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SOUTHERN ARCHAEOLOGICAL SERVICES

SUMMARY REPORT ON AN ARCHAEOLOGICAL EVALUATION AT NEWLANDS NURSERIES, LAGNESS, PAGHAM, WEST SUSSEX

NOVEMBER 1999

SAS 177

A *fresh* approach to archaeology

CONTENTS

1. ABSTRACT

An archaeological field evaluation was carried out by Southern Archaeological Services Ltd between 1 November and 1 December 1999 on a field at Newlands Nurseries, Lagness, Pagham, West Sussex (NGR SU 8980 0160, centred). The natural geology of the site is brickearth over Upper Chalk. The site comprises a single field, 7.02ha in area and then lying fallow, that slopes down very slightly from about 6m above OD (north) to about 4.8m above OD (south). The proposed development (by Parigo Horticultural Co Ltd) is a single glasshouse covering almost the entire field with a reservoir in the northwest corner, and is subject to an archaeological planning condition set by Arun District Council. Finds of Roman date, including pottery, tile and tesserae (fragments of mosaic) were reportedly recovered during ploughing in 1970. As a result, the site was identified as a possible Roman villa. The site was subject to a field evaluation by Southern Archaeology (Chichester) Ltd in 1998, which comprised a geophysical survey and five trenches: the geophysical survey produced unsatisfactory results, but two of the trenches revealed an area of Roman activity - ditches and postholes containing Roman pottery and other finds. The aim of this project was to clarify the results of the previous evaluation and determine the character and extent of the Roman activity, and to assess the distribution of other ancient features across the site. Twelve linear trenches (numbered T7-T18 to follow the previous evaluation) and an open area excavation (T6) were specified, with a contingency for an extra 160m² of trenching, which resulted in another four trenches (T19-T22) being excavated, although one of the specified trenches, T15, was not dug. Three trenches in the southern part of the site (T8, T18 and T22) contained features of Roman date - pits, ditches, gullies, postholes and stakeholes - and another Roman ditch was found in T10, T12 and T14. Two Late Bronze Age cremations were found in T9 and two other features of Bronze Age date in T11 and T14, but the rest of the site was largely devoid of archaeological remains - apart from large quantities of unstratified pottery recovered from surface collection across the whole site. Funding was by Bridge Greenhouses Ltd, of Spalding, Lincolnshire.

2. INTRODUCTION

2.1 The site lies about 5km southeast of the Roman town of Chichester (*Noviomagus Regnensium*), which was occupied from the 1st-4th century AD. A summary of the known historical and archaeological information is given in Section 3. of this report.

2.2 The development area comprises a field adjacent to an existing complex of glasshouses at Newlands Nurseries in the parish of Pagham (see figs. 1 and 2). The field slopes gently downwards from north to south and occupies an area of 7.02ha. The highest point is at about 6m above OD in the north and the lowest point is at about 4.8m above OD in the southern part of the site. An overhead power line crosses the southwestern and southeastern corners of the site. The development site is bounded by arable fields to the north and east, by a lane and public footpath to the south, and by the existing greenhouses to the west. The NGR is SU 8980 0160 (centre of site). According to the British Geological Survey (1:50 000 map sheet 317/332) the site lies on brickearth above Upper Chalk, although the southern edge of the site runs along the boundary between Upper Chalk and Reading Beds.

2.3 A planning application by Parigo Horticultural Co Ltd for a new commercial greenhouse, in-ground reservoir, access road and associated services (ref: P/28/98) was granted by Arun District Council in 1998, subject to an archaeological condition. On advice from West Sussex

County Planning Officer, who advises the District Council on archaeological matters, a field evaluation prior to determination of the application was specified. This work was carried out by Southern Archaeology (Chichester) Ltd in August 1998. The results of this exercise were inconclusive, in that a geophysical survey of the southern part of the site identified an area of high resistance, but without any detail; Roman features were also found in two trenches (T2 and T5), but their function was not clear, so further work was requested. Southern Archaeological Services Ltd of Southampton (SAS) were appointed to carry out stage 2 of the evaluation, consisting of thirteen more trenches and a contingency, to ascertain the nature and extent of the surviving archaeology on the site.

2.4 SAS's site code is SAS 177. The archive and finds will be deposited with Chichester Museum, accession no. 7431, once all the criteria in Section 9. of the Scheme of Investigation have been fulfilled. The site archive and finds are at the time of writing in a secure area at SAS's premises in Southampton.

3. SITE BACKGROUND

3.1 In advance of the fieldwork, a brief survey of the known archaeological, historical and cartographic sources was carried out by an experienced researcher.

3.2 The site lies about 5km SE of the Roman town of *Noviomagus Regnensium* (the name means *'new market of the Regni'*) which remained in occupation from the 1st to the 4th century AD.

3.3 The survey of cartographic sources in West Sussex Record Office showed that the site has been used for agriculture at least since the earliest records consulted. The earliest map (PM249 no. 3B, dated 1595; figure 1a) shows no detail, and appears to locate Lagness (*'Lengnersh'*) rather too close to the sea, but a reference in a mid-17th century Parliamentary Survey to 'Lagmarsh House Farm' records a typical farmhouse with garden, orchard and 'hempe plott', and arable fields. One of the fields mentioned bears the same name (*'Eleaven acres'*) as one recorded as part of the site on the Tithe Map in 1847, although it should be noted that, despite the coincidence of names, a different farm - either in Lagness village to the south, or the later Park Farm/Butterlees Farm to the southeast - could be described here.

3.4 The Yeakell and Gardner map of 1778 (PM249 no. 13; figure 1d) shows a farm in the correct location, but the field boundaries shown do not quite correlate with the existing field or with later map sources, extending much further to the northeast: it is possible that they have been stylised, rather than surveyed, although the kink in the southern boundary of the site (along the footpath to Butterlees Farm) is clearly shown. Another 18th century map (PM249 no. 15, dated 1795; figure 1c) shows a stylised field pattern with one large field surrounding the farm.

3.5 The 1813 OS 1" map (figure 1b) does not name the farm, but shows what might be a building on its site, and attributes the name 'Lagness Farm' to what was earlier Park Farm, and later became Butterlees Farm. No field boundaries are shown.

3.6 The 1847 Pagham Tithe Map and Apportionment (TD/W94; figure 1i) shows the development area as part of Forbridge Farm, clearly divided into four arable fields: Longfield adjoining Boniface's, Orchard Field, 11 acres and Field adjoining Godman's (nos. 7, 9, 11 and 12). The existing greenhouses were built on Marlpit Field (no. 13). Also shown for the first time is a

pond in the kink in the lane to Butterlees Farm. At the time of the apportionment, the owners were the trustees of Richard Shutler and the occupier was Charles How.

3.7 The 1875 OS map (figure 1e) shows Forbridge Farm but no field boundaries within the property, apart from around the farm buildings. The pond is now marked as a marshy area.

3.8 The 1896/7, 1912 and 1933 maps (figures 1f, 1g & 1h) show little detail, with no field boundaries except around the farm buildings and the edge of the property, and no indication of whether the pond existed or was still a small marshy area, although it is shown as separate from both the field and the lane.

4. METHODOLOGY

4.1 The evaluation was designed as 12 linear trenches (numbered T7-T18, to follow on from stage 1; total length 995m x 1.5m wide = 1492.5m^2) and an open area excavation (T6: 40m x 15m = 600m^2) with a contingency for up to 160m^2 of extra trenching. In the event, T15 was not dug, but another 4 trenches (T19-T22) were, along with an extension to T13, the removal of part of a ploughsoil in T18 and several exploratory pits to discover the location of T2. Part of T6 (145.5m^2) was also abandoned after a discrepancy over the location of T2 was discovered, so overall 2028.2m^2 were excavated. In addition to the evaluation trenches, two geoarchaeological test-pits were excavated by machine (see section 8. for the report). Trench locations were scanned with a cable avoiding tool (CAT) before excavation. The fieldwork took place over 23 working days between 1 November and 1 December 1999 (see figs 1 and 2). Monitoring was carried out by Mark Taylor and John Mills of West Sussex County Council, and John Magilton, archaeological advisor to the client.

4.2 T6 was located to elucidate the findings of stage 1, and was designed to cover the entire western end of T2 (the eastern end being interpreted as a pond), so that the nature and extent of the Roman archaeology found in T2 could be determined. T7-T18 were located to pick up any linear features crossing the site and sample the whole 'footprint' of the building for any other concentrations of archaeology. In addition, a geoarchaeological test pit (with provision for up to three others) was specified in order to assess the possibility of the survival of Mesolithic or other Prehistoric evidence below the brickearth.

4.3 All archaeological features within the trenches were investigated. Obviously Modern or natural features were left unexcavated, discrete features were half-sectioned, and at least 10% of linears were sampled. Soil samples were taken from deposits that satisfied the criteria given in section 4.8 of the Scheme of Investigation, and from features that failed to produce datable finds. All trenches were recorded to the standards laid down in the Method Statement supplied by SAS.

4.4 On completion, all trenches were backfilled with excavated spoil.

5. THE CONTEXTS

5.1 "Context" is a term used to denote a recognisable unit of deposition. Context numbers are given in the text in **bold**; contexts in T2 (from the previous evaluation) are given in ***bold italic***. Each context in this phase was assigned a unique four-digit number, with the first two digits serving to identify the trench in which they were recorded (eg **0601** from T6). Three context

numbers (**01**, **02** and **03**) were reserved for unstratified finds. Table 1 lists all the contexts by number with a brief description of soil texture and inclusions noted, and their dimensions in metres (Length/Width/Depth or Diameter/Depth).
"Before" and "After" refer to the critical relationships to other contexts "dgb" means dark greyish brown "lob" means light olive brown "yb" means yellowish brown "bl" means black "vpb" means very pale brown "SCL" means silty clay loam "CL" means clay loam "SaL" means sandy loam "SC" means silty clay "SaC" means sandy clay "GC" means gleyed clay "F" means fill "BF" means bottom fill "TF" means top fill "cbm" means ceramic building material "chk" means chalk "charc" means charcoal "mang" means manganese nodules "Fe" means iron or iron-pan "bf" means burnt flint "bcl" means burnt clay "shl" means shell "frags" means fragments "fl" means flecks "N/A" means not applicable ">" means greater than "UE" means unexcavated "NR" means not recorded "Mod" means Modern

Periods referred to in this report are as follows:-

MBA	Middle Bronze Age	1400-1000BC
LBA	Late Bronze Age	1000-700BC
LIA	Late Iron Age	100BC-AD100
R-B	Romano-British	AD43-410
Med	Mediaeval	1200-1500
LMed	Late Mediaeval	1400-1500
PMed	Post-Mediaeval	1500-1800
EMod/Mod	Early Modern/Modern	1800-2000

***1** = **0601** is After **0605**, **0607**, **0609**, **0611**
***2** = **0801** is After **0808**, **0815**, **0819**
***3** = **0902** is After **0904**, **0906**, **0908**, **0910**, **0912**
***4** = **1102** is After **1103**, **1107**, **1108**, **1111**, **1114**
***5** = **1801** is After **1809**, **1811**, **1816-1830**, **1837**, **1839**, **1855-65**, **1867**, **1872**, **1874**, **1889**
***6** = **1804** is After **1845-1853**, **1876**, **1878**, **1882**, **1885**, **1887**, **1890**
***7** = **2201** is After **2204**, **2208**, **2210**, **2214**, **2216**, **2218**, **2220**, **2222**, **2224**

+1 = **0602** is Before **0604**, **0606**, **0608**, **0610**
+2 = **0805** is Before **0807**, **0814**, **0818**
+3 = **0903** is Before **0905**, **0907**, **0909**, **0911**, **0913**
+4 = **1104** is Before **1103**, **1105**, **1106**, **1110**, **1113**
+5 = **1802** is Before **1842**, **1844-1852**, **1877**, **1879**, **1886**
+6 = **1803** is Before **1802**, **1881**, **1883**, **1890**
+7 = **1804** is Before **1805**, **1812**, **1814**, **1834**, **1838**, **1868**, **1871**, **1888**
+8 = **2202** is Before **2203**, **2205**, **2209**, **2211**, **2213**, **2215**, **2217**, **2219**, **2221**, **2223**

#1 = Material Codes 1;3;4;5;6;8;9; Finds from **1601** were accidentally amalgamated with **0601**
#2 = Material Codes 1;2;3;4;6;8
#3 = Finds from **1601** were accidentally amalgamated with **0601**
#4 = Material Codes 1;3;4;5;6;8
#5 = Material Codes 1;2;3;4;5;6;8

@1 = Figures 15;16;17;24;27
@2 = Figures 7;8;17;19;24;27
@3 = Figures 3;7;8;15;16;17;18;19;21;27

Context	Description	Dimensions	After	Before	Finds	Figs
01	Unstratified finds: surface	N/A	N/A	N/A	1;3;4;5;8	N/A
02	Unstratified finds: T2 area	N/A	N/A	N/A	3;4;8	N/A
03	Unstratified finds: from metal detecting	N/A	N/A	N/A	5	N/A
T6	Trench 6	40 x 15 x 0.67	N/A	N/A	N/A	3
0601	Topsoil:dgb CL; cbm,charc,shl	40 x 15 x 0.3	*1	N/A	#1	3;4
0602	Subsoil:lob SC; cbm,chk,charc,shl	40 x 15 x 0.25	0603	+1	1;3;5;7;8	3;4
0603	Natural brickearth: SC; mang	40 x 15 x UE	UE	0602	-	-
0604	Posthole	0.4 x 0.25	0602	0605	-	4
0605	F of 0604:ob SC; chk,charc,bf	0.4 x 0.25	0604	0601	3	4
0606	Posthole?	0.6 x 0.15	0602	0607	-	4
0607	F of 0606:dgb SC; bf,charc,chk	0.6 x 0.15	0606	0601	1;3;5;8	4
0608	Posthole	0.4 x >0.3 x 0.16	0602	0609	-	4
0609	F of 0608:gb SC; bf,chk,charc	0.4 x >0.3 x 0.16	0608	0601	3	4
0610	Posthole	0.46 x 0.21	0602	0612	-	4
0611	TF of 0610:b SC; charc,chk,shl,bf	0.46 x 0.06	0612	0601	-	4
0612	BF of 0610:lob SC; charc,chk	0.46 x 0.15	0610	0611	-	4
T7	Trench 7	72.2 x 1.5 x 0.71	N/A	N/A	N/A	3
0701	Topsoil	72.2 x 1.5 x 0.3	0702	N/A	#2	14
0702	Subsoil	72.2 x 1.5 x 0.35	0704	0701	1;2;3;5;8	14
0703	Natural brickearth	72.2 x 1.5 x UE	UE	0705	-	14
0704	F of 0705:yb SC; charc,chk	>1.5 x 1.6 x 1.02	0705	0702	1;5	14
0705	Ditch: U-shaped	>1.5 x 1.6 x 1.02	0703	0704	-	3;14
T8	Trench 8	71.4 x 1.5 x 0.65	N/A	N/A	N/A	3
0801	Topsoil	71.4 x 1.5 x 0.5	*2	0810	1;3;4;6;8	10;26
0802	Subsoil	39.2 x 1.5 x 0.2	0803/17	0805	1;3;8	22
0803	F of pond? yb SC	>5 x >1.5 x NR	0804	0802	1;3;5;8	6
0804	Pond?	>5 x >1.5 x NR	0806	0803	-	3;6
0805	Roman ploughsoil	32.2 x 1.5 x 0.7	0802	+2	-	6;10;26
0806	Natural brickearth: SC	71.4 x 1.5 x 0.4	0813	0816	-	6;10;22
0807	Ditch: V-shaped	>1.5 x 7.9 x >1.3	0805	0812	-	3;6;10
0808	TF of 0807:dgb SC; charc	>1.5 x 7.9 x 0.92	0809	0801	1;3;5;7;8	6;10
0809	F of 0807:bl SC; charc	>1.5 x 1.8 x 0.06	0812	0808	-	10
0810	Land drain	>1.5 x 0.25 x 0.4	0801	0811	-	10
0811	F of 0810:yb gravel	>1.5 x 0.25 x 0.4	0810	N/A	-	10
0812	BF of 0807:yb SC	>1.5 x 2.4 x 0.45	0807	0809	-	6;10
0813	Natural brickearth: SC; chk	>1.5 x >0.75 x >0.3	UE	0806		10
0814	Square feature: Modern?	0.6 x >0.48 x 0.29	0805	0815	-	6;26
0815	F of 0814:dgb SC	0.6 x >0.48 x 0.29	0814	0801	-	6;26
0816	Ditch: irregular	>3 x >0.8 x >0.7	0806	0817	-	3;6;22
0817	F of 0816:b SC	>3 x >0.8 x >0.7	0816	0802	-	6;22
0818	Linear: ditch/gully	>3 x 0.25 x UE	0805	0819	-	3;6
0819	F of 0818:dgb SC	>3 x 0.25 x UE	0818	0801	-	6
T9	Trench 9	152 x 1.5 x 0.65	N/A	N/A	N/A	3
0901	Topsoil	152 x 1.5 x 0.3	0902	N/A	1;3;8	20
0902	Subsoil	152 x 1.5 x 0.2	*3	0901	1;2;3;5;8	20
0903	Natural brickearth	152 x 1.5 x UE	UE	+3	-	20;26
0904	F of 0905:vdgb SC; charc,bcl	0.38 x 0.42 x 0.17	0905	0902	3;8	20
0905	Cremation pit	0.38 x 0.42 x 0.17	0903	0904	-	3;20
0906	F of 0907:vdgb SC; charc,bcl	>0.51 x 0.42 x 0.16	0907	0902	3;8	20
0907	Cremation pit	>0.51 x 0.42 x 0.16	0903	0906	-	3;20

Context	Description	Dimensions	After	Before	Finds	Figs
0908	F of 0909:lyb SC; charc	>1.5 x 0.68 x 0.16	0909	0902	1;3;8	26
0909	Pit? animal disturbance?	>1.5 x 0.68 x 0.16	0903	0908	-	3;26
0910	F of 0911:yb SC	>1.5 x 1.63 x UE	0911	0902	-	-
0911	Ditch from Tithe map; same as 2004	>1.5 x 1.63 x UE	0903	0910	-	3
0912	F of 0913:yb SC; chk	0.37 x UE	0913	0902?	-	-
0913	Pit? animal disturbance?	0.37 x UE	0903	0912	-	-
T10	Trench 10	50 x 1.5 x 0.75	N/A	N/A	N/A	3
1001	Topsoil:dgb SC;charc,chk,shl,bf,cbm	50 x 1.5 x 0.3	1002	N/A	1;3;4;8	-
1002	Subsoil:yb SC; charc,mang,chk,bf	50 x 1.5 x 0.23	1005	1001	1;3;5;8	-
1003	Natural brickearth:yb SC; mang,chk	50 x 1.5 x UE	UE	1004	-	-
1004	Ditch: same as 1204/1406	>1.5 x 3.4 x UE	1003	1005	-	3
1005	F of 1004:dyb CL; charc,chk,bf	>1.5 x 3.4 x UE	1004	1002	1;3	-
T11	Trench 11	60 x 1.5 x 0.84	N/A	N/A	N/A	3
1101	Topsoil:dgb SaL; flowerpot frags	60 x 1.5 x 0.19	1102	N/A	-	23
1102	Subsoil:b SaL	60 x 1.5 x 0.18	***4**	1101	1;3;5;8	23
1103	Disturbed brickearth	60? x 1.5 x 0.15	1104	1102	-	-
1104	Natural brickearth: mang/Fe,chk	60 x 1.5 x UE	UE	**+4**	-	23;28
1105	Posthole?	0.22 x 0.05	1104	1107	-	3;28
1106	Posthole?	0.18 x 0.06	1104	1108	-	3;28
1107	F of 1105:lyb SaC; charc,bcl	0.22 x 0.05	1105	1102	-	28
1108	F of 1106:lyb SaC	0.18 x 0.06	1106	1102	3	28
1109	Land drain	>1.5 x 0.16 x >0.17	1112	1111	-	23
1110	Land drain	>1.5 x 0.17 x >0.17	1104	1112	-	-
1111	F of 1109: gravel	>1.5 x 0.16 x >0.17	1109	1102	-	23
1112	F of 1110: gravel,cbm	>1.5 x 0.17 x >0.17	1110	1109	-	-
1113	Feature/soil mark	>0.55 x 0.44 x 0.08	1104	1114	-	3;28
1114	F of 1113:lyb C; charc,Fe	>0.55 x 0.44 x 0.08	1113	1102	-	28
T12	Trench 12	100 x 1.5 x 0.85	N/A	N/A	N/A	3
1201	Topsoil	100 x 1.5 x 0.25	1202	N/A	1;3;5;8	-
1202	Subsoil	100 x 1.5 x 0.5	1205	1201	1;3;4;5;8	11
1203	Natural brickearth	100 x 1.5 x UE	UE	1204	-	11
1204	Ditch: V-shaped	>1.5 x 3.12 x 1.23	1203	1207	-	3;11
1205	TF of 1204:yb SC; chk,charc	>1.5 x 3.12 x 0.95	1206	1202	1;3;6;8	11
1206	F of 1204:yb SC	>1.5 x1.3 x 0.15	1207	1205	-	11
1207	BF of 1204:lyb SC	>1.5 x 1.2 x 0.13	1204	1206	1	11
T13	Trench 13	52 x 1.5 x 0.67	N/A	N/A	N/A	3
1301	Topsoil	52 x 1.5 x ?	1302	N/A	1;3	23
1302	Subsoil	52 x 1.5 x ?	1304	1301	1;3;5;8	23
1303	Natural brickearth	52 x 1.5 x UE	UE	1305	-	5;23
1304	F of 1305:vpb GC; charc,chk,Fe	>4.7 x >2.3 x >0.15	1305	1302	3;8	5
1305	Ditch? not fully excavated	>4.7 x >2.3 x >0.15	1303	1304	-	3;5
T14	Trench 14	100 x 1.5 x 0.63	N/A	N/A	N/A	3
1401	Topsoil:b SCL; cbm,shl	100 x 1.5 x 0.34	1402	N/A	1;3;5;6;8	12;23
1402	Subsoil:yb SC; shl	100 x 1.5 x 0.27	1405/07	1401	1;3;6;8	12;23
1403	Natural brickearth:yb SC	100 x 1.5 x UE	UE	1404/06	-	12;23
1404	Ditch/gully?	>1.5 x 1.42 x UE	1403	1405	-	3
1405	F of 1404:yb SC	>1.5 x 1.42 x UE	1404	1402	1;3	-

