D 0.06m)  
 *Finds:*  none  
 *Fill 2525*  mid-dark grey sandy silt with moderate-frequent sub-angular and sub-rounded gravels (D 0.06m)  
 *Finds:*  mid-late Iron Age pottery and animal bone  
 *Fill 2526*  mid greyish brown sandy silt with moderate sub-angular and sub-rounded gravels and limestone frags  
 *Finds:*  mid-late Iron Age pottery and animal bone  
 *Date:*  ?middle Iron Age  
 *Interpretation:*  : rectangular enclosure ditch - same as 2531
- Posthole 2527** sub-rounded, steep sides with a slightly concave base (Di 0.33m, D 0.22m)  
 *Fill 2528*  mid grey brown sandy silt, firm, with occ. rounded gravels and occ. charcoal  
 *Finds:*  none  
 *Date:*  Iron Age  
 *Interpretation:*  posthole
- Ditch 2529** linear, orientated NE-SW, steep sides with a rounded base  
 *Fill 2538*  yellowish brown silty sand, loose, with frequent gravel (D 0.08m)  
 *Finds:*  none  
 *Fill 2537*  mid yellowish brown sandy silt, loose, with moderate charcoal and occ. gravel (D 0.44m)  
 *Finds:*  ?mid-late Iron Age pottery and animal bone  
 *Date:*  mid-late Iron Age  
 *Interpretation:*  rectangular enclosure ditch - continuation of 2530
- Ditch 2530** curvilinear, almost vertical sides and a flat base  
 *Fill 2540*  dark greyish brown sandy silt, loose, with moderate gravel and charcoal flecks  
 *Finds:*  mid-late Iron Age pottery and animal bone  
 *Fill 2539*  light reddish brown sandy silt, loose, with moderate gravel and occ. charcoal flecks  
 *Finds:*  mid-late Iron Age pottery and animal bone  
 *Date:*  mid-late Iron Age  
 *Interpretation:*  rectangular enclosure ditch - same as 2529
- Ditch 2531** curvilinear, steep sides with a roughly rounded base  
 *Fill 2541*  mid greyish brown sandy silt, with moderate charcoal flecks and gravel (D 0.27m)  
 *Finds:*  none  
 *Date:*  Iron Age  
 *Interpretation:*  rectangular enclosure ditch - same as 2518
- Ditch 2535** curvilinear, steep sides slightly irregular base  
 *Fill 2536*  mid-dark brown sandy silt, loose, with moderate gravel and occ. chert  
 *Finds:*  mid-late Iron Age pottery and animal bone
- Date:*  ?middle Iron Age  
 *Interpretation:*  enclosure entrance ditch
- Pit 2542** irregular oval, with irregular shallow sloping sides and a flat base (L 1.20m, W 0.90m, D 0.08m)  
 *Fill 2543*  mid orange brown sandy silt, firm, with very occ. gravel and charcoal flecks  
 *Finds:*  mid-late Iron Age pottery  
 *Date:*  ?middle Iron Age  
 *Interpretation:*  probable pit - very truncated
- Gully 2544** linear, orientated E-W, moderately steep sides with a flat base (W 0.46m, D 0.15m)  
 *Fill 2545*  mid orange brown sandy silt, compact, with moderate sub-rounded gravel, frequent charcoal and occ. fire-cracked pebbles  
 *Finds:*  ?early-middle Iron Age pottery and animal bone  
 *Date:*  ?early-middle Iron Age  
 *Interpretation:*  gully
- Feature 2546** linear, orientated N-S, with steep sides and an irregular flat base (W 0.35m, D 0.11m)  
 *Fill 2562*  mid brown sandy silt, loose, with occ. charcoal and moderate gravel  
 *Finds:*  none  
 *Date:*  N/A  
 *Interpretation:*  animal disturbance
- Gully 2547** linear, orientated NE-SW, moderately sloping concave sides and a flat base (W 0.86m, D 0.16m)  
 *Fill 2548*  mid orange brown sandy silt, firm, with occ. small rounded gravel  
 *Finds:*  none  
 *Date:*  ?middle Iron Age  
 *Interpretation:*  possible fenceline gully
- Gully 2549** curvilinear, orientated N-S, with near vertical sides and a flattish base (W 0.37m, D 0.15m)  
 *Fill 2550*  mid brown sandy silt, fairly compact, with very occ. small rounded and sub rounded gravel  
 *Finds:*  mid-late Iron Age pottery, animal bone and flint  
 *Date:*  ?middle Iron Age  
 *Interpretation:*  construction gully for roundhouse structure? Contained a posthole (2563)
- Subsoil 2555** mid orange brown sandy silt, compact, with occ. small sub-rounded and rounded gravel  
 *Finds:*  ?mid-late Iron Age pottery and animal bone  
 *Date:*  post-Iron Age  
 *Interpretation:*  alluvial deposit overlying the archaeology
- Feature 2556** linear, orientated E-W, moderately sloping sides and a flat base (W 0.64m, D 0.18m)  
 *Fill 2559*  mid brown sandy silt, loose, with occ. gravel and charcoal  
 *Finds:*  none  
 *Date:*  N/A  
 *Interpretation:*  animal disturbance
- Feature 2557** curvilinear, orientated E-W, turning N-S, moderately irregular sloping sides with an irregular base (W 0.42m, D 0.13m)  
 *Fill 2560*  mid brown sandy silt, loose, with moderate gravel  
 *Finds:*  none  
 *Date:*  N/A  
 *Interpretation:*  animal disturbance
- Posthole 2558** sub-circular, very steep sides with a flat base (Di 0.52m, D 0.39m)  
 *Fill 2561*  mid reddish brown sandy silt, loose, with frequent gravel and charcoal  
 *Finds:*  none  
 *Date:*  ?early-middle Iron Age  
 *Interpretation:*  posthole - part of gate at entrance to rectangular enclosure?