Context	Description	Dimensions	After	Before	Finds	Figs
1406	Ditch: U-shaped	>1.5 x 2.94 x 1.09	1403	1407	-	3;12
1407	F of 1406:yb SC; shl,charc,cbm	>1.5 x 2.94 x 1.09	1406	1402	1;3;8	12
T15	Trench 15	not dug	N/A	N/A	N/A	3
T16	Trench 16	90 x 1.5 x 0.62	N/A	N/A	N/A	3
1601	Topsoil:b SCL; cbm,pot	90 x 1.5 x 0.35	1602	N/A	**#3**	25
1602	Subsoil:yb SCL; shl,cbm	90 x 1.5 x 0.25	1603	1601	1;3;5;6;8	25
1603	Natural brickearth:yb SC	90 x 1.5 x UE	UE	1602	-	25
T17	Trench 17	90 x 1.5 x 0.64	N/A	N/A	N/A	3
1701	Topsoil:b SCL; cbm	90 x 1.5 x 0.34	1702	N/A	1;3;8	25
1702	Subsoil:yb SCL; chk	90 x 1.5 x 0.24	1703	1701	1;3;5;8	25
1703	Natural brickearth: yb	90 x 1.5 x UE	UE	1702	-	25
T18	Trench 18	70 x 1.5 x 0.69	N/A	N/A	N/A	3
1801	Topsoil:dgb CL	70 x 1.5 x 0.3	***5**	N/A	**#4**	**@1**
1802	Subsoil:lob SC	70 x 1.5 x 0.4	1803	**+5**	1;3;6;8	**@2**
1803	Natural brickearth:yb SC; chk	70 x 1.5 x UE	1843	**+6**	-	7;8;24;27
1804	Ploughsoil?ob SC; chk,bf,charc,bcl	45 x 1.5 x 0.25	***6**	**+7**	1;3;5;8	**@3**
1805	Pit/beam slot?	2.7 x >1.5 x 0.2	1804	1806	-	3;7;19
1806	F of 1805:vdg SC; charc,bcl	2.7 x >1.5 x 0.2	1805	1815-29	1;3;5;6;7	19
1807	Stakehole = 1815	N/A	N/A	N/A	-	-
1808	Stakehole = 1817	N/A	N/A	N/A	-	-
1809	TF of 1810:dgb SL; cbm,charc	>1.5 x 3 x 0.15	1831	1801	1;3;5;8	7;17
1810	Ditch: irregular	>1.5 x 3 x 0.58	1833	1891	-	3;7;17
1811	F of 1812:vdg SCL; bf,chk,bcl	>1.5 x 0.6 x 0.3	1812	1801	1;3;5	7;16
1812	Ditch/gully terminus	>1.5 x 0.6 x 0.3	1804	1811	-	3;7;16
1813	F of 1814:dg SC; cbm,bf	1.8 x 1.5 x 0.2	1814	1854-64	1;3;5;8	7;15
1814	Ditch/gully	1.8 x 1.5 x 0.2	1804	1813	-	3;7;15
1815	Stakehole	0.08 x >0.1	1806	1816	-	7;19
1816	F of 1815:vdg SC; charc,bcl	0.08 x >0.1	1815	1801	-	-
1817	Stakehole	0.07 x UE	1806	1818	-	7;19
1818	F of 1817:vdg SC; charc,bcl	0.07 x UE	1817	1801	-	-
1819	Stakehole	0.06 x UE	1806	1820	-	7;19
1820	F of 1819:vdg SC; charc,bcl	0.06 x UE	1819	1801	-	-
1821	Stakehole	0.07 x UE	1806	1822	-	7;19
1822	F of 1821:vdg SC; charc,bcl	0.07 x UE	1821	1801	-	-
1823	Stakehole	0.08 x UE	1806	1824	-	7;19
1824	F of 1823:vdg SC; charc,bcl	0.08 x UE	1823	1801	3	-
1825	Stakehole	0.08 x UE	1806	1826	-	7;19
1826	F of 1825:vdg SC; charc,bcl	0.08 x UE	1825	1801	-	-
1827	Stakehole	0.10 x UE	1806	1828	-	7;19
1828	F of 1827:vdg SC; charc,bcl	0.10 x UE	1827	1801	-	-
1829	Stakehole	0.06 x UE	1806	1830	-	7;19
1830	F of 1829:vdg SC; charc,bcl	0.06 x UE	1829	1801	-	-
1831	Animal disturbance?	0.62 x >1.5 x 0.09	1891	1809	-	7;17
1832	TF of 1842:dgb SL; cbm,charc	>1.5 x 0.79 x 0.14	1840/41	1833	1;3;8	17
1833	F of 1842:ob SL	>1.5 x 0.44 x 0.15	1832	1810	-	17
1834	Post-pit	0.9 x >0.53	1804	1835	-	3;7;8;18
1835	F of 1834:yb SC; large flints	0.9 x >0.53	1834	1836	1;3;5;8	7;8;18
1836	Posthole	0.35 x >0.53	1835	1837	-	7;18

Context	Description	Dimensions	After	Before	Finds	Figs
1837	F of 1836:vdgb SC; cbm	0.25 x 0.4	1836	1801	1;3;5;8	7;18
1838	Ditch/gully	>1.5 x 0.96 x 0.46	1804	1839	-	3;7;21
1839	F of 1838:dg SC; cbm,bf	>1.5 x 0.96 x 0.46	1838	1801	1;3;4;5;8	7;21
1840	BF of 1842:vdg SL; cbm,pot; =1841	>0.24 x 0.33 x 0.09	1842	1832	3	-
1841	BF of 1842:b SC; charc,bone; =1840	>1.5 x 0.42 x 0.12	1842	1832	-	17
1842	Ditch	>0.25 x 1.43 x 0.5	1802	1840/41	-	7;17
1843	Natural brickearth:lyb SC; chk	>0.25 x >1.43 x UE	UE	1842	-	17;7;
1844	Stakehole	0.10 x 0.16	1802	1845	-	7
1845	F of 1844:b SC; chk,charc,Fe	0.10 x 0.16	1844	1804	-	-
1846	Stakehole	0.14 x >0.08 x 0.16	1802	1847	-	7
1847	F of 1846:b SC; chk,charc,Fe	0.14 x >0.08 x 0.16	1846	1804	-	-
1848	Stakehole	0.08 x 0.13	1802	1849	-	7
1849	F of 1848:b SC; chk,charc,Fe	0.08 x 0.13	1848	1804	-	-
1850	Stakehole	0.08 x 0.11	1802	1851	-	7
1851	F of 1850:b SC; chk,charc,Fe	0.08 x 0.11	1850	1804	-	-
1852	Stakehole	0.08 x 0.11	1802	1853	-	7
1853	F of 1852:b SC; chk,charc,Fe	0.08 x 0.11	1852	1804	-	-
1854	Stakehole	0.12 x >0.07 x 0.10	1813	1855	-	7;15
1855	F of 1854:b SC; charc,chk	0.12 x >0.07 x 0.10	1854	1801	-	15
1856	Stakehole	0.07 x 0.12	1813	1857	-	7;15
1857	F of 1856:b SC; charc,chk	0.07 x 0.12	1856	1801	-	-
1858	Stakehole	0.08 x 0.18	1813	1859	-	7;15
1859	F of 1858:b SC; charc,chk	0.08 x 0.18	1858	1801	3	-
1860	Stakehole	0.10 x 0.16	1813	1861	-	7;15
1861	F of 1860:b SC; charc,chk	0.10 x 0.16	1860	1801	-	-
1862	Stakehole	0.08 x 0.15	1813	1863	-	7;15
1863	F of 1862:b SC; charc,chk	0.08 x 0.15	1862	1801	-	-
1864	Stakehole	0.10 x 0.22	1813	1865	-	7;15
1865	F of 1864:b SC; charc,chk	0.10 x 0.22	1864	1801	1;3	-
1866	Stakehole	0.18 x >0.08 x 0.2	1869	1867	-	7;15
1867	F of 1866:gb SC; charc,bf,bcl	0.18 x >0.08 x 0.2	1866	1801	-	15
1868	Gully	>0.42 x >0.42 x 0.2	1804	1869	-	3;7;15
1869	F of 1868:b SC; charc,bf	>0.42 x >0.42 x 0.2	1868	1866	1;3	7;15
1870	Unstratified finds from animal burrow	N/A	N/A	N/A	3	7
1871	Gully?	>1.5 x 1 x UE	1804	1872	-	3;7
1872	F of 1871:vdg SC;charc,bcl,bf	>1.5 x 1 x UE	1871	1801	1;3	7
1873	Pit?	0.8 x >0.44 x UE	1804	1874	-	3;7;15
1874	F of 1873:vdgb SC; bf,bcl,charc	0.8 x >0.44 x UE	1873	1801	3	7;15
1875	Gully/beam slot?	1.22 x >0.43 x 0.14	1880	1876	-	3;8;27
1876	F of 1875:vdg SC; bcl,charc,chk,bf	1.22 x >0.43 x 0.14	1875	1804	1;3	8;27
1877	Gully/beam slot	3.1 x >0.95 x 0.2	1802	1878	-	3;8;27
1878	F of 1877:vdgb SC; charc,bcl,bf,chk,Fe	3.1 x >0.95 x 0.2	1877	1804	3;8	8;27
1879	Gully/beam slot; =1877	0.8 x 0.5 x 0.2	1802	1880	-	8;27
1880	F of 1879:vdgb SC; charc,bcl,bf,chk,Fe	0.8 x 0.5 x 0.2	1879	1875	-	8;27
1881	Ditch	>1.5 x 2.1 x UE	1803	1882	-	3;8
1882	F of 1881:dg SC; bcl,charc,bf,chk,Fe	>1.5 x 2.1 x UE	1881	1804	3;6;8	8
1883	Ditch	>1.5 x 2.5 x UE	1803	1884	-	3;8
1884	BF of 1883:b SC; charc,chk,bf	>1.5 x 2.5 x UE	1883	1885	3	8
1885	TF of 1883:b SC; charc,bf	>1.5 x 1.93 x UE	1884	1804	3	8
1886	Small pit	UE x 0.52 x 0.14	1802	1887	-	8;27
1887	Fill of 1886:ob SC; chk,charc,bf,bcl	UE x 0.52 x 0.14	1886	1804	3;8	27
1888	Pit	1 x >0.7 x UE	1804	1889	-	3;7

Context	Description	Dimensions	After	Before	Finds	Figs
1889	F of 1888:vdg SC; bcl,bf,charc	1 x >0.7 x UE	1888	1801	1;3;8	7
1890	Layer:yb CL; chk,flints	>1.5 x 1.8 x >0.35	1803	1804	3	3;7;24
1891	F of 1810:dgb SL	>1.5 x 2.8 x 0.36	1810	1831	-	17
T19	Trench 19	20 x 1.5 x 0.55	N/A	N/A	N/A	3
1901	Topsoil:dgb CL; bf,chk,shl,clinker	20 x 1.5 x 0.3	1902	N/A	1;3;4;8	-
1902	Subsoil:yb SC; shl,bf	20 x 1.5 x 0.25	1903	1901	1;3;8	-
1903	Natural brickearth:dyb SC	20 x 1.5 x UE	UE	1902	-	-
T20	Trench 20	20.7 x 1.5 x 0.57	N/A	N/A	N/A	3
2001	Topsoil:b SL	20.7 x 1.5 x 0.3	2002	N/A	**#5**	13
2002	Subsoil:by SCL	20.7 x 1.5 x 0.3	2005	2001	1;3;6;8	13
2003	Natural brickearth:yb SC	20.7 x 1.5 x UE	UE	2004	-	13
2004	Ditch: U-shaped =0911	>1.5 x 2.3 x 0.7	2003	2005	-	3;13
2005	F of 2004:yb SC; cbm,bf,shl	>1.5 x 2.3 x 0.7	2004	2002	1;3;4;5;8	13
T21	Trench 21	13.2 x 1.5 x 0.35	N/A	N/A	N/A	3
2101	Topsoil	13.2 x 1.5 x 0.3	2102	N/A	1;3;6	-
2102	Subsoil	13.2 x 1.5 x UE	UE	2101	3;8	-
T22	Trench 22	15 x 1.5 x 0.33	N/A	N/A	N/A	3
2201	Topsoil	15 x 1.5 x 0.17	***7**	N/A	3	9
2202	Subsoil	15 x 1.5 x UE	UE	**+8**	-	9
2203	Amorphous feature	0.58 x 0.24 x UE	2202	2204	-	3;9
2204	F of 2203:yb SC	0.58 x 0.24 x UE	2203	2201	-	9
2205	Linear =2211	>3.5 x >1.5 x UE	2202	2206	-	3;9
2206	F of 2205:b SC =2212	>3.5 x 1.5 x UE	2205	2207	-	9
2207	Land drain	>5.5 x 0.13 x UE	2206/12	2208	-	9
2208	F of 2207:yb SC	>5.5 x 0.13 x UE	2207	2201	-	-
2209	Pit/animal disturbance	>0.96 x >0.32 x UE	2202	2210	-	3;9
2210	F of 2209:lob SC	>0.96 x >0.32 x UE	2209	2201	-	9
2211	Linear =2205	>1.7 x 0.5 x UE	2202	2212	-	9
2212	F of 2211:b SC =2206	>1.7 x 0.5 x UE	2211	2207	-	9
2213	Amorphous feature/pit?	>0.62 x 0.97 x UE	2202	2214	-	3;9
2214	F of 2213:b SC	>0.62 x 0.97 x UE	2213	2201	3	9
2215	Ditch	>1.5 x 2.1 x UE	2202	2216	-	3;9
2216	F of 2215:yb SC	>1.5 x 2.1 x UE	2215	2201	-	9
2217	Posthole?	0.24 x UE	2202	2218	-	9
2218	F of 2217:b SC	0.24 x UE	2217	2201	-	9
2219	Posthole?	0.27 x UE	2202	2220	-	3;9
2220	F of 2219:b SC	0.27 x UE	2219	2201	-	9
2221	Posthole?	0.43 x >0.2 x UE	2202	2222	-	3;9
2222	F of 2221:b SC	0.43 x >0.2 x UE	2221	2201	-	9
2223	Posthole?	0.33 x >0.22 x UE	2202	2224	-	3;9
2224	F of 2223:b SC	0.33 x >0.22 x UE	2223	2201	3	9

6. THE FINDS, POTTERY, HUMAN BONE AND ANIMAL BONE REPORTS

6.1 Finds were recovered from 77 contexts. The finds were processed according to the systems laid down in SAS's Finds Manual.

6.2 The finds are currently stored on a temporary basis at the SAS offices in Southampton. They will be deposited with the appropriate receiving museum on completion of the site archive.

6.3 The finds are listed below in Material Type order.

MATERIAL 01 STONE

c490 fragments were recovered from 54 contexts.

Context	Frag Count	Description
01	3	Fine limestone
0601	40	8 burnt flint; 2 poss. worked flint tertiary flakes; 11 slate - 1 burnt, 6 grey, 4 purple; 1 coal; 1 ironstone; 7 chalk; 4 sandstone - 1 abraded iron-rich,1 shelly iron-rich, 2 buff-colour; 5 limestone - 4 very fine, 1 medium shelly; 1 prob. Purbeck limestone roof tile [ITEM 67]
0602	8	4 burnt flint; 3 chalk; 1 fine Quarr limestone slightly burnt
0607	2	1 granite; 1 iron-pan/concretion
0701	13	3 burnt flint; 2 chalk; 2 fine abraded limestone; 1 pink granite; 4 slate - 1 purple, 3 burnt; 1 metamorphic, prob. schist
0702	22	2 worked flint - 1 broken secondary flake, 1 prob. not worked; 14 burnt flint; 4 chalk; 1 fine shelly Quarr limestone; 1 greensand
0704	3	1 poss. worked flint; 2 burnt flint
0801	5	3 chalk; 1 grey slate; 1 limestone
0802	3	1 iron-rich sandstone, abraded; 2 chalk
0803	1	1 iron-rich sandstone
0808	7	2 burnt flint; 1 shelly limestone; 1 granite with 1 weathered surface & 2 poss. worked surfaces; 2 sandstone - 1 red, 1 fine/greensand; 1 fine/greensand quern [ITEM 1]
0901	7	2 burnt flint; 1 grey slate; 4 chalk
0902	13	6 burnt flint; 4 chalk; 2 slate - 1 silver/grey, 1 purple/grey; 1 ironstone
0908	3	3 burnt flint
1001	1	1 burnt flint
1002	8	5 burnt flint; 1 chalk; 2 sandstone - 1 grey, 1 iron-rich red
1005	2	1 poss. worked flint secondary flake; 1 burnt flint
1102	1	1 burnt flint
1201	7	4 burnt flint; 2 slate - 1 grey, 1 purple; 1 poss. worked flint tertiary flake
1202	11	7 burnt flint; 1 iron-rich sandstone; 1 granite; 1 igneous/sedimentary grit with quartz & mica; 1 poss. worked flint tertiary flake
1205	16	16 burnt flint
1207	1	1 burnt flint 13
1301	2	1 chalk; 1 grey slate
1302	7	1 chalk; 3 burnt flint; 3 sandstone - 1red iron-rich, 1 greensand, 1 buff-colour
1401	14	7 burnt flint; 2 chalk; 1 grey slate; 1 iron-rich waterworn sandstone; 2 fine shelly limestone - 1 with poss. worked surface; 1 poss. worked flint tertiary flake
1402	16	14 burnt flint; 2 worked flint - 1 secondary flake, 1 poss. worked tertiary flake
1405	1	1 burnt flint
1407	7	1 worked flint secondary flake; 6 burnt flint 16
1601	?	Finds from **1601** were accidentally amalgamated with **0601**

Context	Frag Count	Description
1602	17	13 burnt flint; 2 chalk; 1 limestone; 1 poss. worked flint tertiary flake
1701	7	3 burnt flint; 3 chalk; 1 limestone
1702	15	8 burnt flint; 3 limestone - 2 fine, 1 medium shelly, 2 of them burnt; 4 chalk
1801	7	1 poss. worked flint secondary flake; 2 burnt flint; 1 chalk; 2 limestone - 1 fine abraded, 1 shelly; 1 shelly red sandstone
1802	2	1 greensand quern, broken [ITEM 60]; 1 granite, smooth on 4 faces, worked/waterworn or both?
1804	9	4 burnt flint; 4 limestone; 1 chalk
1806	12	6 burnt flint; 1 burnt sandstone; 4 burnt greensand quern fragments with tooling - 3 fit together [ITEM 54]; 1 hard fine micaceous sandstone whetstone, broken [ITEM 55]
1809	15	14 burnt flint; 1 sandstone
1811	c105	2 worked flint - 1 secondary flake, 1 prob. not worked secondary flake; c95 burnt flint; 4 chalk; 2 sandstone - 1 red, 1 grey
1813	2	2 burnt flint
1832	5	5 burnt flint
1835	8	7 burnt flint; 1 highly micaceous burnt sandstone
1837	9	7 sandstone; 2 coarse granite with pyrites
1839	2	1 burnt flint; 1 red sandstone
1865	1	1 burnt flint
1869	2	2 burnt flint
1872	1	1 burnt flint
1876	1	1 greensand?
1889	8	1 granite, poss. burnt & smoothed/weathered on two faces; 7 sandstone - 2 abraded shelly, 1 buff-colour, 1 red, 3 grey fine
1901	4	1 grey slate; 2 burnt flint; 1 chalk
1902	2	1 burnt flint; 1 chalk
2001	8	2 burnt flint; 3 slate - 2 grey, 1 burnt; 1 chalk; 2 small, abraded oolitic limestone
2002	5	2 burnt flint; 2 chalk; 1 fine limestone
2005	14	13 burnt flint; 1 iron-rich? sandstone
2101	5	3 burnt flint; 2 burnt? limestone

MATERIAL 02 AGGREGATES

7 fragments of aggregate were recovered from 4 contexts:

Context	Frag Count	Description
0701	3	2 Portland cement type; 1 lime mortar
0702	1	1 mortar
0902	1	1 natural? concretion
2001	2	1 mortar; 1 concrete

MATERIAL 03 CERAMICS
POTTERY

1009 fragments of pottery were recovered from 70 contexts. They were assessed by Lorraine Mepham (see 6.4 Pottery Report, below) - dates are given in *Italic*. Some of the post-Roman material was also scanned by Duncan H Brown: where his assessment differs from Lorraine's it is given in {brackets}. Fragment counts may vary due to sherd size and the presence of ceramic building material (not assessed) - discrepancies are shown thus: 205/202 (with SAS' count first).

Context	Frag Count	Description
01	205/202	1 flint-tempered *MBA/LBA*; 1 Samian *C1-2nd*; 67 coarsewares, inc storage jars wt finger impressions, drop flange bowls, rilled jar - Rowlands Castle, Alice Holt *C2-4th*; 1 New Forest fine *mid C3-4th*; 1 grog-tempered *LIA/C4th?*; 66 flint-tempered sandyware *C13-14th* {1 LMed base *C15th*}; 3 green-glazed whiteware *{C16th}*; 11 stoneware {2 Bellarmine *C17th*}; 41 redwares *PMed*; 9 industrial {mocha ware, refined earthenware, flowerpot} *Mod*
02	6	1 greyware, 1 oxidised *R-B*; 1 flint-tempered sandyware *C13-14th*; 3 undiagnostic
0601	68	8 greyware *C3-4th?*; 12 sandy flint-tempered, 1 glazed *C13-14th*; 12 sandyware, 1 stamped/rouletted *C13-14th*; 1 stoneware *Mod* {English stoneware *C16th?*}; 21 redware *PMed* {15 redware, 2 NE redware}; 11 industrial {11 refined earthenware & porcelain, 2 flowerpot} *Mod* ; 3 undiagnostic
0602	13	5 flint-tempered *MBA/LBA*; 4 greyware *R-B*; 3 sandyware, 1 flint-tempered *C13-14th*; 1 undiagnostic
0605	1	1 small flint-tempered *MBA/LBA* (or *Med* cbm?)
0607	3	1 flint-tempered *LBA*; 1 coarseware *R-B*; 1 industrial {refined earthenware} *Mod*
0609	2	1 greyware *R-B*; 1 glazed sandyware *C13-14th*; both abraded
0701	10	1 BB1? *R-B*; 1 grog-tempered *LIA/C4th?*; 2 coarse sandyware *C13-14th*; 5 redware *PMed*; 1 industrial {1 refined earthenware; 2 flowerpot} *Mod*
0702	12	3 flint-tempered *MBA/LBA*; 4 greyware, inc Alice Holt *R-B*; 5 flint-tempered sandyware *C13-14th*
0801	29	3 fineware inc Oxon colour-coat *C3-4th?*; 18 coarseware *prob C3-4th*; 5 flint-tempered sandyware *C13-14th*; 1 glazed redware, 2 refined earthenware *Mod*
0802	5	4 greyware *R-B*; 1 flint-tempered sandyware, applied thumb strip *C13-14th*
0803	3	1 greyware *R-B*; 1 grog-tempered *LIA/C4th?*;1 flint-tempered sandyware *C13-14th*
0808	138	1 flint-tempered bead rim jar *C1st BC-C1st AD*; 120 coarseware, inc hook rim jar, storage jar, Alice Holt, Rowlands Castle *R-B*; 3 grog-tempered *LIA/C4th?*; 2 amphora Dr 20 *C1-3rd*; 5 New Forest fineware *C3-4th*; 7 Oxon fineware *C3-4th*
0901	8	2 flint-tempered sandyware *C13-14th*; 3 red earthenware, 2 refined earthenware, 1 flowerpot *Mod*
0902	9	1 flint-tempered *MBA/LBA*; 4 coarseware *R-B*; 3 flint-tempered sandyware, 1 sandyware *C13-14th*

Context	Frag Count	Description
0904	13	flint-tempered cremation pot, 2 rim, 11 body sherds *LBA*
0908	6	5 flint-tempered *MBA*; 1 glazed sandyware *C13-14th {C15th}*
1001	2	1 redware {1 redware; 1 NE glazed redware, abraded} *PMed*
1002	1	1 industrial {refined earthenware} *Mod*
1005	1	1 grog-tempered, burnt *LIA/C4th?*
1102	3	2 flint-tempered sandyware, 1 abraded sandyware *C13-14th*
1108	1	1 flint tempered coarseware, burnt *MBA/LBA*
1201	4	1 sandyware *C15-16th?*; 1 redware {green-glazed} *PMed*; 2 industrial {1 vitreous ware, 1 blue & white porcelain} *Mod*
1202	5	1 flint-tempered *MBA/LBA*; 2 greyware, inc storage jar, Alice Holt *C3-4th*; 2 sandyware *C13-14th*
1205	8	4 coarseware inc Alice Holt *C3-4th*?; 2 flint-tempered sandyware, 2 sandyware *C13-14th*
1301	8/10	2 flint-tempered sandyware, 3 sandyware inc 1 rim *C13-14th*; 5 redware {4 redware} *PMed* {1 flowerpot *Mod*}
1302	4/5	1 coarse flint-tempered *MBA/LBA*; 1 oxidised, 2 greyware inc Alice Holt *R-B*
1304	2	1 greyware, 1 oxidised *R-B*
1401	4	2 flint-tempered sandyware, 1 sandyware bowl *C13-14th*; 1 glazed earthenware *PMed*
1402	15	10 flint-tempered *MBA/LBA*; 3 flint-tempered sandyware inc jar, 1 glazed sandyware {*C13-15th*} *C13-14th*; 1 undiagnostic
1405	3	3 flint-tempered, burnt, same vessel? *MBA/LBA*
1407	1	1 flint-tempered sandyware rim *C13-14th*
1601	?	finds from **1601** were accidentally amalgamated with **0601**
1602	13	4 flint-tempered *LBA*; 4 coaresware *R-B*; 3 flint-tempered sandyware, inc jar, 2 sandyware *C13-14th*
1701	7	4 flint-tempered sandyware,1 sandyware *C13-14th*; 1 stoneware, 1 flowerpot *Mod*
1702	4	2 greyware *R-B*; 1 fineware *C3-4th?*; 1 leached calcareous *R-B*
1801	17	1 amphora Dr 20 *C1-3rd*; 1 Samian *C1-2nd*; 7 greyware inc Rowlands Castle; 1 oxidised *R-B*; 1 fineware, Oxon? *C3-4th?*; 4 grog-tempered *LIA/C4th?*; 1 glazed redware *PMed*; 1 undiagnostic
1802	6	4 greyware inc everted rim jar, Rowlands Castle *C2-3rd*; 2 flint-tempered sandyware *C13-14th*
1804	83/84	9 fineware flagons *Late C1-C2nd*; 2 Samian, S Gaulish? Drag 33 cup stamped base 'REBVRRIA...' *Late C1-Early C2nd*; 1 amphora, Dr 20 *C1-3rd*; 53 greyware inc storage jars, Alice Holt, Rowlands Castle *C2-4th*; 9 oxidised everted rim jar, Rowlands Castle *C2-3rd*; 3 BB1?, 1 whiteware mortarium *R-B*; 1 grog-tempered *LIA/C4th?*; 5 flint-tempered sandyware *C13-14th*
1806	11	1 Samian Drag 18 platter, S Gaul *Mid-Late C1st*; 6 greyware, 1 BB1?, 2 fineware, 1 whiteware *R-B*
1809	40	1 amphora Dr 20 *C1-3rd*; 1 fine whiteware ring neck flagon *Late C1-Early C2nd*; 25 greyware inc everted rim jars, 1 with tally mark, most Rowlands Castle *C2-3rd*; 1 fineware flanged bowl? Oxon? *C3-4th?* 12 oxidised *R-B*
1811	33	3 amphora Dr 20 *C1-3rd*; 1 Oxon fineware *C3-4th*; 27 greyware, 2 oxidised *R-B*

Context	Frag Count	Description
1813	14	2 fine whiteware flagon, 8 greyware platter *Late C1-Early 2nd*; 4 oxidised *R-B*
1824	1	1 oxidised *R-B*
1832	22	12 greyware, 9 oxidised, 1 whiteware *R-B*
1835	5	1 flint-tempered *MBA/LBA*; 2 greyware, 1 oxidised *R-B*; 1 briquetage? *R-B?*
1837	32	24 greyware inc lid, Rowlands Castle *Late C1-2nd*; 1 Samian *C2nd*; 1 retrograde stamped amphora handle *prob C2nd*; 1 Oxon fineware *C3-4th*; 2 oxidised *R-B*; 3 briquetage? *R-B?*
1839	32	19 greyware, inc storage jar, Alice Holt, Rowlands Castle *C2-4th*; 1 BB1, 12 oxidised *R-B*
1840	3	3 greyware, inc lid *R-B*
1859	2	1 greyware, 1 oxidised *R-B*
1869	1	1 abraded greyware everted rim jar *R-B*
1870	4	1 amphora Dr 20 *C1-3rd*; 3 greyware, 1 rim *R-B*
1872	9	9 greyware - 4 same vessel: everted rim jar, sooted, with tally mark; mostly Rowlands Castle *C2-3rd*
1874	6	4 greyware, Rowlands Castle *C2-3rd*; 2 fineware *R-B*
1876	5/0	3 sandyware; 2 flint-tempered
1878	12	2 fineware, inc Oxon mortarium *C3-4th*; 9 greyware,1 oxidised *R-B*
1882	7	5 greyware, inc Alice Holt storage jar *C3-4th*; 1 oxidised *R-B*; 1 grog-tempered *LIA/C4th?*
1884	1	1 greyware *R-B*
1885	1	1 flint-tempered *C1 BC-C1 AD*
1887	1	1 coarseware *R-B*
1889	13	9 greyware, inc Alice Holt storage jars, 1 Oxon fineware flanged bowl *C3-4th*; 1 whiteware *R-B*; 2 grog-tempered, inc lid *LIA/C4th?*
1890	1	1 greyware *R-B*
1901	4	2 flint-tempered sandyware, 1 glazed *C13-14th*; 1 abraded redware, 1 whiteware {1 green-glazed earthenware} *PMed*
1902	2	1 flint tempered/cbm? *LBA/Med?*; 1 coarseware *R-B*
2001	6	2 sandyware, 1 rim *C13-14th*; 2 redware {1 redware} *PMed*; 2 industrial {2 porcelain, 1 flowerpot} *Mod*
2005	10	1 coarseware *R-B*; 1 flint-tempered sandyware *C13-14th*; 6 redware {earthenware} *PMed*
2101	4	1 grog-tempered rim *LIA/C4th?*; 2 greyware *R-B*; 1 poss fine tile
2102	2	1 greyware *R-B*; 1 redware {fine earthenware flowerpot?} *PMed*
2201	1	1 sandyware *C13-14th*
2214	1	1 fineware, abraded, Oxon? *C3-4th?*

CERAMIC BUILDING MATERIAL

474 fragments were recovered from 51 contexts:

Context	Frag Count	Description
01	72	incl. 1 poss. abraded tegula *R-B*; flint-tempered rooftile *prob Med*; peg tile *EMod/Mod*
02	2	2 abraded tegula, fit together *R-B*
0601	123	102 tile incl. flint-tempered tile, 1 with animal paw impression *Med*; peg tile *PMed/EMod*; 13 brick, 4 overfired, 1 with indentations; 8 cbm
0602	6	1 glazed rooftile *Med*; 3 rooftile *PMed*; 2 misc.
0607	1	1 peg tile *PMed/EMod*
0701	9	5 peg tile *PMed/EMod*, 2 poss. *Med*; 2 abraded fragments; 1 fine red brick; 1 buff brick with clay pellets
0702	2	1 fine red tile; 1 red brick with flint & mortar adhering *Mod?*
0801	13	4 peg tile *PMed/EMod*; 1 red brick with buff clay pellets; 1 abraded brick; 7 cbm
0802	7	1 flint-tempered rooftile, 2 rooftile, fit together *Med?*; 4 abraded tile
0803	1	1 small orange micaceous tile with red & clay inclusions
0808	16	3 imbrex, same fabric; 3 overfired tegula, 2 fit together, 6 tegula?, 2 overfired fit together *R-B*; 4 misc.
0901	21	10 peg tile *PMed/EMod*; 4 moulded tile; 2 flint-tempered; 5 misc.
0902	7	1 peg tile *PMed/EMod*; 1 land drain *Mod*; 2 brick?; 3 cbm
1001	10	incl. sandy tile; flint-tempered tile *Med?*; peg tile *PMed/EMod*
1002	1	1 tile
1101	2	1 poss. tegula *R-B*; 1 peg tile *PMed/EMod*
1201	6	5 rooftile, different fabrics; 1 brick
1202	4	1 tile; 1 poss. tile, abraded; 2 cbm
1301	10	1 tile; 7 brick; 2 cbm
1302	2	1 poss. burnt brick, abraded; 1 tile, pale red fine micaceous fabric with spars & flint
1401	13	4 flint-tempered tile *Med?*; 6 peg tile *PMed/EMod*; 3 very abraded, soft fabric, 1 organic impressions
1402	6	1 highly micaceous rooftile; 5 very abraded cbm, 1 with flint, 1 with clay pellets
1407	1	1 fine orange fabric
1601	?	finds from **1601** were accidentally amalgamated with **0601**
1602	9	9 peg tile, 1 with round hole *PMed/EMod*
1701	8	4 tile; 4 cbm
1702	2	1 burnt, very abraded; 1 peg tile *PMed/EMod*
1801	20	2 tegula *R-B*; 14 prob. tile; 4 misc. cbm
1802	1	1 abraded coarse tile *Med*
1804	13	5 tile; 8 brick
1806	6	1 tegula; 1 tegula/peli? *R-B*; 4 misc. tile
1809	12	5 prob. tegula *R-B*; 7 misc. tile
1811	8	1 tile *R-B*; 7 cbm
1813	1	1 cbm

Context	Frag Count	Description
1832	6	3 prob. tegula; 1 tile; 2 cbm *R-B*
1837	1	1 overfired flat tile, prob. *R-B*
1839	1	1 curved tile, soft orange fabric
1865	1	1 coarse red brick
1869	4	4 abraded brick
1872	2	1 poss. tegula, burnt; 1 poss. peli, fine orange fabric, sparse flint inclusions *R-B*
1876	3	3 cbm
1878	1	1 abraded cbm
1882	3	1 abraded tile; 2 abraded cbm
1889	3	3 abraded cbm
1901	7	1 coarse flint-tempered tile; 5 fine tile *Med/PMed*?; 1 reused abraded brick, frogged, cement mortar adhering *EMod/Mod*
2001	6	1 peg tile *PMed/EMod*; 1 land drain *Mod*; 4 brick
2002	7	3 peg tile *PMed/EMod*; 4 cbm
2005	8	4 tile; 1 burnt brick?; 3 brick
2101	3	1 poss. overfired tegula *R-B*; 2 cbm
2102	2	1 roof tile *Med/PMed*; 1 abraded tile, fine micaceous fabric, red & clay inclusions
2224	1	1 red brick, sparse flint inclusions *PMed*

BURNT CLAY

148 fragments were recovered from 21 contexts:

Context	Frag Count	Description
0601	5	5 fragments, 1 with organic impressions
0602	1	1 fragment
0702	4	4 frags
0801	1	1 with sparse burnt flint inclusions & chalk?
0808	2	2 fine micaceous clay, burnt, with wattle marks (or poss. part of shaped object = loomweight?)
0904	1	1 burnt & abraded, poss. organic impressions
0906	22	22 burnt, some organic impressions
1702	2	1 abraded fine buff/brown fabric; 1 pink/white fabric, very hard
1802	1	1 fragment
1804	4	4 fragments, 2 with poss. ferrous inclusions
1806	4	4 fragments
1809	24	24 fragments, 2 with wattle marks
1811	31	31 fragments, many small
1813	2	2 fragments
1832	18	18 fragments, some very burnt, 1 either object (loomweight?) or building material with wattle mark - see also **0808**
1835	1	1 fragment
1837	9	9 small fragments
1839	10	10 fragments, some with flat surfaces - daub?
1840	1	1 fragment
1869	4	1 abraded, with organic impressions; 3 abraded burnt clay
2005	1	1 abraded - daub?

CLAY PIPE

2 fragments were recovered from 2 contexts:

Context	Frag Count	Description
0601	1	1 stem, small bore (poss. pre-1850s)
1401	1	1 thin stem, large bore

MATERIAL 04 GLASS

16 fragments were recovered from 12 contexts:

Context	Frag Count	Description
01	2	2 dark green wine bottle bases *PMed/Mod*?
02	1	1 flat olive/green rounded edge, with red paint/decoration along edge, matt on undecorated side, pitted window glass? *R-B*? [ITEM 48]
0601	3	2 window glass; 1 bottle neck *Mod*
0701	1	1 thin-walled green body sherd
0801	1	1 clear, flat window glass? *EMod/Mod*
1001	1	1 thin-walled green body sherd
1202	1	1 dark green body sherd *PMed/Mod*
1801	1	1 dark green body sherd *PMed/Mod*
1839	1	1 pale blue body sherd *R-B* [ITEM 36]
1901	1	1 thick-walled clear body sherd *Mod*?
2001	2	1 dark green wine bottle neck *PMed/Mod*; 1 clear vessel/bowl? with everted rim, broken
2005	1	1 fragment

MATERIAL 05 METAL

IRON

59 iron objects were recovered from 27 contexts. they have been x-rayed at Southampton City Museums.

Context	Frag Count	Description
03	9	4 nails [ITEMS 14, 38, 41, 45]; 4 shafts [ITEMS 40, 42-44]; 1 nut & bolt [ITEM 46]
0601	4	2 shafts [ITEMS 70, 71]; 1 triangular plate [ITEM 69]; 1 object/fitting with 2 round holes [ITEM 68]
0602	1	1 shaft [ITEM 28]
0607	1	1 nail? [ITEM 53]
0702	1	1 nail [ITEM 29]
0704	1	1 nail [ITEM 10]
0808	4	1 nail [ITEM 2]; 2 shafts [ITEMS 3, 4]; 1 plate [ITEM 5]
0902	1	1 ring - washer? [ITEM 61]
1002	1	1 nail [ITEM 13]
1102	1	1 nail [ITEM 14]
1201	2	1 flat-headed nail [ITEM 15]; 1 shaft/object? [ITEM 16]

Context	Frag Count	Description
1202	1	1 fitting, with 2 round holes - machinery? [ITEM 17]
1302	1	1 nail [ITEM 9]
1401	1	1 flat-headed nail, actively corroding [ITEM 18]
1602	1	1 shaft [ITEM 19]
1702	5	1 wedge with mortar adhering [ITEM 62]; 4 nails, 1 square flat-headed [ITEMS 63-66]
1801	1	1 strip/small bar [ITEM 8]
1804	3	2 nails [ITEMS 20, 21]; 1 nail head [ITEM 22]
1806	4	2 nails [ITEMS 56, 57]; 2 shafts [ITEMS 58, 59]
1809	1	1 large nail/bolt? [ITEM 30]
1811	2	2 nails [ITEMS 31, 32]
1813	1	1 nail shaft [ITEM 33]
1835	1	1 nail [ITEM 52]
1837	3	3 nail shafts, 2 fit together [ITEM 34]
1839	1	1 nail [ITEM 37]
2001	3	1 flattish object with 2 holes? [ITEM 49]; 2 nails [ITEMS 50, 51]
2005	4	2 shafts [ITEMS 24, 25]; 1 clock hand & 1 hinge [ITEM 26]

COPPER ALLOY

5 copper alloy objects were recovered from 4 contexts: they have all been x-rayed, and the coins are being conserved at Southampton City Museums.

Context	Frag Count	Description
01	1	1 broken square plate with 2 holes & 2 'studs' [ITEM 27]
0803	1	1 heavy object, poss. with holes, corroded brown and bright blue [ITEM 72]
0808	2	2 unidentifiable coins *R-B* [ITEMS 6, 7]
1804	1	1 wire [ITEM 23]

LEAD

1 rounded lead object (possibly a weight?) [ITEM 47] was recovered from context **03**.

MATERIAL 06 SLAG

21 fragments of slag were recovered from 14 contexts:

Context	Frag Count	Description
0601	4	1 slag; 3 clinker
0701	1	1 clinker
0801	2	2 clinker
1205	1	1 clinker
1401	1	1 clinker
1402	1	1 tiny slag fragment
1602	1	1 slag

Context	Frag Count	Description
1801	1	1 clinker
1802	1	1 hearth lining?
1806	1	1 clinker
1882	1	1 hearth lining?
2001	4	4 clinker
2002	1	1 clinker
2101	1	1 clinker

MATERIAL 07 FLORAL REMAINS

CHARCOAL

4 fragments of charcoal were recovered from 3 contexts:

Context	Frag Count	Description
0602	1	1 charcoal
0808	1	1 charcoal
1806	2	2 charcoal

MATERIAL 08 FAUNAL REMAINS

SHELL

257 fragments of shell were recovered from 35 contexts: insufficient material was recovered to enable statistical analysis of the oyster shell.

Context	Frag Count	Description
01	1	1 cockle
02	1	1 oyster, lower valve
0601	46	18 oyster lower valve, 2 with umbones; 20 oyster upper valve, 3 with umbones, 2 infested; 8 undiagnostic
0602	20	16 oyster - 6 lower valve, 2 with partial umbones, 2 infested, 10 upper valve, 3 with umbones, 3 infested; 4 snail
0701	11	11 oyster - 6 lower valve, 2 with umbones, 5 upper valve, 1 with umbo
0702	18	18 oyster - 9 lower valve, 1 with umbo and infested, 9 upper valve
0801	15	15 oyster - 4 lower valve, 2 with umbones, 1 infested, 11 upper valve, 3 with umbones, 2 infested
0802	9	9 oyster - 5 lower valve, 2 with umbones, 4 upper valve, 2 with umbones
0803	4	4 oyster - 2 lower valve, 2 upper valve, 1 with umbo
0901	15	15 oyster - 5 lower valve, 2 infested, 10 upper valve, 7 with umbones, 2 infested
0902	6	6 oyster - 1 lower valve with umbo, 1 upper valve, 4 undiagnostic
0908	1	1 oyster - undiagnostic
1001	6	6 oyster - 4 lower valve, 3 with umbones, 1 infested, 2 upper valve, both with umbones

Context	Frag Count	Description
1002	8	8 oyster - 2 lower valve, both with umbones, 1 infested, 6 upper valve, 5 with umbones, 1 infested
1102	3	3 oyster - 2 lower valve, 1 with umbo, infested, 1 upper valve
1201	1	1 upper valve with umbo
1202	11	11 oyster - 6 lower valve, 4 with umbones, 5 upper valve
1205	10	10 oyster - 1 lower valve with umbo (2 pieces), 3 upper valve with umbones, 5 undiagnostic
1302	7	7 oyster - 2 lower valve with umbones, 5 upper valve with umbones
1401	5	5 oyster - 1 lower valve with umbo, 4 upper valve, 2 with umbones
1402	4	4 oyster - 3 lower valve, 1 with umbo, 1 infested, 1 upper valve
1407	5	5 oyster - 1 lower valve, 1 upper valve, 3 undiagnostic
1602	8	8 oyster - 5 lower valve, 2 with umbones, 3 upper valve, 2 with umbones, 1 infested
1701	8	8 oyster - 3 lower valves, 1 with umbo, 1 infested, 5 upper valves, 3 with umbones, 2 infested
1702	7	7 oyster - 1 lower valve, 6 upper valves, 2 with umbones
1801	4	4 oyster - 4 lower valve, 1 infested
1802	2	2 oyster - 2 upper valve, 1 infested
1804	1	1 oyster
1882	1	1 oyster upper valve
1901	1	1 oyster, undiagnostic
1902	4	4 oyster - 1 lower valve, 2 upper valve with umbones, 1 undiagnostic
2001	3	3 oyster - 2 lower valve, 1 upper valve with umbo
2002	6	6 oyster - 2 lower valve, 1 with umbo, 1 infested, 2 upper valve, 1 with umbo, 2 undiagnostic
2005	4	4 oyster - 1 upper valve, 3 undiagnostic
2102	1	1 oyster lower valve

ANIMAL BONE

708 fragments were recovered from 19 contexts: see also 6.6 Animal Bone Report

Context	Frag Count	Description
0602	22	1 fish; 21 bird - incl. 2 tibia, 8 phalange, 3 sternum?
0607	1	1 large mammal longbone fragment
0801	6	6 large mammal long bone fragments, friable
0803	2	2 horse molars
0808	c170	3 horse - 1 scapula, 1 metacarpus, 1 radius, distal end; 11 cattle - 1 metatarsus, distal end, 2 metacarpus, proximal end (1 butchered), 1 radius, distal end, 1 astragalus, 6 jawbone (3? with butchery marks, 1? diseased); 1 red deer antler; 1 sheep jawbone (butchered? diseased?); 8 loose teeth - 1 dog; 1 pelvis? butchered; c 80 very small fragments
0902	5	5 large mammal fragments, friable

Context	Frag Count	Description
1304	c425	17 horse - 3 molars, 1 incisor, 1 radius, distal end, 2 astragalus,1 calcaneum, 1 metacarpus, proximal end, 1 metatarsus, proximal end, 2 metapodial, distal end, 5 phalanges; 2 pig - 2 fibulae, distal end; c200 very small fragments
1804	9	4 sheep - 2 mandible, 2 teeth; 5 poss. bird
1809	2	1 sheep tooth; 1 large mammal long bone fragment
1813	7	7 large mammal, mainly ribs
1832	2	2 sheep - 1 metapodial shaft, gnawed, 1 prob. sheep long bone shaft
1835	1	1 large mammal, flat bone fragment
1837	10	1 fragment of burnt bone [ITEM 35];1 sheep phalanx; 1 bird metatarsus, distal end; 1 skull fragment, large mammal ribs
1839	4	1 cow tooth; 1 large mammal vertebra; 2 undiagnostic
1878	1	1 burnt large mammal long bone fragment
1882	2	2 large mammal long bone fragments, 1 butchered
1887	25	25 deer or sheep/goat? - 12 vertebrae, 2 pelvic, 1 radius, proximal end, 1 metatarsus, proximal end, 5 other long bones
1889	14	14 large mammal (cattle?) incl. skull and long bone fragments
2005	1	1 undiagnostic fragment, burnt?