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**Posthole 2563** curvilinear, with vertical sides and a flattish base (W 0.30m, D 0.18m)

*Fill 2564* mid brown sandy silt, fairly compact, with occ. small rounded and sub-rounded gravel

*Finds:* none

*Date:* ?middle Iron Age

*Interpretation:* posthole within gully 2549

**Gully 2565** linear, orientated E-W, with steep sides and a flat base (W 0.56m, D 0.25m)

*Fill 2566* mid orange brown sandy silt, firm, with occ. sub-rounded gravel

*Finds:* none

*Date:* Iron Age

*Interpretation:* gully

**Gully 2567** linear, orientated E-W, steep sides with a narrow concave base (W 0.35m, D 0.30m)

*Fill 2568* mid orange brown sandy silt, firm, with occ. sub-rounded gravel

*Finds:* none

*Date:* Iron Age

*Interpretation:* gully

**Gully 2569** linear, orientated SE-NW, moderately steep sides with flattish base (W 0.32m, D 0.13m)

*Fill 2574* light yellow brown silty sand, loose, with frequent gravel

*Finds:* none

*Date:* Iron Age

*Interpretation:* gully

**Ditch 2570** linear, orientated SE-NW, moderately steep sides with a rounded base (W 1.20m, D 0.48m)

*Fill 2573* mid yellow brown silty sand, loose, moderate-frequent medium sized gravels (D 0.16m)

*Finds:* late Iron Age pottery

*Fill 2572* dark grey brown clay silt, firm, with moderate gravel (D 0.06m)

*Finds:* Iron Age pottery, animal bone, baked clay and shell (snail)

*Fill 2571* mid yellow brown sandy silt, loose, with frequent gravel (D 0.32m)

*Finds:* Iron Age pottery and animal bone

*Date:* late Iron Age

*Interpretation:* field boundary ditch

**Gully 2575** linear, orientated E-W, shallow irregular sides with a flat base

*Fill 2576* mid grey brown sandy silt, firm, with moderate small gravel and occ. charcoal flecks

*Finds:* animal bone and foreign stone (pumice ?)

*Date:* ?middle Iron Age

*Interpretation:* possible fenceline gully

**Pit 2577** gently sloping edges and a flattish base, only viewed in pipe trench

*Fill 2578* dark grey black organic sandy clay with purer sandy and clay tip lines, with occ. small sub-angular and sub-rounded gravelly stones and very occ. charcoal

*Finds:* none

*Fill 2579* dark grey sandy clay silt with orange mottles towards base, compact, with frequent small-medium sub-rounded and sub-angular stones, decreasing with depth and occ. charcoal

*Finds:* mid-late Iron Age pottery and animal bone

*Fill 2580* mid orangey grey mottled sandy silt, compact, with moderate-frequent small-medium sub-rounded and sub-angular stones and very occ. charcoal