HUMAN BONE

16 fragments of human bone were recovered from 2 contexts, along with many small fragments from soil samples: see 6.5 Human Bone Report and 7 Environmental Report

Context	Frag Count	Description
0904	7	7 fragments of cremated human bone [ITEM 11]
0906	9	9 fragments of cremated human bone [ITEM 12]

MATERIAL 9 MODERN SYNTHETICS

1 fragment of asbestos was recovered from context **0601**

6.4 POTTERY REPORT *Lorraine Mepham March 2000*

6.4.1 **Introduction**

A total of 988 sherds were examined; this includes four sherds of possible briquetage. In addition, four fragments were identified as possible Mediaeval rooftile. The assemblage includes later Prehistoric - Middle-Late Bronze Age - (54 sherds), Late Iron Age/Romano-British (634 sherds), Mediaeval (160 sherds) and Post-Mediaeval (140 sherds) components. The overall condition is fair to poor; apart from the Post-Mediaeval material, sherds are generally small and abraded, particularly the Prehistoric and Mediaeval sherds. Approximately one third of the assemblage (371 sherds) was recovered from topsoil or otherwise unstratified contexts.
The pottery assemblage has been briefly scanned and quantified (sherd count) by broad fabric group/ware type within each context, eg RB coarse greywares, Samian, Mediaeval sandywares. Spot dates have been recorded on a context by context basis for each fabric group, and a note made of the range of vessel forms represented. Table 1 below presents the overall totals for each fabric group/ware type.

Table 1 Pottery totals

Fabric group/ware type	No. sherds
LATER PREHISTORIC	
MBA/LBA flint-tempered wares	30
LBA flint-tempered wares	24
sub-total Later Prehistoric	**54**
LATE IRON AGE/ROMANO-BRITISH	
Flint-tempered wares	2
Unspeciifed coarsewares	219
Coarse greywares	266
Coarse oxidised wares	59
Coarse whitewares	4
Coarse calcareous ware	1
Coarse grog-tempered wares	16
?Black Burnished ware (BB1)	6
Briquetage	4
Amphora	10
Samian	6
Unspecified (British) finewares	25
New Forest finewares	6
Oxfordshire finewares	10
sub-total LIA/Romano-British	**634**
MEDIAEVAL	
Sandy flint-tempered wares	126
sandywares	34
sub-total Mediaeval	**160**
POST-MEDIAEVAL	
Coarse redwares	92
Coarse whitewares	4
Stonewares	13
Industrial wares	31
sub-total Post-Mediaeval	**140**
OVERALL TOTAL	**988**

6.4.2 Later Prehistoric

The earliest pottery comprises 54 sherds, all in flint-tempered fabrics in varying degrees of coarseness. The coarser end of the spectrum includes possible Deverel-Rimbury material, although in the absence of diagnostic sherds, and the continuation of flint-tempered fabrics into the later post-Deverel-Rimbury ceramic tradition, this group can only be dated broadly to the Middle/Late Bronze Age. A smaller number of sherds are in slightly finer flint-tempered fabrics, and are more likely to belong to the post-Deverel-Rimbury tradition of the Late Bronze Age.

6.4.3 Late Iron Age/Romano-British

The transitional Late Iron Age/Early Romano-British period (1st century BC-1st century AD) is represented by two flint-tempered sherds, including one from a bead rim jar. A further 16 grog-tempered sherds could also belong to the native Late Iron Age tradition which continued into the post-conquest period, but are more likely to be Late Roman (late 3rd-4th century AD) of a type known as 'Wessex grog-tempered ware' (Fulford 1975, 286-92).

All other sherds in this chronological group are in 'Romanised' wares. These are dominated by coarsewares, including greywares, oxidised wares and whitewares. A significant proportion of the greywares, and some of the oxidised wares, can be identified as probable products of the

Rowlands Castle kilns, found at Fishbourne from the mid 1st-3rd centuries AD (Cunliffe 1971, 252-3); characteristic vessel forms in Rowlands Castle-type fabrics include everted rim jars of 3rd century AD date (probably originating in the 2nd century AD), some with incised tally marks below the rim (*ibid.*, type 313). Products of later 1st-2nd century AD kilns in the Arun valley, such as Wiggonholt, Hardham and Littlehampton, could also be represented hers (Evans 1974; Lovell forthcoming), as well as later 3rd-4th century AD 'Adur Valley' wares (Lyne 1993, 17) and Alice Holt products (Lyne and Jefferies 1979). Certainly vessel forms present span the Roman period, from late 1st-2nd century AD platters and jars to 3rd-4th century AD dropped flange bowls and large thick-walled storage jars with internal finger smearing. Perhaps surprising is the low proportion of Dorset Black Burnished ware (BB1) which was marketed through Chichester in large quantities from the 3rd century AD.

Finewares are represented by small quantities of New Forest and Oxfordshire colour-coated wares, both characteristic of the later 3rd-4th century AD. Fine whitewares, probably deriving largely from flagons, are likely to originate from more than one source, but are predominantly of early Roman date. Recognisable imports are restricted to a very small quantity of Samian (both Southern and Central Gaulish products are present) and Spanish Dressel 20 amphorae (including one stamped handle).

Just over half the Romano-British assemblage (348 sherds) was recovered from T18; other sherds came in smaller quantities from trenches across the site.

6.4.4 Mediaeval

Mediaeval wares fall into two broad fabric groups: sandy wares also containing flint inclusions; and finer sandy wares. Both groups include glazed sherds although these are more common in the finer sandy fabrics. Most, if not all, these wares are likely to have been locally produced, and potential sources include the 13th century kilns in Chichester (Down and Rule 1971, 153-64; Down 1978, 10-16) and the 14th-15th century kilns at Binsted (Barton 1979, 170-9). There is little diagnostic material here, but the few rim sherds present derive from jars and bowls; some of the glazed sherds could come from jugs.

Just under half the Mediaeval assemblage (66 sherds) came from general unstratified contexts; other sherds were recovered in small quantities from various trenches across the site, with the largest group deriving from T6 (27 sherds).

6.4.5 Post-Mediaeval

Post-Mediaeval wares are dominated by coarse earthenwares, mostly redwares with a few whitewares; these are of broad Post-Mediaeval date, and include Modern flowerpot sherds as well as earlier Post-Mediaeval glazed wares. Also present are stonewares and industrial wares, all probably of 19th or 20th century date. Post-Mediaeval sherds were recovered mainly from topsoil contexts.

6.4.6 Statement of Potential

Of the overall pottery assemblage, the Romano-British component has the highest potential for further research, but this is limited by the relatively small size of the assemblage, its relatively poor condition, and the predominance of undiagnostic coarsewares. It is unlikely that the pottery can help to refine the chronological framework of the site beyond the dating undertaken as part of this assessment, particularly given the lack of a lengthy vertical stratigraphic sequence.

More detailed fabric and form analysis could, however, be undertaken for Romano-British pottery from stratified contexts (520 sherds), which would highlight potential sources of supply and therefore set the site within its local and regional economic context, by comparison with other assemblages of the same date, such as Chichester (Down and Rule 1971 etc), Westhampnett Bypass (Mepham in prep.) and Littlehampton (Lyne 1993). Little, if any, of this material is worth illustrating. Prehistoric, Mediaeval and Post-Mediaeval groups do not warrant further analysis.

6.4.7 **References**

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6.5 HUMAN BONE REPORT *Jacqueline McKinley March 2000*

6.5.1 Burnt bone from three contexts was assesses; **0904**, the remains of a possible Bronze Age cremation burial; **0906**, a cremation-related deposit; and **1837**, the fill of a post-pipe. All the bone was in good condition with no apparent erosion/weathering suggestive of burial in adverse soil conditions. Two contexts (**0904**, **0906**) comprised cremated human bone, that from **1837** being burnt animal bone.

0904: total weight 193.9g, plus 127.4g unsorted <5mm residue including a substantial proportion of human bone fragments. At least half the fragments were identifiable to skeletal element, including fragments of worn tooth crown.

0906: total weight 48.8g, including fragments identifiable to skeletal element.

6.5.2 In both cases, the remains represented those of an adult. No pathological lesions were observed. The bone was well-oxidised, all being buff/white in colour. Small quantities of bone were recovered in both cases, representing c.19% and 4.8% of the minimum total weight of bone expected from an adult cremation, despite the relatively large dimensions and depths of the fills (0.16-0.17m deep). The bone from both deposits was also heavily fragmented with c.69% of the bone from **0904** and 80% of **0906** being <5mm in size, the greatest quantity of bone being <2mm.

6.5.3 Although the deposits had been truncated, the remaining depths appeared relatively undisturbed, although the pottery in **0904** was fragmented, which may imply disturbance by ploughing. Whilst some bone may have been lost as a result of truncation, it is also possible that these small quantities were all that was deposited, as no bone was visible in the tops of the fills. The bone is also substantially more fragmentary than is commonly seen: as the deposits were relatively undisturbed, this may reflect the effects of burial in the acid brickearth soils or be of

cultural significance. In both deposits quantities of burnt clay and charcoal were recovered, both probably representing redeposited pyre debris.

6.5.4 Any further analysis would identify the skeletal elements within the deposits, which may give further details on the age and sex of the individuals, and any deliberate selection of specific elements for burial. Further contextual detail could help confirm the type of deposits represented - burials or redeposited pyre debris. The small amounts of bone recovered, and particularly the small size of the bone fragments are also factors to be considered.

6.6 ANIMAL BONE REPORT *Claire Ingrem February 2000*

6.6.1 This report considers the animal bone recovered by Southern Archaeological Services Ltd from the site of Newlands Nursery, Pagham in West Sussex. The animal bone was recovered from the site of a Romano-British farmstead from various features including postholes, pits, ditches, gullies and a possible beamslot. Retrieval of the animal bone was by hand collection. The bone was assessed in February 2000 at the Centre for Human Ecology and Environment, University of Southampton. All bone fragments from all contexts were examined, with the total number of identified bone over 10mm recorded for each context. Tooth eruption and wear was recorded using the methods of Grant (1982) and age estimated according to Halstead (1985) and Payne (1973) for cattle and sheep/goat respectively. Measurements were taken according to von den Driesch (1976). The condition of the bone was also noted.

6.6.2 A total of 646 animal bone fragments were recorded of which 277 were identified to species (Table 1). The majority were recovered from the ditches with only a small number of fragments recovered from other features.

Table 1. Species representation according to feature type

	Ditch	Gully	Pit	Post-hole	Post-pipe	Beam slot?	Pond	Plough soil	Sub soil	Top soil	Total
Cattle	21	1						2			24
Sheep/goat	7	2	9		2			1			21
Pig	2										2
Horse	131						2				133
Dog	2										2
Red deer	1										1
Lge mammal	3									5	8
Med mammal			3								3
Domestic fowl									94		94
Bird indet.					1				5		6
Uid	312	8	11	2	6	1		5	7		352

6.6.3 *Condition of the bone*

The condition of the bone in each context was assessed and graded on a scale of 1 to 5. Bone graded as 1 was in excellent condition with little or no post-depositional damage, that graded as 5 had suffered severe surface modification and could only be identified as 'bone' The majority of the bone was in poor condition which has resulted in a considerable loss of information particularly with regard to surface modification (Table 2).

Table 2. Condition of the animal bones

	1	2	3	4	5
Ditch			143	336	
Gully			11		
Pit		23			
Beam slot?			1		
Pond			2		
Posthole			2		
Ploughsoil			8		
Post-pipe			9		
Subsoil		101	5		
Topsoil			5		
Total		**124**	**186**	**336**	

6.6.4 ***Species representation***

Of the major domesticates, fragments of cattle and sheep/goat are present in almost equal numbers and pig is present in small numbers. Fragments of horse and domestic fowl are the most numerous however, this is due to the recovery of articulated partial skeletons. Two canine teeth belonging to dog and a red deer antler were also recovered from the ditches.

The majority of the cattle, both pig fragments, the dog teeth and the red deer antler were all recovered from ditch deposits. In contrast, sheep/goat remains were found in a variety of features including ditches, gullies, pits and postpipe and include the partial skeleton of a sheep/goat recovered from a pit (**1887**).

Table 3. Species representation in major bone bearing contexts

		Context	
	0602	**0808**	**1304**
Cattle		18	
Sheep/goat		3	
Pig		1	
Horse		9	122
Dog		2	
Red deer		1	
Lge mammal		3	
Med mammal			
Domestic fowl	94		
Bird indet.	5		
Uid	2	85	214
Total	**101**	**122**	**336**

Table 3 shows the species representation in contexts containing the major concentrations of animal bone. The articulated horse remains were recovered from the fill of a shallow ditch containing 2 sherds of Roman pottery (**1304**) and although the remains are in poor condition it was apparent that two articulated lower rear limbs were present. A few teeth were also recovered but the only evidence for the forelimbs and axial skeleton is a fragment of metacarpal. No other species was identified from this context. Another Romano-British ditch (**0808**) also contained horse remains, although these were not articulated nor were they buried in isolation from other

species. The partial skeleton of a domestic fowl was recovered from the subsoil **(0602)** and is consequently undated.

6.6.5 ***General information***

Measurements

Measurements were obtained from 15 bones and compared with data held on the Animal Bone Metrical Archive Project (ABMAP) at the Centre for Human Ecology and Environment (Appendix 1). In general, these conform to the size expected for animals of the Romano-British period with the exception of two measurements taken on four horse bones. Both the greatest breadth of the horse astragali and the smallest depth of a metacarpal and metatarsal are larger than the range for this period.

Ageing information

Ageing information was obtained from two mandibles and a loose tooth belonging to cattle, and one sheep mandible; estimated ages are shown in Table 4.

Table 4. Estimated age of cattle and sheep according to tooth eruption and wear

	(d)P4	*M1*	*M2*	*M3*	*Age*
Species					
Cattle	(j)				8-18 months
Cattle	c	g			30-36 months
Cattle	h		k	k	senile
Sheep/goat	h	h	g	g	6-8 years

Taphonomy

A few bones displayed evidence of surface modification (Table 5). Bones belonging to cattle, sheep/goat and pig had been gnawed by canids but only cattle and sheep/goat remains possessed evidence of butchery in the form of cut or chop marks. An unidentified fragment had been burnt.

Table 5. Incidence of taphonomy

	Gnawed	*Cut*	*Chopped*	*Burnt*
Cattle	2	1	1	
Sheep/goat	1	1	1	
Pig	1			
Uid				1
Total	**4**	**2**	**2**	**1**

6.6.6 ***Discussion***

Although the presence of horse on Romano-British sites is not unusual, the recovery of articulated horse ankles is interesting as similar finds have been made on other sites of this period. At Uffington (Ingrem n.d), articulated horse ankles were found in a pit associated with a dog skull and mandibles whilst at Balksbury (Maltby n.d.:74), an articulated set of horse metacarpals and a first phalanx were recovered from a pit. At Baldock, Hertfordshire (Chaplin & McCormick 1986) horse bones were present in most of the larger deposits and in some instances a number of related horse bones were present. Although there is no evidence of butchery on the horse remains from Newlands Nursery, there is no reason to assume that they represent anything other than primary butchery waste. In any case, cut marks are unlikely to have survived given the poor condition of much of the bone.

Larger assemblages of animal bone have been recovered from other Romano-British sites in this area of Southern England such as, Fishbourne (Grant 1971), and Elsted (Saunders 1980). Due to the relatively small size of the Newlands Nursery assemblage and the poor condition of much of the bone, further analysis is unlikely to add further information to local or regional studies. For this reason, information on animal size, age and surface modification has been included in this assessment report.

6.6.7 ***Recommendations***

No further analysis is recommended

6.6.8 ***References***

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6.6.9 **Appendix** *Metrical information*

Species	*Element*	*Measurement type*	*Measurement (mm)*	*ABMAP Mean*	*Range*	*n*
Cattle	Astragalus	GLl	63.00	62.6	52.2-77.2	171
Cattle	Astragalus	GLm	58.80	56.4	40.5-71.7	174
Cattle	Metatarsal	Bd	50.00	51.6	43.6-69	175
Cattle	Tibia	Bd	58.10	58.8	43.3-71.8	88
Cattle	Tibia	Dd	41.20	46.1	39-56	29
Sheep/goat	Metatarsal	Bp	21.20	19.3	15.9-27.9	131
Sheep/goat	Metatarsal	Dp	20.1	18.9	15.7-22.1	78
Sheep/goat	Metatarsal	SD	12.5	10.6	7.7-14	30
Sheep/goat	Radius	Bp	30.80	29	24.6-33.5	94
Horse	Astragalus	GH	60.80	55.7	46.1-63	12
Horse	Astragalus	GH	60.30	55.7	46.1-63	12

Species	*Element*	*Measurement type*	*Measurement (mm)*	*ABMAP Mean*	*Range*	*n*
Horse	**Astragalus**	**GB**	**64.60**	**57.6**	**47.5-60.9**	**9**
Horse	**Astragalus**	**GB**	**62.50**	**57.6**	**47.5-60.9**	**9**
Horse	Metacarpal	Bd	49.10	46.4	28-65.7	23
Horse	Metacarpal	Bp	49.00	45.8	40.0-52.3	26
Horse	Metacarpal	Bp	49.00	45.8	40.0-52.3	26
Horse	Metacarpal	Dp	32.10	31.2	27-35.3	16
Horse	Metacarpal	Dp	32.00	31.2	27-35.3	16
Horse	Metacarpal	GL	238.00	211.7	187-271	16
Horse	Metacarpal	GL	226.00	211.7	187-271	16
Horse	**Metacarpal**	**SD**	**34.00**	**30.2**	**27.5-33.1**	**17**
Horse	Metacarpal	SD	30.60	30.2	27.5-33.1	17
Horse	Metatarsal	Bd	47.10	46.4	39.5-53.8	31
Horse	Metatarsal	Bp	48.00	46.4	39.5-53.8	31
Horse	Metatarsal	Dd	36.40	29.8	25.4-37.5	20
Horse	Metatarsal	Dp	41.40	41.1	38.8-42.9	11
Horse	**Metatarsal**	**SD**	**31.10**	**27.7**	**24.5-30.5**	**15**
Horse	Radius	Bd	71.90	69.9	61.7-87	22
Horse	Radius	Bfd	60.20	60.1	52.6-69.5	20
Horse	Scapula	SLC	64.80	57.2	51.8-66.5	9
Horse	Tibia	Bd	74.80	65.7	57.7-80.8	34

7. ENVIRONMENTAL REPORT

Pete Higgins March 2000

7.1 33 samples of soil were taken from as many contexts. Where possible, the sample size was 10l. These were prioritised on the basis of stratigraphic information, and rated from 1 (most important) to 4 (least important). All samples were processed by disaggregation in a dilute solution of Hydrogen peroxide, followed by wet sieving using a 250μ mesh for the flot and a 710 μ mesh for the residue. Flots and residues were dried, and those samples in categories 1 and 2 were sorted under low magnification; artefacts and ecofacts were extracted, and the results are tabulated below. Note that sample 5, context **0809** contained large amounts of burnt cereal remains, and was therefore sub-sampled, 20% of the residue and 2% of the flot being sorted.

7.2

Sample	***Context***	***Material***	***Count***	***Weight (g)***
1	**1114**	Plant	14	<1
		Chenopodium	*1*	
		Moss capsules	*10*	
		Grass stem, sp. indet	*1*	
		sp. indet	*2*	
		Shell, cf Helicidae	1	
3	**1837**	Burnt flint	17	2
		Pottery	1	2
		Burnt clay	33	4
		Plant	52	2
		Moss capsules	*40*	
		Rannunculus sp.	*1*	
		sp. indet	*1*	
		Grass stem cf. *Arrhenatherium elatius*	*6*	
		Twig *Alnus glutinosa*	*4*	*2*
		Large mammal, all small, 5 burnt	21	<1

Sample	Context	Material	Count	Weight (g)
		Small mammal	3	<1
		Bird	24	<1
		Iron Object	1	<1
		Magnetised material	c.500	4
		NB The following sample was sub-sampled; 20% of the residue and 2% of the flot was sorted		
5	**0809**	Burnt flint	5	2
		Burnt clay	11	4
		Cereal seed	36	
		19 x *Triticum sp.*	*19*	
		17 x *Hordeum* sp., hulled	*17*	
		Chaff	710	
		Triticum cf *spelta*	*280*	
		Hordeum vulgare	*95*	
		sp. indet	*335*	
		Other plant	14	<1
		Sonchus sp.	*6*	
		sp. indet	*8*	
		Mammal bone, largest piece burnt	3	1
		Fish	1	<1
7	**0808**	Flint	7	8
		Burnt clay	2	1
		Cereal seed	1	<1
		Hordeum, naked	*1*	
		Other plant	18	<1
		Chenopodium sp.	*2*	
		sp. indet	2	
		Modern grass blade fragments	*14*	
		Mammal bone	15	1
		Magnetised material	c.100	2
11	**0704**	Burnt flint	c.42	549
		Iron slag	c.400	72
		Plant, mainly Graminae stems, cf *Triticum sp.*	54	<1
		Magnetised material	c.750	4
12	**0904**	Burnt flint	14	20
		Pottery, inc. rims and bases - 1 vessel	97	265
		Burnt clay	>150	14
		Charcoal derived from timber	27	1
		Human bone, divided into > + < 5mm, all burnt including a min. of 1 tooth	>2000	324
		Fish, undiagnostic rib	1	<1
		Magnetised material, burnt stone & clay	c.250	2
13	**0906**	Burnt flint, all small to very small	24	2
		Burnt clay (1,000s of very small frags left in residue)	c.90	84
		Plant	16	<1
		grass stem fragments, sp. indet	*4*	
		Charcoal; small chips of timber	*12*	
		Human bone, nearly all very small, all calcined	c.600	50
		Shell, land snail, all burnt	13	<1

Sample	Context	Material	Count	Weight (g)
		1 x *Cochliopa lubrica*	*11*	
		1 x Helicidae	*1*	
		1 x *sp. indet*	*1*	
		Arthropod, sp. indet	2	<1
		Magnetised material	c.400	6
14	**0908**	Burnt flint	21	4
		Plant, moss capsules	8	<1
		Shell	17	<1
		Cochliopa lubrica	*3*	
		Helicidae	*5*	
		sp. indet	*9*	
		Magnetised material	c.25	<1
15	**0817**	Burnt flint	17	4
		Cereal seed	4	<1
		moss capsules	*2*	
		Atriplex sp.	*2*	
		Other plant, inc. shrub leaf fragments, grass stems & blades, all sp indet	35	<1
		Shell	6	<1
		cf. Helicidae	*2*	
		sp. indet	*4*	
17	**1869**	Burnt flint, 1 large, rest small to very small	34	40
		Brick/tile	30	17
		Burnt clay	12	6
		Cereal seed	16	<1
		Atriplex sp.	*14*	
		Compositae	*2*	
		sp. indet.	*1*	
		Other plant	33	<1
		Grass stems and blades	*2*	
		Moss capsules	*31*	
		Magnetised material	c.120	3
		Iron object	1	1
19	**0910**	Burnt flint	15	2
		Burnt clay	1	8
		Plant	66	<1
		Sambucus nigra	*2*	
		Chenopodium cf. album	*3*	
		moss capsules	*12*	
		Cruciferae *cf. Brassica sp.*	*49*	
		Other shell	214	<1
		Arthropod, inc. 1 Modern centipede, 1 sp. indet.	2	
20	**2206**	Burnt flint	35	2
		Burnt clay	33	2
		Plant	98	<1
		Chenopodium cf.album	*3*	
		Compositae	*2*	
		Brassica sp.	*14*	
		Cruciferae	*10*	
		sp. indet	*15*	
		moss capsules	*50*	

Sample	*Context*	*Material*	*Count*	*Weight (g)*
		Charcoal	24	<1
		Magnetised material	c.49	<1
23	**2212**	Burnt flint	30	30
		Burnt clay	1	<1
		Clay pipe	1	1
		Plant	26	<1
		Chenopodium album	*7*	
		moss capsules	*14*	
		green Cotyledons	*4*	
		green moss apex	*1*	<1
		Magnetised material	c.50	<1
24	**2222**	Burnt flint	10	1
		Brick/tile	10	<1
		Plant	16	
		Chenopodium sp.	*9*	<1
		sp. indet	*2*	
		Cruciferae	*3*	
		Grass stems sp. indet	*2*	<1
		Charcoal, not sorted	present	
		Magnetised material	c.30	2
25	**2218**	Burnt flint	16	2
		Worked flint	11	2
		Chalk, not sorted	present	
		Brick/tile	4	1
		Plant	13	
		Chenopodium sp.	*12*	
		sp. indet	*1*	<1
		Charcoal, not sorted	present	
		Present but left		
		Other shell		
		Land snail	1	<1
		Magnetised material	c.40	2
26	**2216**	Burnt flint	11	<1
		Charcoal		
		Magnetised material	c.40	<1
28	**1887**	Burnt flint	4	16
		Plant, *Chenopodium* cf. *album*	1	<1
		Charcoal	16	<1
		Large Mammal	c.900	212
		Probably sheep, 24 x teeth, various partial long bones, 1 x vertebra, part of mandible, many misc. fragments, also phalanges.		
		Magnetised material c.40 <1		
30	**1005**	Limestone, not sorted	present	
		Burnt flint	39	52
		Worked flint	1	3
		Chalk, not sorted	present	
		Plant, sp. indet.	1	<1
		Present but unidentified	<1	
		Charcoal		
		Other shell, spp. indet.	c.30	<1

Sample	*Context*	*Material*	*Count*	*Weight (g)*
		Magnetised material	c.110	<1
32	**1885**	Burnt flint	10	2
		Plant, sp. indet	6	<1
		Charcoal not sorted	present	
		Large mammal bone		
		Probably animal, misc. fragments,		
		2 burnt	8	<1
		Shell, sp. indet.	4	<1
		Magnetised material	c.90	2
33	**1884**	Burnt flint	18	10
		Brick/tile, mortar adhering	1	1
		Daub, abraded	1	2
		Plant, sp. indet.	2	<1
		Charcoal, not sorted	present	
		Large mammal bone	4	<1
		Land snail	2	<1
		Magnetised material	c.60	<1

7.3 Overview

Soil conditions for preservation of ecofact classes were generally slightly alkaline, resulting in survival of shell. Under such conditions, and given the lack of a reasonably long vertical sequence, it was considered unlikely that palynological samples would yield worthwhile results, so none were taken. Preservation of plant material was mainly charring, although water-logging also occurred in a few ditch fills. Some plant fragments were green, and many features were severely truncated; this is indicative of recent, fairly deep, ploughing. It is therefore probable that at least some contexts have been disturbed recently, and the environmental results should be viewed with that in mind.

7.3.1 Land snails

Four contexts (**0817**, **0906**, **0908** and **1114**) yielded fragments of Helicidae shell; since species of this family are perfectly capable of burrowing deep to survive adverse weather conditions, these may well be intrusive.

Broadly speaking the other species present are of wide distribution and wide environmental tolerances. Some of these, too, may be intrusive, and include at least one greenhouse alien.

7.3.2 Animal bone

Given the survival of shell, the general paucity of animal bone is worthy of note. Context **1887** contained large amounts of sheep bone, probably the remains of one or more deliberate burials, but the remaining assemblage is surprisingly poor. Other artefactual information suggests that a Roman period farmstead was nearby, and one might expect considerable domestic bone refuse. Perhaps rubbish disposal took place elsewhere.

7.3.3 Burnt clay, Burnt stone, Magnetised material and Slag

Magnetised material is retrieved by use of a powerful magnet, in order to ensure that no significant material (e.g. hammerscale) is missed, with the result that less significant material (e.g. burnt or heated stone) is also retrieved. All the magnetised material from the samples falls into the latter category, and indicates non-specific burning events. Such material is usually to be found in virtually every archaeological deposit. In most contexts the amount and distribution of burnt

clay and burnt stone also indicate a low 'background noise' of burning events; the amounts do not exceed the levels expected in a rural environment.

The exceptions are contexts **0704**, **0904**, **0906**, and **1869**.
0704 contained iron slag but no hammerscale, indicating that the iron-working process here did not include forging. The precise nature of the process is obscure, although the likeliest candidate is casting. The presence of stems of wheat suggests that straw may have been used as bonding material for the cast, and is suggestive of localised, small-scale activity, possibly intended to produce items for 'in-house' use rather than for exchange.

0904 and **0906** contained human cremations. The presence or absence of pottery (whether hand-collected or from samples) indicates the former was urned, the latter unurned. This is supported by the presence of several thousand small and very small burnt clay fragments (almost 70% of the residue, by weight) in **0906**, together with small chips of burnt timber, suggesting either the deposition of very hot material from a pyre, or the deposition of material from beneath a pyre.

1869 contained brick/tile fragments as well as burnt flint and burnt clay, which are probably all derived from a nearby burning event, possibly a hearth.

7.3.4 Plant material
Context **0809** apart, the plant material from the samples is consistent with agricultural, mainly arable, land use. For example, the assemblages from **0910**, **1837**, **2212**, **2222** and **2206** are all typical of recently cleared land, or perhaps land lying fallow; **1837** maybe had a wooded ditch nearby, while that from **0910** is more suggestive of a drier hedge (on a bank, perhaps?).

The cereal grains present are, where identifiable, typical of agriculture in southern Britain from the Late Iron Age to the end of the Roman period. Wheat (spelt?) and hulled barley were the main crops, with pulses notably absent. **0809** contained large amounts of burnt cereal remains, mainly chaff. This is presumably the remains of a winnowing operation, although the absence of weeds of cereals, e.g. corn cockle, may indicate that this is a secondary process, the weeds having been removed during an earlier winnowing. The assemblage of cereal remains is large, and although such assemblages are not unknown from elsewhere, further analysis and comparison with published assemblages may yield interesting results.

7.3.5 Human Bone
The human bone from contexts **0904** and **0906** was submitted to J McKinley for analysis (see 6.5 Human Bone Report).

7.4 Conclusion
Most of the samples processed were from contexts dated to the Roman period and are entirely consistent with a mainly arable system of land use; field boundaries were probably delineated by hedges (maybe with banks and ditches), and the main crops grown were wheat and barley. The presence of a sheep burial and iron working is consistent with the nearby presence of a farmstead.

8. GEOARCHAEOLOGICAL REPORT (see figure 3)

This report on the geoarchaeological test-pits was written by Dr Keith Wilkinson of the Department of Archaeology, King Alfred's College, Winchester. Mark Roberts of the Boxgrove

Quaternary Project and Rachael Terry of King Alfred's College were also present to observe the test-pits.

8.1 Introduction

As part of an archaeological evaluation carried out by SAS at Newlands Nursery, Pagham, West Sussex, provision was made for the excavation of a number of test-pits to investigate Pleistocene strata at the site. The Assistant County Archaeologist, John Mills, asked for such an investigation as the site lies in an area which is thought to contain deposits relating to Pleistocene raised beaches, ie former shorelines (Bates, Parfitt & Roberts 1998). Raised beach deposits in the West Sussex coastal plain are considered as a highly important resource for the recovery of information relating to the Palaeolithic period, as emphasised by recent investigations at Boxgrove (Roberts & Parfitt 1999). Pagham lies on the lower coastal plain (*sensu* Bates *et al.* 1998) and as such contains deposits relating to the Ipswichian (Oxygen Isotope Stage [OIS] 5e) and subsequent periods (Bates *et al.* 1998; Roberts 1999).

8.2 Methodology

Two test-pits were excavated using the rear-actor of a JCB to a depth of c4.5m below ground level. The strata revealed were described by the author to standard geological criteria in the field. Until 1.2m below the surface, entry into the test-pits in order to describe the stratigraphy was possible, but thereafter descriptions had to be made from material on the spoil heap and distant observation of the section. Fieldwork was initiated and completed on 3 November 1999.

8.3 Results

Test-pit 1

Test-pit 1 was excavated in the north of the site in an area set aside for the construction of a reservoir (near T13). The following strata were observed:

Unit	Depth	Description
1	0-0.3m	Dark yellowish brown humic topsoil. Sharp boundary to 2:
2	0.3m-1.9m	Mid red-brown silt clay with very occasional sub-angular flint granules. Moderate
		to poorly sorted. Sharp boundary to 3:
3	1.9m-3.9m	White cobble to boulder flint gravel in a silt clay matrix. Occasional pockets of
		grey clay, locally iron-stained. Diffuse boundary to 4:
4	3.9m-4.2m	Gravel of highly eroded chalk cobbles and boulders with occasional rounded flint
		pebbles in a silt clay matrix. Diffuse boundary to 5:
5	4.2m-4.3m	Blue-grey silt clay with occasional granular chalk clasts. Sharp boundary to 6:
6	4.3m+	Chalk bedrock

The stratigraphic log demonstrates that chalk bedrock (Unit 6) occurs as a subcrop across the site (see below for the significance of this). Above the chalk are periglacial deposits (Units 3-5), which formed from solifluction activity originating in the Downs to the north. However, the rounded flint pebbles observed in Unit 4 may represent the lag of a raised beach, although this would appear to be highly eroded. Coarse facies within the periglacial sediments represent intense erosive episodes on the Downs which resulted in solifluction lobes extending across much of the coastal plain. Fine-grained deposits (ie Unit 5 and parts of Unit 3) are lower-energy fills of surficial undulations, forming through ephemeral fluvial processes. Unit 2 is a 'brickearth' and, judging from its lack of structure, would appear to have been highly modified since its original

deposition. Brickearths are thought to have formed through a combination of aeolian and fluvial processes.

Test-pit 2

Test-pit 2 was excavated in the southern part of the site (between T8 and T18). The stratigraphy was as follows:

Unit	Depth	Description
7	0-0.3m	Dark yellowish brown humic topsoil. Sharp boundary to 8:
8	0.3m-0.9m	Mid red-brown silt clay with very occasional sub-angular flint granules.
		Moderate to poorly sorted. Sharp boundary to 9:
9	0.9m-4.2m	Cobble to pebble chalk gravels in a chalk-derived silt clay matrix. Poorly
		sorted. Diffuse boundary to 10:
10	4.2m+	Chalk bedrock

The stratigraphy of test-pit 2 is less variable than that of test-pit 1. The uppermost soil (Unit 7) and 'brickearth' (Unit 8) are the same as those observed in test-pit 1 (Units 1 and 2), but the 3.3m of solifluction debris that underlie them consists of uniform chalk-derived gravels.

8.4 Conclusions

Test-pitting at Newlands Nursery demonstrates that only (possible) vestiges of a former raised beach exist, and this only as lag in test-pit 1. The solifluction debris in both test-pits is of low archaeological potential and the only possible archaeology in these strata would be reworked artefacts. These deposits are undoubtedly of Devensian date and probably relate to the last glacial maximum around 20-25,000BP. The 'brickearth' is obviously of slighter later (Devensian) date, but is also of low archaeological potential, given the mixing processes that seem to have operated following its formation. The presence of chalk at the base of the test-pits is of some significance as it demonstrates that the site lies to the south of the Chichester syncline (a depression in the chalk filled by strata of Tertiary age, eg Reading Beds and London Clay) (Roberts 1999).

It is not recommended that any further archaeological investigation of Pleistocene strata be carried out on the Newlands Nursery site.

8.5 Bibliography

Bates, M R, Parfitt, S A and Roberts, M A (1998) Palaeolithic archaeology and Quaternary stratigraphy of the West Sussex coastal plain. In J B Murton, C A Whiteman, M R Bates, D R Bridgland, A J Long, M B Roberts and M P Waller (eds.) *The Quaternary of Kent and Sussex:* field guide (Quaternary Research Association, London pp 165-168)

Roberts, M B (1999) Geological framework. In M B Roberts and S A Parfitt (eds.) *Boxgrove: a Middle Pleistocene hominid site at Eartham Quarry, Boxgrove, West Sussex* (English Heritage Archaeological Report 17, London pp 21-36)

9. RESULTS

9.1 Trench 6 (see figures 2, 3 & 4)

9.1.1 The main purpose of T6 was to provide more information about the features discovered in T2, so the north, east and west sides of T6 were excavated to the top of natural brickearth **0603** before the topsoil **0601** was removed, in order to locate T2 more easily. However, T2 could not be seen in section, so stripping of the topsoil continued in the hope that T2 might be easier to spot in plan. When about 75% of the topsoil had been removed, further excavation ceased, with the agreement of the County Archaeologist.

9.1.2 The only features found in T6 were shallow ploughmarks containing Modern inclusions (not numbered) and four Modern postholes (**0604**, **0606**, **0608** and **0610**) cut into the disturbed brickearth subsoil **0602**. Finds from these postholes included Bronze Age, Roman, Mediaeval and Modern pottery, but the presence of Modern finds in **0602** suggests that these finds are residual. The postholes may relate to field boundaries shown on the site location plan (figure 2) in the southwest corner of the development area. No features other than land drains were seen to cut the natural brickearth. Another indicator that T6 was not in the same area as T2 was that the majority of datable finds were Mediaeval (including pottery, ceramic tile and one stone rooftile [Item 67]) or Modern, rather than Roman. A few Bronze Age sherds were recovered from **0602**. Fragments of chalk and slag or clinker, probably from field manuring, were recovered from both topsoil and subsoil, along with oyster shells and burnt flint, which were the main indicators during excavation that the subsoil **0602** was not a natural deposit. The recovery of domestic fowl bones in fairly good condition from **0602** (see 6.6 Animal Bone Report) probably represents the (fairly recent) disposal of farm waste. Due to a mix-up during finds processing, the finds from **1601** were accidentally amalgamated with **0601**, but the bulk of the finds recovered were from **0601**.

9.2 Trench 7 (see figures 3 & 14)

9.2.1 T7 was aligned to find features crossing the southwest corner of the site, while avoiding the overhead power lines.

9.2.2 The topsoil **0701** contained a mixture of Roman, Mediaeval, Post-Mediaeval and Modern finds, while the subsoil **0702** contained less Modern material and a few sherds of Bronze Age pottery. Here the subsoil sealed **0704**, the fill of a ditch **0705**, which cut the natural brickearth **0703**. The only finds recovered from **0704** were burnt flint, a possibly worked flint and a nail [Item 10].

9.3 Trench 8 (see figures 3, 6, 10 & 26)

9.3.1 T8 was designed to test how far south the features found in T2 extended, but because of the mislocation of T2 only the eastern end of T8 actually coincided with T2. T2 was first seen crossing T8, but because it was so far away from its recorded position it was assumed to be another Modern feature until T6, T19 and T20 had been excavated without finding T2, when its significance was realised.

9.3.2 The topsoil **0801** contained a mixture of Roman Mediaeval and Modern finds, and the subsoil **0802** contained less Modern material. **0802** was not continuous along the trench length, being replaced by an overlying darker layer **0805**, interpreted as a remnant ploughsoil, in the northeastern arm of T8. Three features cut **0805**: **0807**, **0814** and **0818**. **0807** was a large v-shaped ditch (= ditch ***6*** in T2, not excavated) with three fills - **0808**, **0809** and **0812** - and was not fully excavated, due to its depth and the presence of water seeping into its base. Natural brickearth **0806** was seen near the base of **0807** to overlie brickearth containing lumps of chalk,

0813. Finds were only recovered from **0808**, but these included large quantities of Roman pottery ranging from the Late Iron Age/early Roman period to the 3rd-4th centuries, and building material (mainly rooftiles), as well as worked stone (a quern?), a possible clay loomweight, animal bone (see 6.6 Animal Bone Report), two nails and two probably 3rd-4th century Roman coins. One ditch fill **0809** contained evidence of agricultural activity (see 7. Environmental Report). The edge of this ditch was also seen at the eastern end of T21. Feature **0818** was not excavated, but was sampled (without success) to recover dating evidence. The other feature cutting **0805**, a squarish feature with a steeply sloping base (**0814**) lay at the edge of T2 where it crossed T8. Its fill, **0815**, contained unrotted grass and redeposited topsoil, and is probably the imprint of one of the JCB jacks from the previous evaluation.

9.3.3 The subsoil **0802** sealed two features in the western arm of T8: **0804** was a large but poorly-defined feature with gently sloping sides whose fill **0803** of redeposited brickearth with brown mottling contained Roman and Mediaeval pottery, a small fragment of possibly Roman tile, an unidentified metal object, oyster shells and two horse molars (see 6.6 Animal Bone Report). It has been interpreted as a possible pond. The other feature, **0816**, was linear in form with a group of large flint nodules in the top of its fill **0817**, which also contained small fragments of bone (see 7. Environmental Report). It was not fully excavated, due to depth and water seepage. Both features cut **0806**.

9.4 Trench 9 (See figures 3, 20 & 26)

9.4.1 T9 was originally placed to test the northward extent of the T2 features and to pick up any east-west features in that part of the site.

9.4.2 The topsoil **0901** overlay subsoil **0902**. **0902** was cut only by a service trench, which was detected with the CAT and left unexcavated, but sealed five features: **0905**, **0907**, **0909**, **0911** and **0913**, which were cut into natural brickearth **0903**. Of these, two (**0909** and **0913**) were interpreted as animal disturbance because of their amorphous shape: **0913** was not excavated, but **0908**, the fill of **0909**, contained burnt flint and Middle Bronze Age pottery as well as a sherd of Mediaeval glazed sandyware. Feature **0911** was a ditch seen twice crossing T9, but was not excavated because it lay on the line of a field boundary noted on the 1847 Tithe map (the line of this ditch crossed T19 and T20 and was excavated in T20 as **2004**). The remaining features in T9 were both cremation pits: **0904**, the fill of **0905**, contained Later Bronze Age pottery, burnt clay and burnt human bone [Item 11], but **0906**, the fill of **0907**, was un-urned, and contained considerably more burnt clay as well as burnt human bone [Item 12]. These may represent the remnant of a ploughed-out Bronze Age burial ground, although individual burials of htis date are also widespread in West Sussex.

9.5 Trench 10 (see figure 3)

9.5.1 T10 was located to pick up linear features to the west of the previous evaluation.

9.5.2 The topsoil **1001** overlay subsoil **1002**. Both contained Post-Mediaeval or Modern pottery and ceramic building material. The only feature found in T10, apart from land drains and natural disturbance, was **1004**, a ditch that was cut into natural brickearth **1003** and sealed by **1002** but only partly excavated. Its fill **1005** contained only burnt flint, a possibly worked flint and one tiny sherd of burnt Early Iron Age or Later Roman grog-tempered pottery. **1004** aligns fairly well with the Roman ditch found in T12 and T14 (**1204** and **1406**).

9.6 Trench 11 (see figures 3, 23 & 28)
9.6.1 T11 was located along the western edge of the proposed greenhouse. It was the first trench excavated.

9.6.2 The topsoil **1101** contained large quantities of broken flowerpot, both ceramic and plastic, and other Modern inclusions, which were not collected. Two disturbed brickearth layers, **1102** and **1103**, were recorded in T11, but they were very similar in colour and texture and had very diffuse boundaries. **1102** contained a Mediaeval pottery, a peg tile, a possible tegula and a nail [Item 14]. Apart from land drains, there were only three small features in T11: possible postholes **1105** and **1106**, and a very vague feature (described by the excavator as possibly only a 'soil mark') **1113**, which all cut natural brickearth **1104**. **1105** and **1106** were both very truncated, and the only find recovered was one burnt sherd of Bronze Age pottery from **1108**, the fill of **1106**, although **1107**, the fill of **1105**, contained burnt clay and charcoal around its edge. It is possible that these features are the truncated remnants of cremation burials similar to **0905** and **0907**. **1114**, the fill of **1113**, contained no finds, and only a few small fragments of charcoal (see 8. Environmental Report), and is probably a natural feature.

9.7 Trench 12 (see figures 3 & 11)
9.7.1 T12 was placed to cover part of the internal layout of the proposed greenhouse.

9.7.2 The topsoil of T12, **1201**, contained Post-Mediaeval and Modern pottery, a variety of types of rooftile and two iron objects [Items 15 and 16]. The subsoil **1202** contained bottle glass and an iron object [Item 17], but the pottery recovered was a mixture of Bronze Age, Roman and Mediaeval types. The only feature in T12 was **1204**, a ditch cut into natural brickearth **1203**, which aligned with **1004** and **1406** and which contained three fills: **1205**, **1206** and **1207**. No finds or inclusions were recorded from **1206**, the middle fill, and the primary fill, **1207**, contained only burnt flint, but the top fill, **1205**, contained chalk and charcoal flecks, oyster shells, Roman and Mediaeval pottery and one (probably intrusive) fragment of clinker.

9.8 Trench 13 (see figures 3, 5 & 23)
9.8.1 T13 was placed to investigate the proposed reservoir in the northwest corner of the site.

9.8.2 The topsoil, **1301**, contained Mediaeval, Post-Mediaeval and Modern pottery, including flowerpot, and brick and tile fragments, but no oyster shell was recovered. The subsoil **1302** was less mixed, and contained oyster shell, Bronze Age and Roman pottery, undiagnostic brick and tile and a nail [Item 9]. **1302** sealed **1305**, the only feature seen in T13, whose fill **1304** contained Roman pottery and animal bone, including the articulated lower rear legs of a horse, which has been interpreted as butchery waste (see 6.6 Animal Bone Report). **1305** was cut into natural brickearth **1303**.