*Finds:* none

*Date:* mid-late Iron Age

*Interpretation:* water collection pit

**Layer 2581** subsoil deposit (same as 2555)

*Finds:* none

*Date:* post-Iron Age

*Interpretation:* alluvial deposit overlying the archaeology

## Miscellaneous Contexts

The contexts are listed in order of Plot number

The fills of all features are given in the order of primary fill first and top fill last

## Construction Section 4

**Layer 4000** mid-dark brown silty clay loam, with occ. sub-angular flint (D 0.30m)

*Finds:* none

*Interpretation:* topsoil

**Layer 4001** mid grey/yellow and blue clay with occ. patches of yellow gravel, compact, with occ. flint nodules

*Interpretation:* natural clay beds with occ. gravel pockets

## Plot 19, TF 17077 71886

**Field boundary 4403** straight regular linear, orientated NE-SW, steep sides with a flat base (W 1.55m D 0.57m)

*Fill 4404* mixed backfill of mid grey brown silt with orange flecks, lumps of yellow clay natural and mid orange sandy silt with orange flecks, all compact and mostly friable with a slightly clayey feel and all with occ. charcoal flecks and occ. small stones

*Finds:* none

*Interpretation:* disused field boundary of unknown date

## Construction Section 7

## Plot 42, TF 14162 65490

**Ditch 7018** linear, orientated ENE-WSW, Northern side very regular and straight sided, Southern side gently sloping down to a wide flat base (W 1.35m, D 0.67m)

*Fill 7019* orange brown clay silt with organic (stems and roots) remains (D 0.07m)

*Finds:* none

*Fill 7020* mid grey with small orange grey flecks, compact, with some organic material spread throughout deposit

*Finds:* none

**Recut 7021** of Ditch 7018 linear, orientated ENE-WSW, gently sloping sides with a flattish base (W 0.90m, D 0.55m)

*Fill 7022* mixture of dark grey clay silt, peaty black humic soil and redeposited orange clay, compact

*Finds:* none

*Date:* modern

*Interpretation:* probable field boundary/drainage ditch

## Plot 43, TF 14110 65348

**Ditch 7014** linear, orientated NNW-SSE, with fairly steep irregular sides and a rounded base (W 1.55m, D 0.60m)

*Fill 7017* mid yellow and grey silty clay, compact (D 0.18m)

*Finds:* none

*Fill 7016* very dark grey black peat, friable, with very occ. small limestone frags. (D 0.12m)

*Finds:* none

*Fill 7015* dark grey silty peat with occ. yellow silty clay, with occ. small, medium and large sub-angular limestone (D 0.30m)

*Finds:* none

*Date:* modern

*Interpretation:* drainage/boundary ditch

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## Plot 44, TF 13940 65033

Layer 7001 mid grey clay silt, compact, with areas of peaty silt

*Finds:* none

*Interpretation:* topsoil

Layer 7002 mixed blue, grey and orange clays with occ. mottled silt and peat bands, with highly preserved tree remains

*Interpretation:* natural clays

Ditch 7003 linear, orientated N-S, moderately sloping sides with a gently rounded base (W 2.35m D 0.95m)

Fill 7004 mid grey orange mottled slightly clayey silt, very compact and smooth (D 0.04m)

*Finds:* none

Fill 7005 dark grey clay silt, compact and smooth, with very occ. burnt clay flecks (D 0.60m)

*Finds:* none

Fill 7006 light yellow grey streaked clay silt, smooth, (D 0.03m)

*Finds:* none

Fill 7007 mottled light-dark clay silt, smooth and compact, with occ. orange flecks. (D 0.08m)

*Finds:* none

Fill 7008 bright orange yellow clay silt, very smooth, (D 0.03m)

*Finds:* none

Fill 7009 orange grey brown clay silt with darker orange mottles, smooth and compact (D 0.05m)

*Finds:* none

Fill 7010 medium grey brown clay with mottled light orange and grey compact clay silt, (D 0.16m)

*Finds:* none

Recut 7011 linear, orientated N-S, gently sloping sides and slightly rounded base (W 2.00m, D 0.75m)

Fill 7012 mid-dark grey clay silt, compact, with occ. redeposited natural. (D 0.75m)

*Finds:* none

Fill 7013 dark grey clay silt, compact, with occ. peaty deposits and redeposited natural (D 0.60m)