9.9 Trench 14 (see figures 3, 12 & 23)
9.9.1 T14 was placed along the northern edge of the footprint of the proposed development, with an angled arm to detect any east-west linear features.

9.9.2 Topsoil **1401** overlay subsoil **1402**. Both produced burnt flint and worked flint and a mixture of Mediaeval and later pottery, with some probably Mediaeval roof tile as well as undiagnostic and Modern building material, although **1402** also contained 10 sherds of Bronze Age pottery, which may possibly come from a feature that was not identified during the excavation. One of only two clay pipe stems from the site was recovered from **1401** along with a nail [Item18]. The subsoil sealed the only two features found in T14, ditch **1406** and unexcavated

ditch **1404**, which were cut into natural brickearth **1403**. **1406** has been interpreted as the same ditch as **1004** and **1204**. Although it is possible that it may have veered slightly to the east (in which case **1404** could be the continuation rather than **1406**) the excavator of **1404** noted that its fill was virtually indistinguishable from the natural brickearth, and doubted whether it was a feature at all. Both ditches had one fill: **1405** produced a burnt flint and three sherds of burnt Bronze Age pottery, possibly from the same vessel, and **1407** contained one worked flint flake, six burnt flints, one rim of a coarse Mediaeval pot, a fragment of ceramic building material in a fine orange fabric, and five oyster shells.

9.10 Trench 15 (see figure 3)
9.10.1 T15 was placed to explore the northeastern part of the proposed greenhouse, but was not dug due to time pressure, with the agreement of John Mills.

9.11 Trench 16 (see figures 3 & 25)
9.11.1 T16 was positioned along the eastern frontage of the proposed building, with an angled arm to catch linear features running northwest-southeast.

9.11.2 Three contexts were identified in T16: topsoil **1601**, subsoil **1602** and natural brickearth **1603**. The finds from **1601** were accidentally amalgamated during post-excavation with **0601**, but as the majority were from **0601** they have all been recorded as such. The finds types recovered from **1601** included stone, pottery, ceramic building material and oyster shell. **1602** contained a possibly worked flint flake, Bronze Age, Roman and Mediaeval pottery, peg tiles, a nail shaft [Item 19], a fragment of slag and oyster shells.

9.12 Trench 17 (see figures 3 & 25)
9.12.1 T17 was placed along the eastern frontage of the proposed greenhouse, with an angled arm to the southwest.

9.12.2 A number of potential features were seen in T17, but on investigation all were found to be natural features or patches of disturbed ground. The topsoil **1701** overlay subsoil **1702**, which overlay natural brickearth **1703**. Mediaeval and Modern pottery and ceramic building material were recovered from **1701**; **1702** also contained Roman pottery, two unusual burnt clay fragments, four nails and an iron wedge apparently used in building, as it had mortar adhering to it [Items 62-66].

9.13 Trench 18 (see figures 3, 7, 8, 15, 16, 17, 18, 19, 21, 22, 24 & 27)
9.13.1 T18 was placed to find any features in the southeast corner of the development. It was the most archaeologically significant trench, although if T2 had not been mis-located, T6 would have been.

9.13.2 The topsoil **1801** contained a mixture of pottery types, including Roman pottery and building material. It lay above **1804**, which extended across most of the trench, but was not seen at the western and eastern ends or between features **1812** and **1810**, where **1802** lay directly below **1801**. A number of features cut **1804**: all contained Roman finds. **1806**, the fill of **1805**; **1811**, the fill of **1812**; **1813**, the fill of **1814**; **1835**, the fill of **1834**; **1837**, the fill of **1836**; **1839**, the fill of **1838**; **1869**, the fill of **1868**; **1872**, the fill of **1871**; **1874**, the fill of **1874** and **1889**, the fill of **1888**, all contained Roman pottery. **1804** itself contained Mediaeval pottery, although 5 out of a total of 84 sherds could be the result of ploughing.

9.13.3 Feature **1810/1842** had a confused relationship with **1804**, as its west edge clearly cut **1802**, but it may not have cut **1804**, which thinned out just to the east of **1810**. Three fills of **1810/1842** - **1809**, **1832** and **1840** - all contained Roman pottery.

9.13.4 A small sondage was dug through **1804** to reveal a group of stakeholes, **1844-1852**, cut into what was at first thought to be natural brickearth **1803**, but was later found to be **1802**, the disturbed brickearth layer common to all trenches. Towards the end of the fieldwork, about $^2/_3$ of **1804** was removed by machine to see whether there were any other features below it. Below **1804**, as well as the stakeholes, four features were found to cut **1802**: three of these - **1875**, **1877** and **1879** - were intercutting, or possibly the same feature, similar in shape to **1805**. **1876**, the fill of **1875**, was unfortunately not assessed in the Pottery Report, but the pottery is probably Roman; **1880**, the fill of **1879**, contained no finds, and **1878**, the fill of **1877**, contained Roman pottery. The only other feature seen below **1804** and cutting **1802** was a small pit, **1886** (seen in section only) whose fill, **1887**, contained one sherd of Roman pottery and a complete(?) articulated(?) sheep/goat skeleton, the bulk of which was recovered from soil sample no. 28. Layer **1802** contained Mediaeval tile and pottery as well as Roman material, but these finds could also be a consequence of ploughing, especially as they were recovered from the western end of the trench, where **1802** lay immediately below the topsoil. Layer **1890**, seen only at the extreme west end of T18, had an unclear relationship to **1802**, but lay between **1803** and **1801**: it contained a single sherd of Roman pottery.

9.13.5 After the removal of part of **1802** only two features were found sealed by it. Both features were ditches: **1881** had one fill, **1882**, which contained Roman pottery, a fragment of hearth lining and butchered animal bone; **1883** had two fills, **1884** and **1885**, both of which contained only one sherd of Roman pottery.

9.14 Trench 19 (see figure 3)
9.14.1 T19 was dug in an attempt to locate T2 before it had been identified in T8.

9.14.2 Topsoil **1901** and subsoil **1902** were excavated to the top of natural brickearth **1903**. Apart from a natural feature at the south end of T19, the only other feature was a vague linear crossing the northern end of the trench. This was excavated to a depth of 0.3m to establish that it was a feature, but left unexcavated when it was realised that it was the same as the Tithe map ditch (see also **0911** and **2004**). The ditch appeared to be sealed by **1902**, but the similarity of the redeposited brickearth fill to the disturbed brickearth subsoil was so close that their relationship cannot be definitely stated. Both **1901** and **1902** contained small quantities of burnt flint, chalk and oyster shell, though **1901** had a greater variety of finds - including Mediaeval and Post-Mediaeval pottery, possibly Mediaeval tile, and Modern glass and brick - than **1902**, which contained only 2 sherds, 1 Bronze Age, and 1 Roman. Some of the finds from **02** were recovered from T19.

9.15 Trench 20 (see figures 3 & 13)
9.15.1 T20 was also dug in an attempt to locate T2. The end of T9 was backfilled in order to facilitate the excavation of T20.

9.15.2 Topsoil **2001** overlay subsoil **2002**, which sealed **2005**, the fill of **2004**, the only feature in T20, apart from land drains. Both topsoil and subsoil contained Modern inclusions similar to those in T6. The fill **2005** contained Mediaeval and Post-Mediaeval as well as Roman pottery and building material, and Modern-looking iron objects [Items 24-26]. Because of these inclusions

and its location, **2004** has been interpreted as the ditch seen on the Tithe map. Ditch **2004** cut the natural brickearth **2003**. Some of the finds from **02** were recovered from T20.

9.16 Trench 21 (see figure 3)

9.16.1 T21 was dug after T2 had been identified crossing T8, but before the western end of T2 had been located. The reproduction of trench plans without a bar scale and at a different scale to that recorded on the illustrations in the SA evaluation report also confused the identification, so that T2 was expected to be longer than it actually was. Because ditch **0807** and land drain **0810** must have crossed T2, it was first thought that **0807** was the equivalent of ditch ***45*** from T2, as that would have made T2's position nearer to its recorded location. Therefore T21 was dug parallel to the supposed position of T2 in order to find ditches ***8***, ***10*** and ***12***.

9.16.2 Apart from the edge of ditch ***6*/0807**, no other features were found in T21, so it was abandoned. Topsoil **2101** contained Roman pottery and tile, but the subsoil **2102** also contained a Mediaeval or Post-Mediaeval rooftile and part of a flowerpot, showing that the top of **2102**, at least, had been disturbed after **0807** was cut into it. Some of the finds from **02** were recovered from T21.

9.17 Trench 22 (see figures 3 & 9)

9.17.1 T22 was dug after T21 had failed to locate the Roman features, and after the west end of T2 had finally been found by trial excavation. It was dug parallel to T2 and long enough to pick up the concentration of Roman features so that they could be identified and further dating evidence recovered. Unfortunately, there appeared to be little correlation between T22 and T2, with only feature ***12*** being tentatively identified as **2215**, and no other ditches seen. The features in T22 were not excavated, but were sampled to recover dating evidence, although very little pottery or other dating evidence was recovered (see 7. Environmental Report).

9.17.2 The topsoil **2201** contained one sherd of Mediaeval pottery. No finds were recovered from the subsoil **2202**. All the features seen cut the subsoil, and the only intercutting features were **2206** and **2212**, which were both cut by **2207**, a land drain. Finds were only recovered from the surface of **2214**, the fill of **2213** (one abraded Roman sherd), and **2224**, the fill of **2213** (one fragment of Modern brick).

9.18 Unstratified finds

9.18.1 Unstratified finds were recovered from the surface of the field (context **01**), from the various pits and trenches dug to try to locate T2 (context **02**), by metal detecting the spoil, especially from T8 and T18 (context **03**), and from an animal burrow in T18 (context **1870**). Finds from **01** were collected randomly while crossing the field from trench to trench, but there did not seem to be a close correlation between the amount of unstratified material and the presence of features: in fact, finds were common across the entire field, with perhaps fewer in the area of T6, and much of the Roman material came from parts of the site well away from T8 and T18. This is presumably the result of plough action.

9.19 **Confidence Rating**

The confidence rating for the excavation depended on several factors: the weather was generally good, but occasional heavy rain caused some problems with context recognition, especially where this involved redeposited or disturbed brickearth, as was common on this site. Time pressure also caused some recording problems, especially towards the end of the fieldwork. However, the machining was of high quality and the quality of the workforce was good, so the overall confidence rating for the recording is high.

10. CONCLUSIONS

10.1 NATURAL DEPOSITS

The natural deposits found on the site were brickearth (**0603**, **0703**, **0806**, **0903**, **1003**, **1104**, **1203**, **1303**, **1403**, **1603**, **1703**, **1803**, **1903** and **2003**), and brickearth with chalk inclusions (**0813** and **1843**). See also 8. Geoarchaeological Report.

10.2 BRONZE AGE

Four Bronze Age features were found, and all were severely truncated: feature **1404** is the earliest found on the site, with pottery dating from the Middle Bronze Age. These sherds were burnt, and so may derive from a cremation, although there was no human bone or other evidence of burning seen in **1404**. Feature **1106** produced one sherd of Mid-Late Bronze Age date which was also burnt: although no human bone was present, this feature could also have been the ploughed-out remnant of a cremation pit. Features **0905** and **0907** were both cremation pits, one urned, the other un-urned, but there is no reason to suppose different dates for them as the two rites are commonly found together in Bronze Age burial grounds. The pottery from **0905** dates these to the post-Deverel-Rimbury tradition of the Late Bronze Age. Only 1 sherd of Mid-Late Bronze Age pottery was collected from the field surface - the rest came mainly from the topsoil or subsoil or from later features.

10.3 ROMAN EVIDENCE

The bulk of the datable features on the site were Roman. Unfortunately, none of the features can be unambiguously dated by their finds to either the early or late Roman periods. The coins from **0808** provided the best potential dating evidence from the site, but although clearly Roman, they could not be precisely identified: they are however more likely to be late rather than early Roman from their size and base metal content. One fragment of a Roman glass vessel [Item36] was recovered from **1839**, and the fragment of window glass from **02** [Item 48] could be Roman, because the 'matt-glossy' technique used to make it was widespread during the first three centuries of Roman Britain, but was superseded in the 4th century by the use of opened-out cylinders of blown glass. The quernstones from **0808** and **1806** [Items 1 and 54] and the whetstone from **1806** [Item 55] could also be worth further study. The Roman features found were mainly linear ditches and gullies, with only **0807** (and the unexcavated **1881** and **1883**?) being of substantial size (possibly land divisions?), whereas the rest are more likely to represent field boundaries, drainage features or stock enclosures. Apart from the very large posthole **1834/1836**, there were no significant structural features found on the site. The function of **1805** and **1875/1877/1879** is unknown, but they appear too small to be buildings, and the many stakeholes found are more likely to represent fence lines than anything more substantial. However it is clear that, given the quantity of finds recovered (from surface collection, from the topsoil and subsoil, and from features) the absence of *tesserae* and relative paucity of fine imported pottery, glass or metalwork implies that there was definitely not a villa on the site. The absence of Roman features from T6, from the east end of T2 and from the SW-NE arm of T19 shows that the area of Roman activity did not extend far to the north or west of T8 and T18. It is thus likely that the focus of the settlement lay further to the south on the neighbouring property, but the evidence from this site, especially the environmental evidence from ditch **0807**, suggests that a small farmstead is much more likely than a villa.

10.4 MEDIAEVAL EVIDENCE

Although a fairly large quantity (160 sherds) of Mediaeval pottery was recovered from the site, almost half came from surface collection, and most of the rest from topsoils and subsoils. No

features could be unequivocally dated to the Mediaeval period: posthole **0604** contained Mediaeval tile (or Bronze Age pottery?) and **0608** contained one sherd each of Roman and Mediaeval pot, but both of these cut **0602**, which contained Post-Mediaeval building material, and so are likely to be Post-Mediaeval or Modern. Feature **1004/1204/1406** is probably Mediaeval rather than Roman, and is almost certainly a boundary ditch. At the west end of T8, feature **0804**, which contained Roman and Mediaeval material, may be the edge of a pond, but could as well be Post-Mediaeval in date as Mediaeval. The only other feature containing Mediaeval pottery was **0909**, where one sherd of glazed pottery was found together with Middle Bronze Age pot: the excavator had difficulty in ditinguishing the fill and determining the boundaries of the feature, and thought it likely to be animal disturbance. Mediaeval pottery recovered from **0802, 1802** and **1804** is likely to be intrusive, as a result of ploughing. The absence of any material earlier than the 13th century is also interesting, as the area was presumably settled and used for agriculture throughout the Saxon period.

10.5 POST-MEDIAEVAL AND MODERN EVIDENCE

Most of the Post-Mediaeval and Modern finds were recovered from topsoil and subsoil contexts, but the presence of Post-Mediaeval finds in **2005** confirms the map evidence that field boundaries subdividing the site (shown on the Tithe map) were infilled during the mid-19th century to make one large field. Other evidence of recent activity includes the disposal of domestic fowl bones in **0602**, and the presence in the soil samples of an alien species of snail from the greenhouses.

10.6 UNDATED FEATURES AND LAYERS

10.6.1 Many of the features remain undated, particularly in T22, where hand-cleaning and soil sampling failed to recover dating evidence. Some features can be tentatively dated: posthole **0610** is likely to be Post-Mediaeval or Modern like the other postholes in T6; **0704** is probably Roman or later, because of the presence of a nail; ditch **0816** may be prehistoric, because of the absence of finds or diagnostic inclusions, but **0818** is likely to be Roman, as (like **0807**) it cuts **0805**; **0911** is on the line of the Tithe map ditch, and so is Post-Mediaeval; **1105** may be prehistoric because of its similarity and proximity to **1106**; **1866** and **1879** are probably Roman because of their relationship to adjoining features. In T22, all the features except **2213** (Roman), **2207** and **2223** (both Modern) were undated, despite being sampled to recover datable finds.

10.6.2 The subsoil(s) identified present a problem of interpretation for the site, as they appeared to the excavators to be the same context, but had different relationships to the features in different trenches. No subsoils were found during stage 1 of the evaluation, but the presence of finds (particularly oyster shells) well below the top of what appeared to be natural brickearth confirmed that a disturbed brickearth subsoil existed. The reasonably good, unabraded state of the oyster shells and some of the pottery found suggests that the subsoil was not the result of long-term deep ploughing. However, in some trenches (T6, T18 and T22) the subsoil was cut by all features, and thus is earlier than them, whereas in the majority of trenches (T7, T9-T14 and T20) the subsoil sealed all features, and so is later. In T8, the subsoil sealed some features and was cut by others, including Roman features, but contained Mediaeval finds. In T18 there were Roman features cutting the subsoil, which also contained Mediaeval as well as Roman finds. The possibility of similar but different subsoils arising from different agricultural practices in what used to be separate fields can be discounted as there is no correlation between the subsoils in trenches located in the same Tithe map field. It seems, therefore, that the most reasonable explanation is that there is not one 'subsoil', but that the brickearth has been disturbed by ploughing, and perhaps in other ways, at various times in the past, giving rise to what appears to be a homogeneous layer.

10.7 GENERAL

In general, the evaluation demonstrated that, although there was much of interest on the site, there is no need for further excavation or observations during groundworks for the development. The extent of Bronze Age activity was slightly greater than anticipated, but most of the evidence was highly truncated or residual. The Roman evidence suggests that the focus of settlement was nearby, probably to the south, but not actually within the development area, and the existence of a villa on the site can now be discounted. The complete absence of any Saxon or Early Mediaeval evidence from the site is not unusual for this part of West Sussex, and evidence of later Mediaeval activity is widespread but not intensive, and no more than would be expected in this area. However, the possibility of a settlement or even a villa existing on the neighbouring properties, especially to the south, should be recognised, particularly if they are to be developed in the future.

10.8 MITIGATION

At a meeting on site on 26/11/99 between John Mills, John Magilton, Laurence MacRae and Brian Whitehead, the question of how to mitigate the effects of the development on the archaeology was discussed. As the main area of archaeological interest lay at the southern edge of the site and the proposed construction method was to be by digging large numbers of small postholes, it was decided that a watching brief on the main part of the development would not produce any meaningful information. As the Roman features and finds suggested a small farming settlement (rather than a villa) located somewhere to the south of the site, a compromise, by which the size of the greenhouse would be reduced by one bay on the south side (thus protecting the likely area of archaeological interest without hindering the development) was agreed.

11. SOURCES

The following sources were used in the preparation of this report:

Parigo Horticultural Co Ltd, Newland Nursery, Lagness, Pagham, West Sussex (Arun District Council Planning Permission ref. P/28/98) Scheme of Archaeological Investigation (Stage 2) West Sussex County Council 1999

Method Statement for an Archaeological Evaluation on land at Newland Nursery, Lagness, Pagham, West Sussex SAS Ltd 1999

Report on an Archaeological Evaluation at Newlands Nursery, Lagness, Pagham, West Sussex Southern Archaeology (Chichester) Ltd 1998

West Sussex Record Office:

PM 249 no. 3B	John Norden map	1595
PM 249 no. 13	Yeakell & Gardner map	1778
PM 249 no. 15	map of Sussex	1795
PM 249 no. 19	OS 1" Series	1813
TD/W94	Pagham tithe map	1847
1875	OS 25" Series sheet LXI/16	
1896/7	OS 25" Series sheet LXI/16	
1912	OS 25" Series Sheet LXI.16	
1933	OS 25" Series Sheet LXI.16	

Also consulted were:

The apportionment of the tithe map, for land-use and field names

'The Meare Marsh of Merston' by E M Yates *Sussex Archaeological Collections 113* pp118-123
Lagmarsh House Farm (Lagness) Parliamentary Survey *Sussex Archaeological Collections 24* pp234-7

12. ACKNOWLEDGEMENTS

11.1 Southern Archaeological Services Ltd would like to thank the following individuals and organisations for their help during the project:-

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Brian Coe of Parigo Horticultural Co Ltd
John Magilton, archaeological adviser to the client
Mark Taylor and John Mills of the County Archaeologist's Office
The staff of West Sussex Record Office
Mark Roberts, Boxgrove Quaternary Project
George Willis, the JCB operator (Cosham Plant Hire)

11.2

Site Director	Brian Whitehead
Site Assistants	Pete Higgins, Ian Barnes, Matt Rous, Dave Norcott, Trevor Steptoe
Report	Brian Whitehead
Illustrations	Brian Whitehead, Ian Barnes
Finds	Sue Higgins, Rebecca Marsh, Linzi Harvey, Brian Whitehead
Environmental	Pete Higgins
Geoarchaeological	Dr Keith Wilkinson (King Alfred's College)
Animal bone	Claire Ingrem (Centre for Human Ecology & Environment, University of Southampton)
Human bone	Jacqueline McKinley (Trust for Wessex Archaeology)
Roman pottery	Lorraine Mepham (Trust for Wessex Archaeology)
Mediaeval and later pottery	Duncan H Brown (Southampton City Museums)
X-raying & conservation	Southampton City Museums
Documentary research	Brian Whitehead
Editing	Brian Whitehead and SAS collective

13. ILLUSTRATIONS

Figure 1	Documentary background
Figure 1a	Extract from John Norden Map 1595 (WSRO PM 249 no. 3B)
Figure 1b	Extract reproduced from the 1813 Ordnance Survey 1" map
Figure 1c	Extract from 1795 map of Sussex (WSRO PM 249 no. 15)
Figure 1d	Extract from Yeakell & Gardner map 1778 (WSRO PM 249 no. 13)
Figure 1e	Extract reproduced from the 1875 Ordnance Survey map
Figure 1f	Extract reproduced from the 1896/97 Ordnance Survey map
Figure 1g	Extract reproduced from the 1912 Ordnance Survey map
Figure 1h	Extract reproduced from the 1933 Ordnance Survey map
Figure 1i	Extract from 1847 Pagham Tithe map (WSRO MF 82)

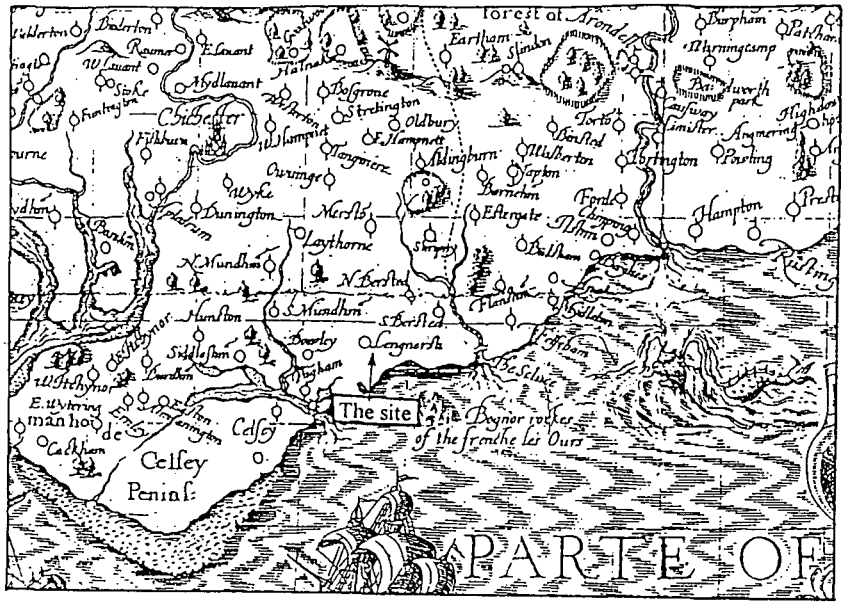


Figure 1a Extract from John Norden Map 1595 (WSRO PM 249 no. 3B)

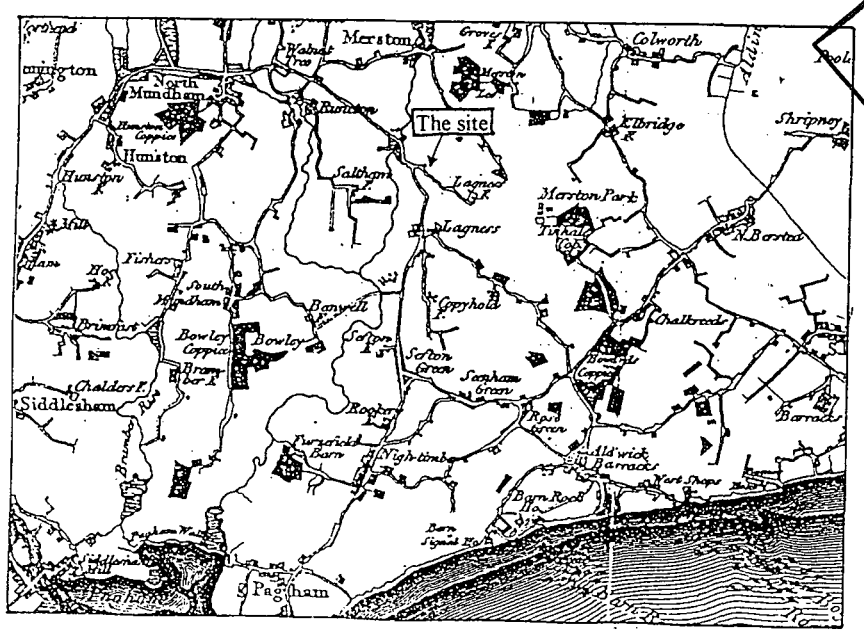


Figure 1b Extract reproduced from the 1813 Ordnance Survey 1" map

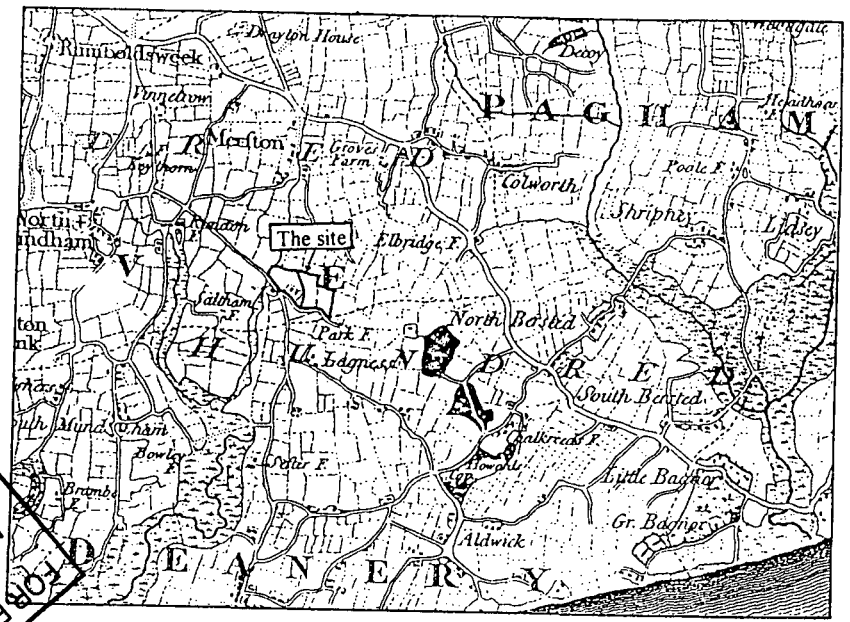


Figure 1c Extract from 1795 map of Sussex (WSRO PM 249 no. 15)

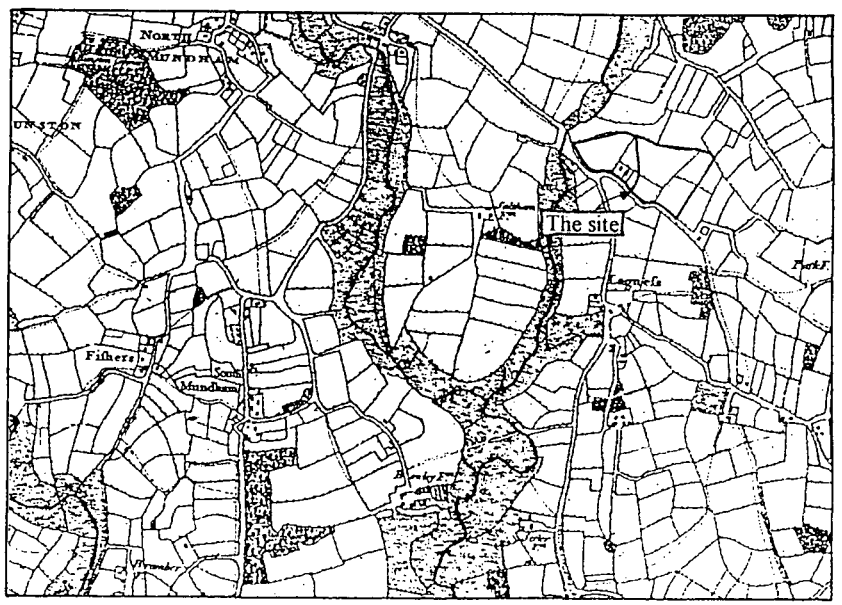


Figure 1d Extract from Yeakell & Gardner map 1778 (WSRO PM 249 no. 13)

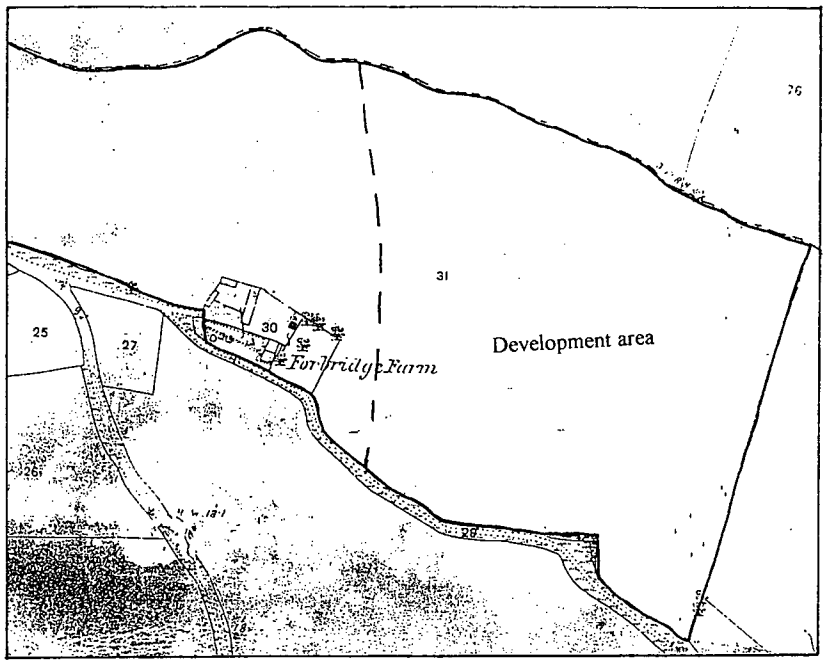


Figure 1e Extract reproduced from the 1875 Ordnance Survey map

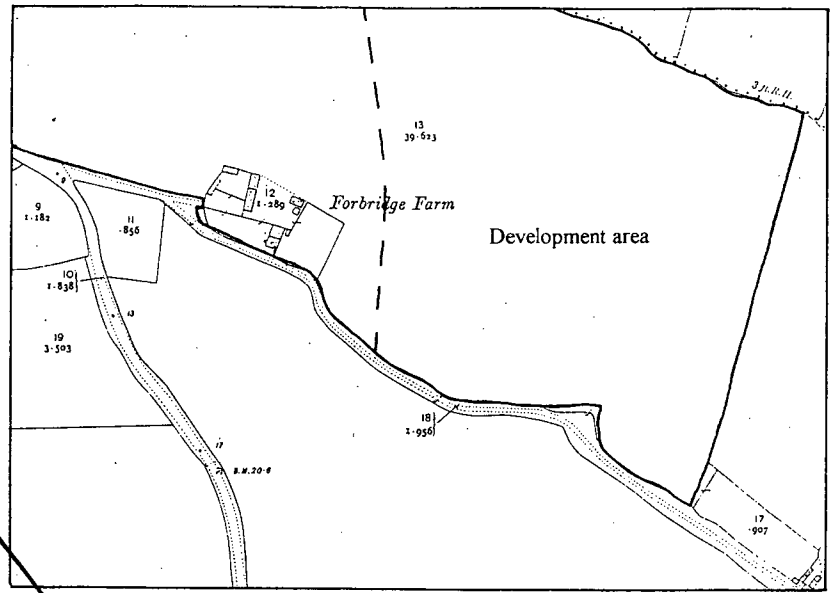


Figure 1g Extract reproduced from the 1912 Ordnance Survey map

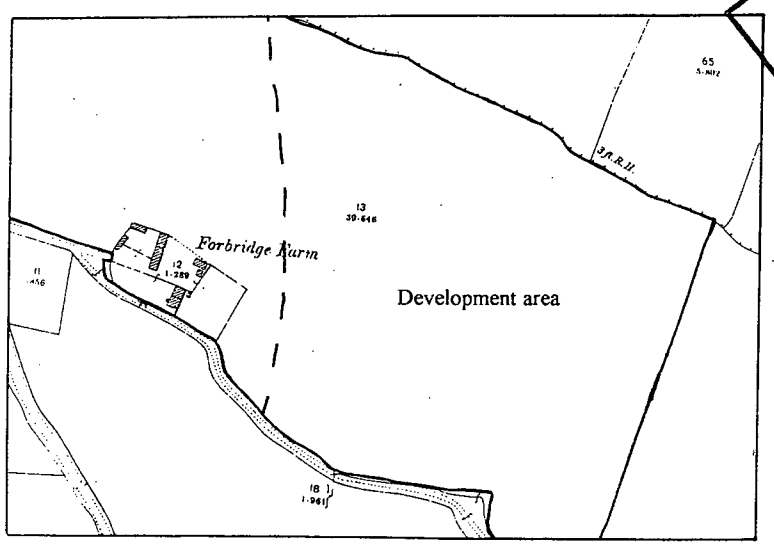


Figure 1f Extract reproduced from the 1896/97 Ordnance Survey map

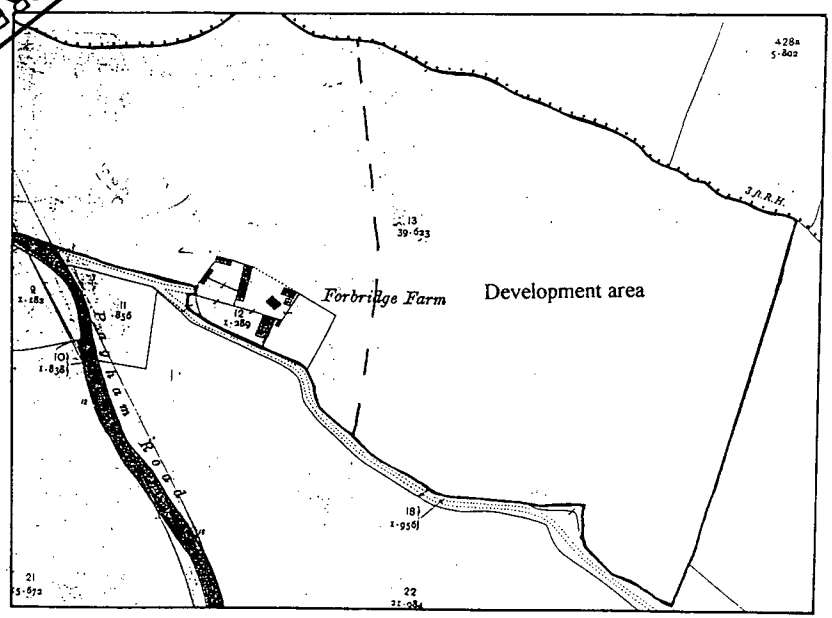


Figure 1h Extract reproduced from the 1933 Ordnance Survey map

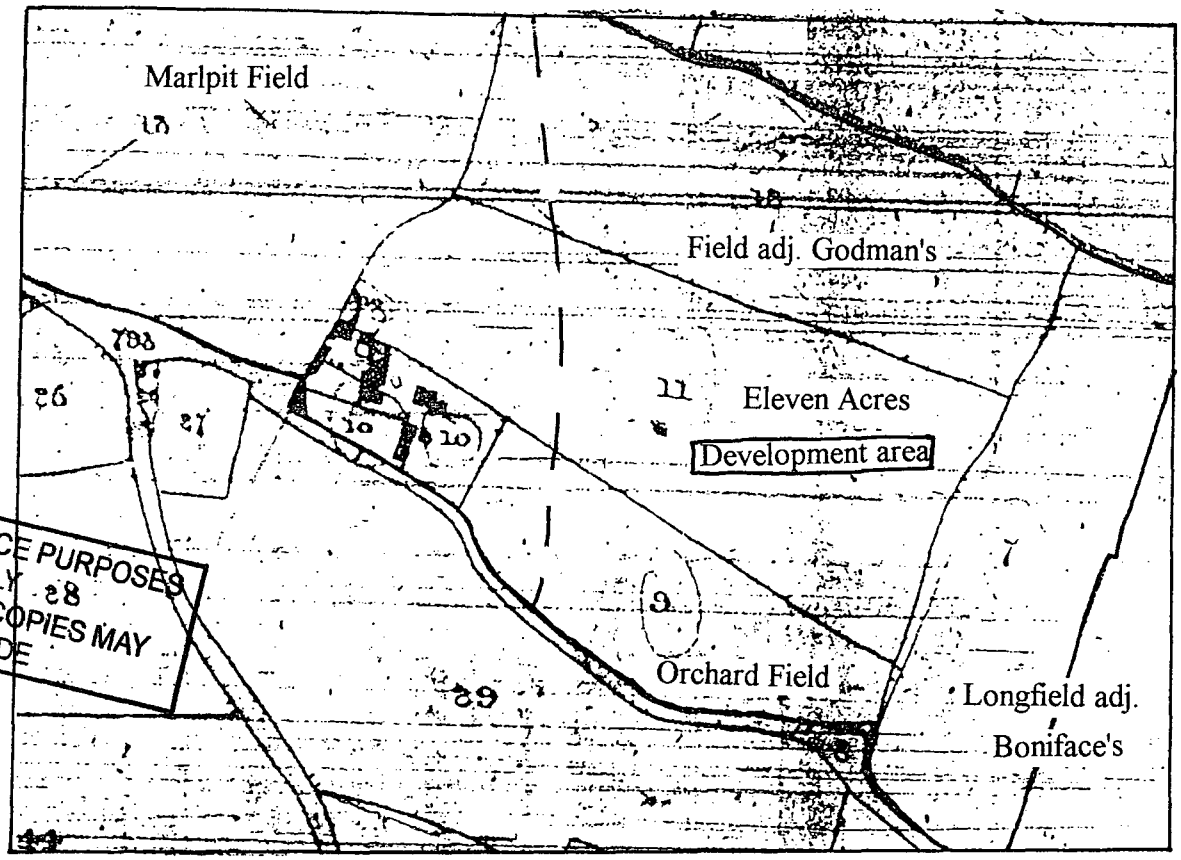
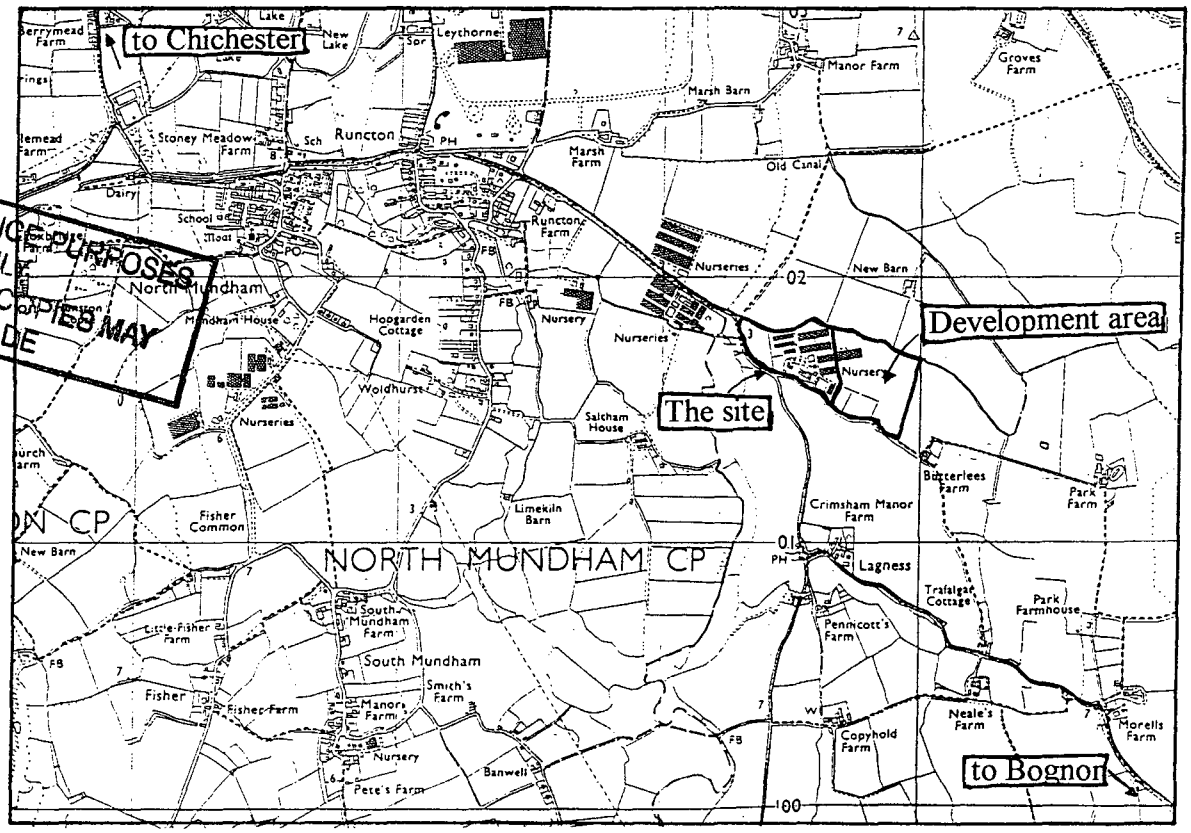
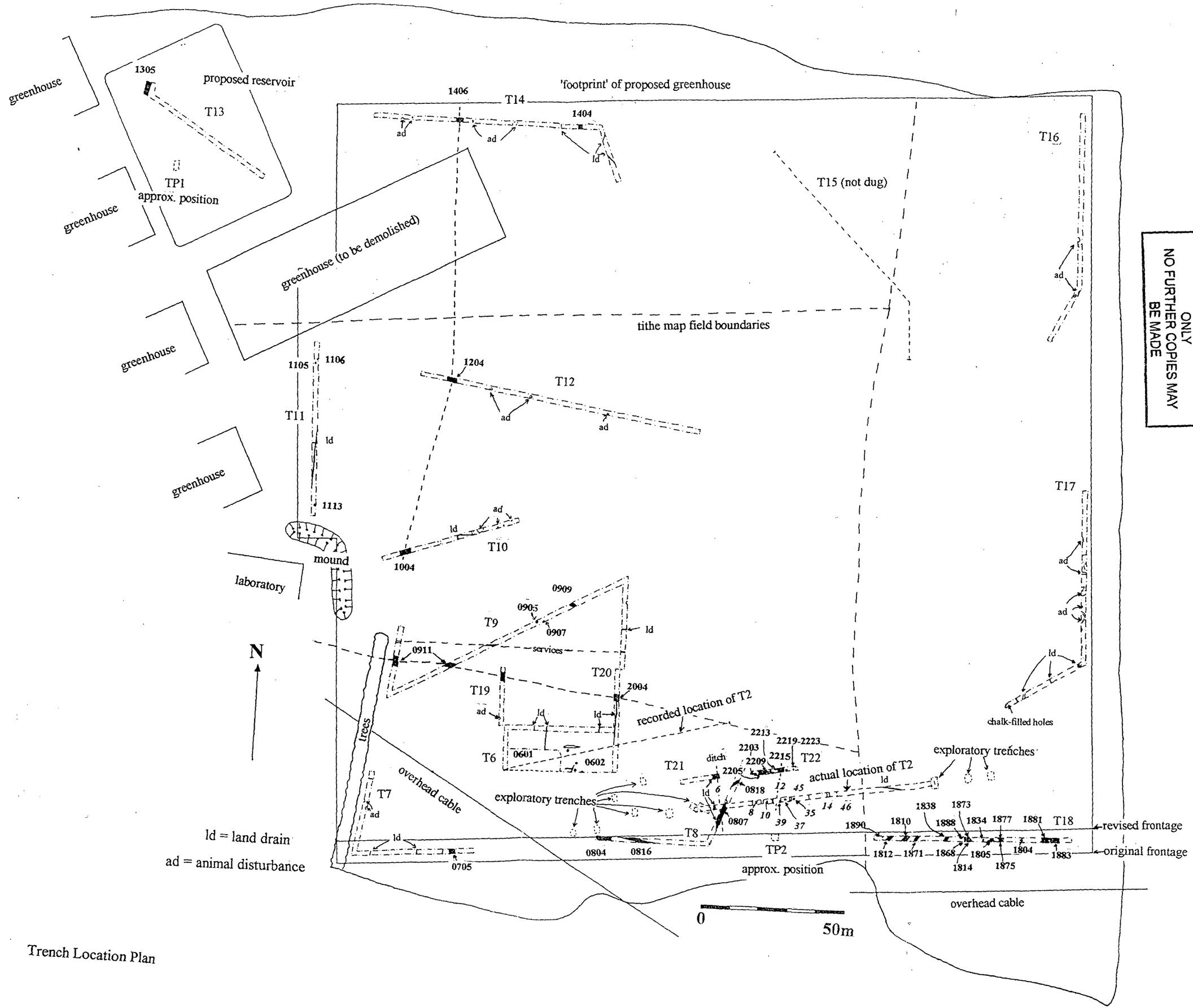