*Finds:* none

*Date:* probably modern

*Interpretation:* drainage/boundary ditch

## Construction Section 8

Layer 8001 mid grey clay silt, compact, with patches of peaty deposits

*Finds:* none

*Interpretation:* topsoil

Layer 8002 mixed blue, grey and orange clays with occ. silt bands, also occ. thin peaty layers and well preserved tree remains

## Plot 46, TF 13777 64713

Ditch 8006 linear, orientated NW-SE, moderately sloping sides with slightly rounded base (W 2.40m, D 0.60m)

Fill 8010 series of lenses of orange, black and grey clay silts with very occ. round stones (D 0.20m)

*Finds:* none

Fill 8009 mid greyish white clay silt (D 0.10m)

*Finds:* none

Fill 8008 mid dark brown peaty silt, compact (D 0.20m)

*Finds:* none

Fill 8007 mid brown clay, compact (D 0.37m)

*Finds:* none

*Date:* modern

*Interpretation:* drainage ditch running parallel with trackway

## Plot 61, TF 12834 62238

Ditch 8003 linear, orientated NE-SW, with very steep slightly concave sides and a fairly flat base (W 1.80m, D 0.74m).

Fill 8005 lenses of yellow and grey silt, fairly compact (D 0.06m)

*Finds:* none

Fill 8004 friable black peat with light yellow grey lumps of silty clay redeposited natural

*Finds:* animal bone

*Date:* modern

*Interpretation:* ditch

## Construction Section 9

Layer 901 mid brown grey silty clay loam, compact, with small and medium rounded and sub-rounded gravel and patches of peaty deposits (D 0.30-0.40m)

*Finds:* none

*Interpretation:* topsoil

Layer 902 mixed grey/blue and orange clay, very compact, with lenses of siltier bands and peat deposits visible at regular intervals across the easement. Occ. small rounded and sub-rounded calcareous limestone and chalk inclusions

*Interpretation:* natural

## Plot 74, TF 11771 60707

Field boundary 911 linear, moderately sloping sides but with shallower western edge and a narrow flat bottomed base. (W 0.85m, D 0.75m)

Fill 912 mid grey brown silty clay, compact, with very occ. rounded and sub-rounded pebbles and flint frags (D 0.30m)

*Finds:* none

Fill 913 mid orange grey / brown silty clay, compact, with occ. small rounded and sub-rounded pebbles and flint frags

*Finds:* none

*Date:* modern

*Interpretation:* probable old field division

## Plot 74, TF 11792 60713

Field boundary 914 linear, orientated WSW-ENE, gradual sloping sides (though drops sharply at base) with a flattish base

Fill 916 mid orange grey silty clay, compact, with occ. small and medium sized gravel (D 0.25m)

*Finds:* none

Fill 915 light grey/brown silty clay, compact, with very occ. small gravel

*Finds:* none

*Date:* modern

*Interpretation:* field boundary with land drain cutting through it in section

Layer 921 mid orange brown clayey silt, fairly compact, with occ. small gravel and charcoal flecks (D 0.50m)

*Interpretation:* probable hill wash

## Plot 75, TF 11434 60536

Ditch 923 curvilinear, gently sloping sides increasing in steepness with fairly flat slightly irregular base (W 4.30m, D 0.85m)

Fill 924 mid-dark grey sandy silt (becoming more clayey with depth) with frequent small to medium rounded and sub-rounded stones. Deposit also contains a yellow gravel tip line

*Finds:* None

Fill 925 mid-dark brown silty loam with area of dense humic content and orange organic flecking, fairly compact, with occ. small to medium sub-rounded and rounded stones

*Finds:* Modern pot sherd

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*Date:* modern

*Interpretation:* enclosure ditch

## Construction Section 17

**Layer 1701**

*Interpretation:* topsoil

**Layer 1702** blue yellow mixed clay/sand/silt

*Interpretation:* natural

**Layer 1703** mid blue grey silty clay with occ. charcoal flecking (D 0.25-0.30m)

*Finds:* animal bone

*Interpretation:* subsoil

## Plot 128, TF 1307 4918

**Layer 1704** black peat and grey silty clay with very occ. natural sub-angular flint

*Interpretation:* remnant of peat

**Layer 1705** mid grey silty clay, compact, with very occ. small sub-angular flint and some charcoal flecking

*Finds:* bronze age pottery and brick/tile

*Interpretation:* possible buried soil

**Layer 1706** light grey silty clay, compact, with occ. small sub-angular flint

*Interpretation:* natural silting deposit

**Layer 1707** yellow grey silty sand, soft,

*Interpretation:* silty sand deposit

## Plot 128, TF 13125 49259

**Ditch 1715** linear, orientated NW-SE, V-shaped (W 1.40m, D 0.58m)

**Fill 1716** mid dark grey silty clay with orange mottling, compact, with occ. small to medium sub-rounded and sub-angular stones and very occ. charcoal flecks. Stones are concentrated along outer edges

*Finds:* none

**Fill 1717** mid-dark grey clay with orange mottling, compact, with very occ. small to medium sub-rounded and sub-angular stones with occ. charcoal flecks (D 0.34m)

*Finds:* none

**Fill 1718** mid dark grey brown, slightly humic, clay silt, fairly compact, with very occ. small to medium sub-rounded and sub-angular stones and occ. charcoal flecks (D 0.40m)

*Finds:* none

*Date:* modern

*Interpretation:* drainage ditch

## Plot 128, TF 12992 49068

**Ditch 1719** linear, orientated E-W, steep Southern edge and shallower Northern edge with a slightly pointed base

**Fill 1720** mid grey sandy clay silt with occ. orange mottling, compact, with occ. small-medium sub-angular stones and very occ. charcoal flecks (D 0.13m)

*Finds:* none

**Fill 1721** mixed orange grey sandy clay silt with small concentrations of orange clay, compact, with very occ. small gravel stones

*Finds:* none

**Fill 1722** mid grey silty clay with occ. orange mottling, very compact and fairly smooth, with very occasional small sub-angular stones

*Finds:* none

**Recut 1723** of Ditch 1719 linear, orientated E-W, steep northern edge and a shallow southern edge with a wide flat base (W 2.05m, D 0.30m)

**Fill 1724** mid grey sandy clay silt with orange mottling, compact, with large lumps of re-deposited orange clay natural, with occ. small to medium sub-rounded and sub-angular stones and occ. charcoal flecks

*Finds:* none

*Date:* post medieval

*Interpretation:* drainage/boundary ditch

**Layer 1725** mid grey brown sandy clay silt with orange mottling, compact, with frequent small sub-angular stones and occ. - medium sub-rounded and sub-angular stones and charcoal flecks

*Finds:* none

*Interpretation:* lower subsoil

**Layer 1726** dark grey brown sandy clay silt, very compact, with occ. small to medium sub-angular and sub-rounded stones and occ. charcoal flecks (D 0.28m)

*Finds:* none

*Interpretation:* uppermost subsoil

## Plot 131, TF 12518 48551

**Ditch 1729** linear, orientated NNE-SSW, moderately steep sides with a fairly flat base

**Fill 1730** light grey silty clay with brown mottling, compact, with occ. small to medium sub-rounded and sub-angular stones with very occ. charcoal flecks (D 0.07m)

**Fill 1731** dark grey silty clay with occ. brown mottling, compact, with occ. small to medium sub-rounded and sub-angular stones, concentrated mostly to either end and charcoal flecks

*Finds:* none

*Date:* Pre-medieval

*Interpretation:* field boundary/ditch

**Layer 1732** mid brown clay sandy silt with orange mottling, compact, with occ. small to medium sub-rounded and sub-angular stones and charcoal flecks

*Finds:* none

*Interpretation:* subsoil

## Plot 132, TF 12322 48336

**Ditch 1727** linear, orientated E-W, gently sloping Northern edge and steep Southern edge with a wide flat base (W 2.30m, D 0.50m)

**Fill 1728** mid grey brown sandy silt with occ. orange mottling, compact, and occ. small-medium sub-angular and sub-rounded stones and occ. charcoal flecks

*Finds:* medieval pottery sherd

*Interpretation:* post-medieval field boundary/ditch

## Plot 132, TF 11999 47982

**Ditch 1733** linear, orientated NNW-SSE, with moderately steep sides and a rounded base (W 1.50m, D 0.56m)

**Fill 1734** mid olive green clayey silt, compact, with occ. small sub-rounded and sub-angular stones (D 0.20m)

*Finds:* none

**Fill 1735** mid orange sand, compact, (D 0.07m)

*Finds:* none

**Fill 1736** dark grey clayey silt, compact, with occ. small sub-rounded and sub-angular stones (D 0.33m)

*Finds:* none

*Date:* probable post-medieval

*Interpretation:* post-medieval field boundary/ditch