Figure 1i Extract from 1847 Pagham Tithe map (WSRO MF 82)



0 1km

Figure 2 Site Location Plan. Reproduced from the 1995 Ordnance Survey 1:25 000 Pathfinder map with the permission of Her Majesty's Stationery Office, © Crown copyright Southern Archaeological Services Ltd, Unit 7 Kingsbury House, Kingsbury Road, Southampton SO14 0JT. Licence no. AL 0100030752



ld = land drain

ad = animal disturbance

Figure 3 Trench Location Plan

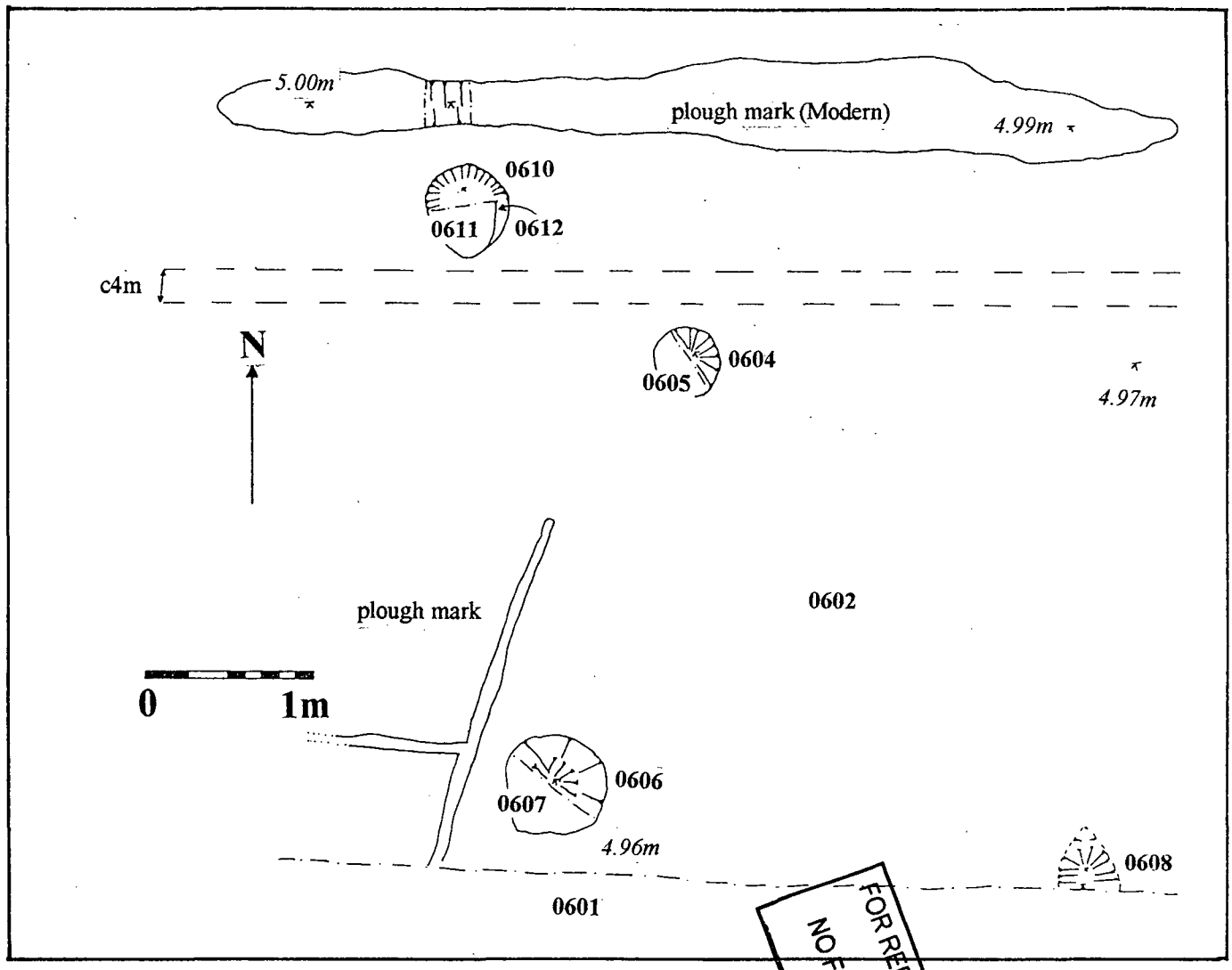
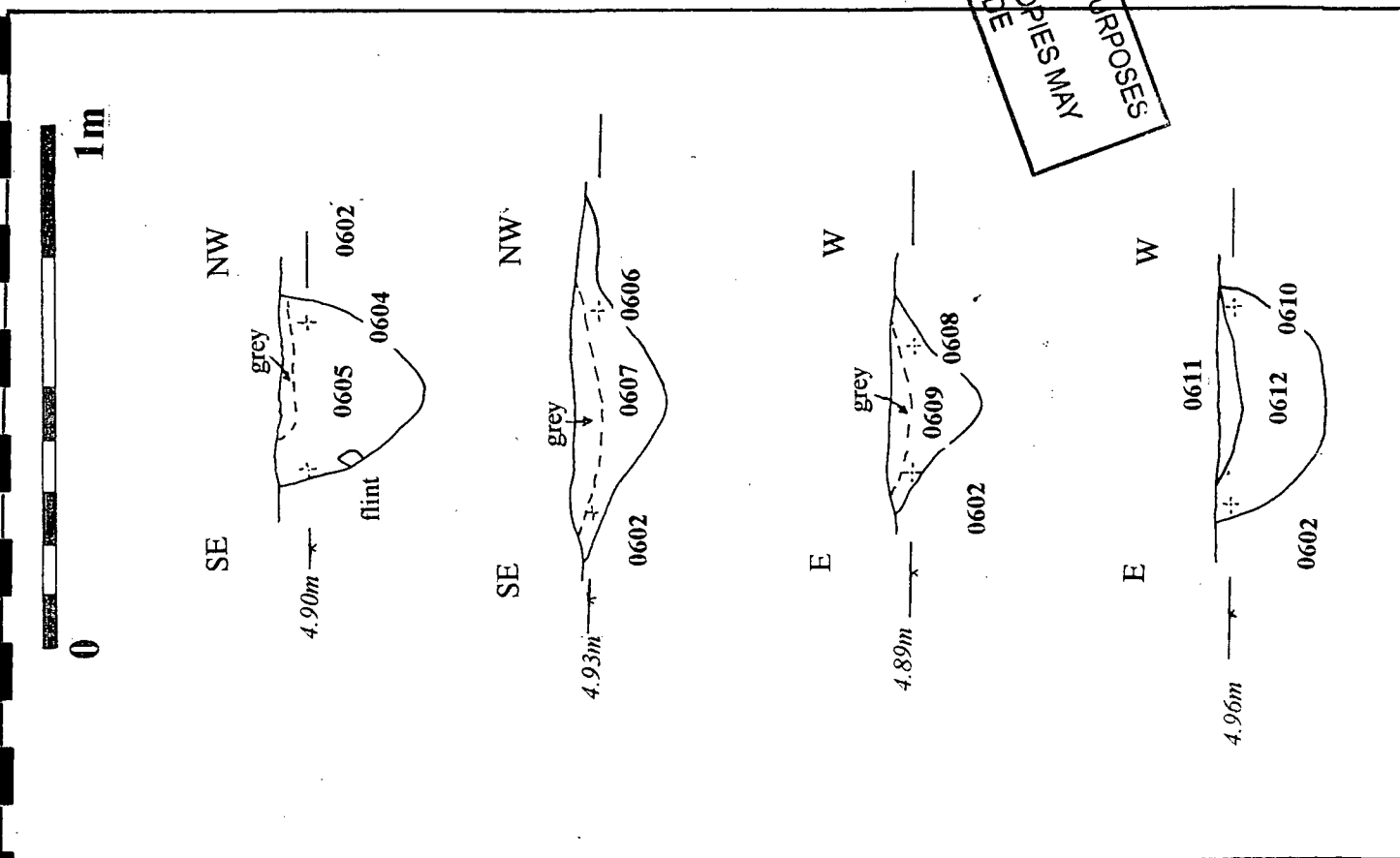


Figure 4 Plan and Sections of T6 Postholes



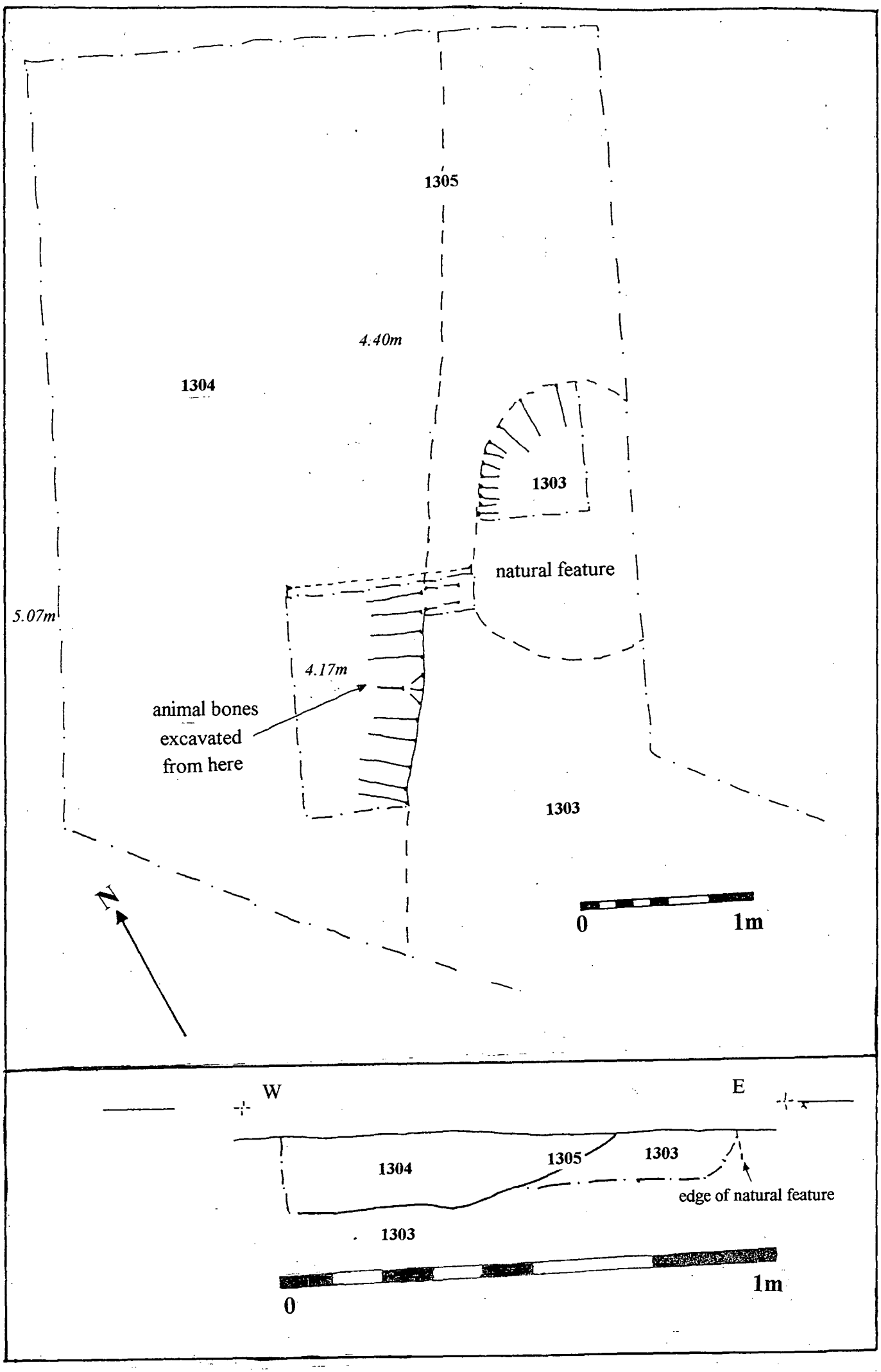


Figure 5 Plan and section of **1305**

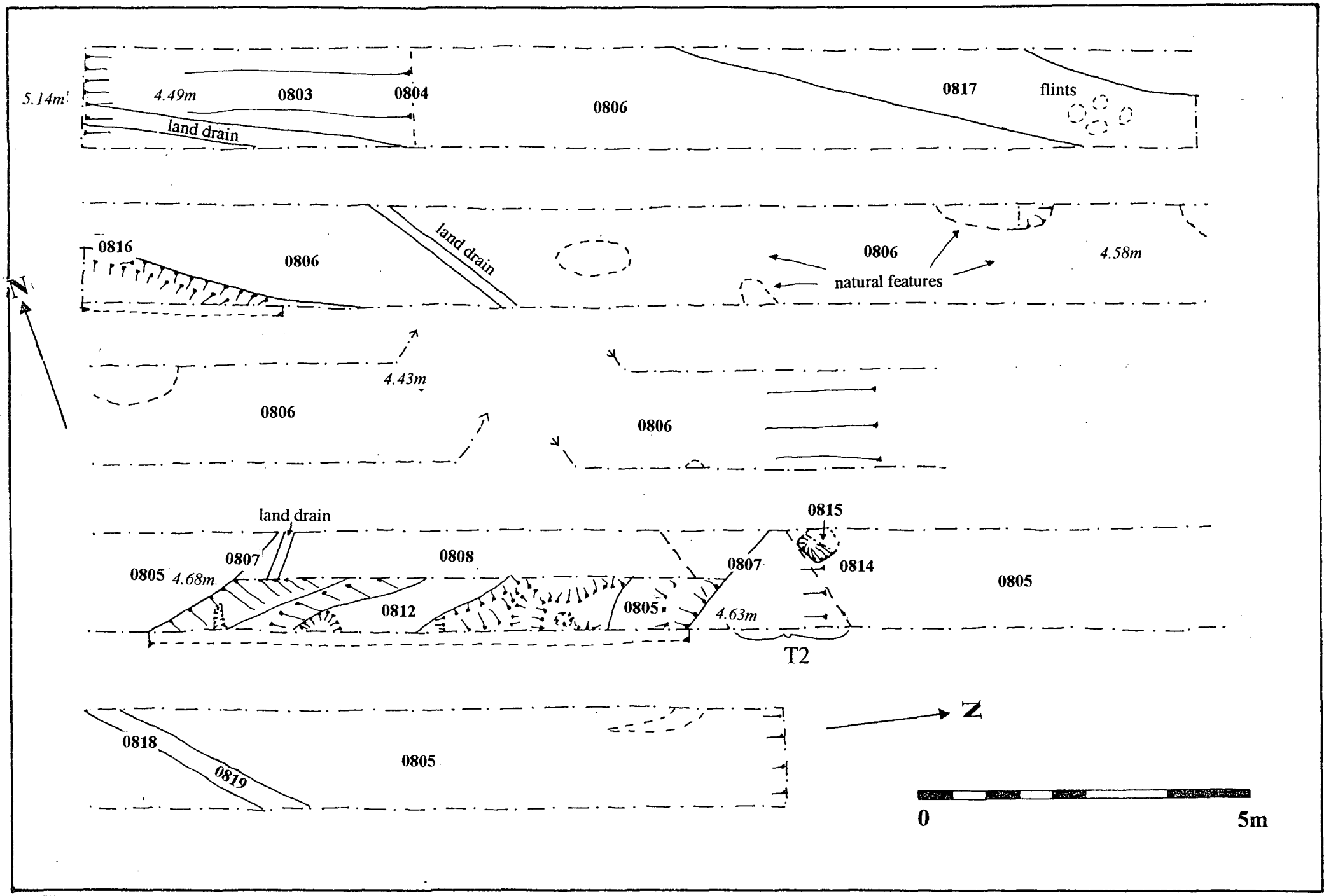


Figure 6 Plan of T8

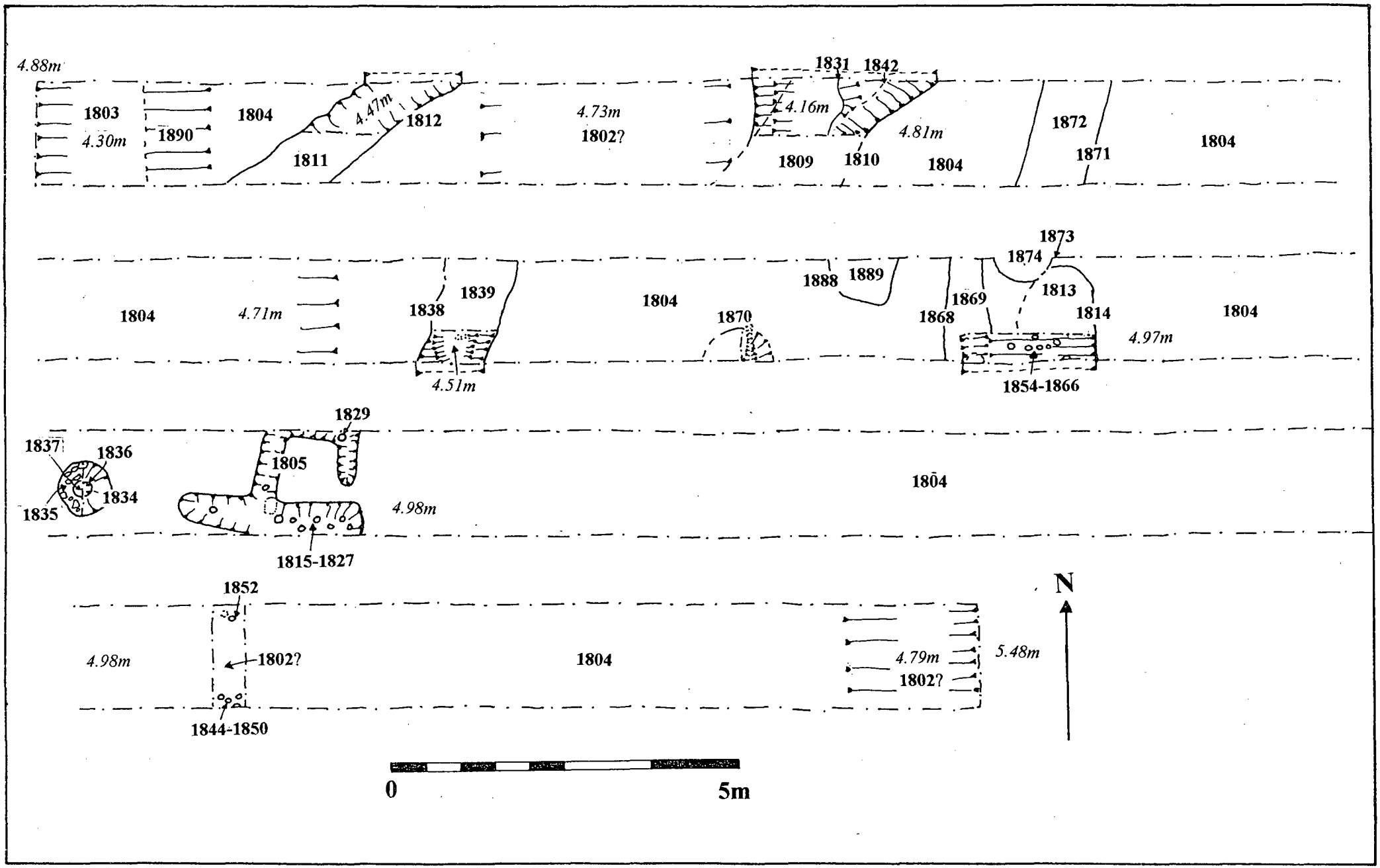


Figure 7 Plan of T18

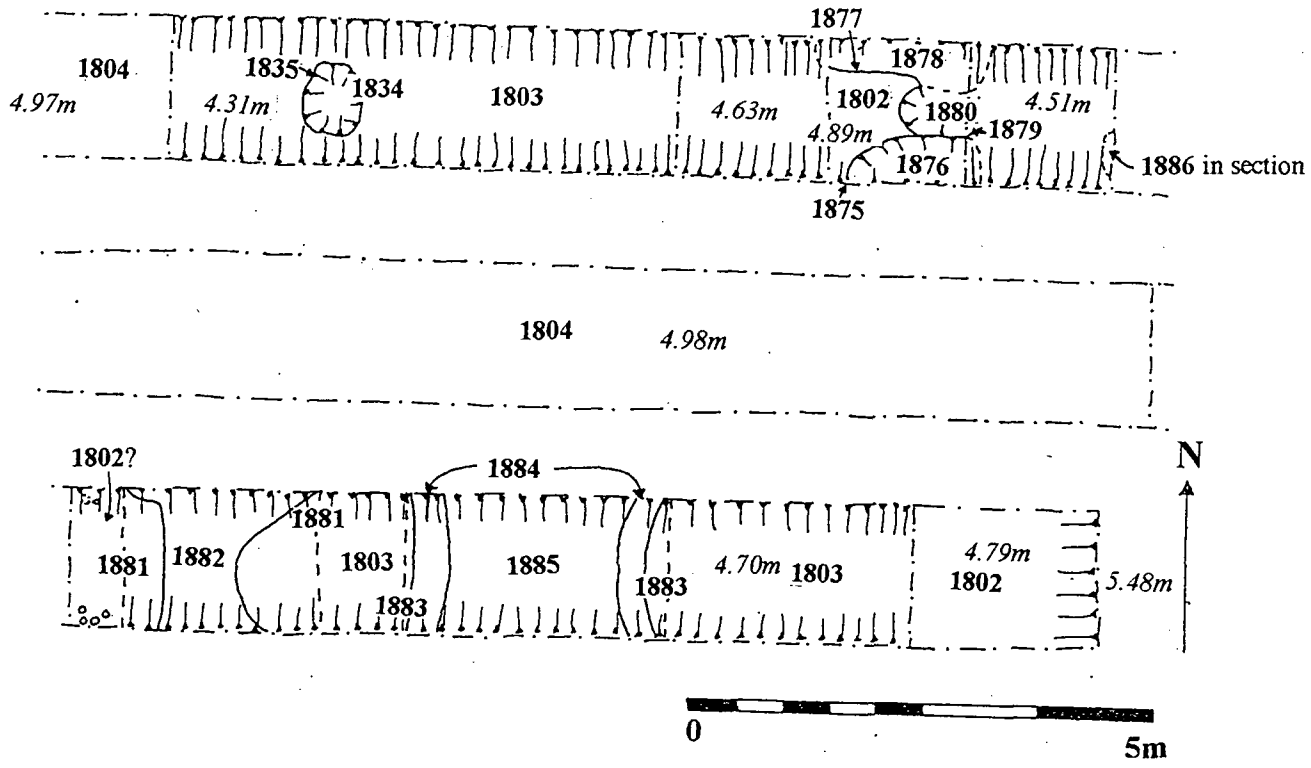


Figure 8 Plan of east end of T18 after removal of part of **1804**

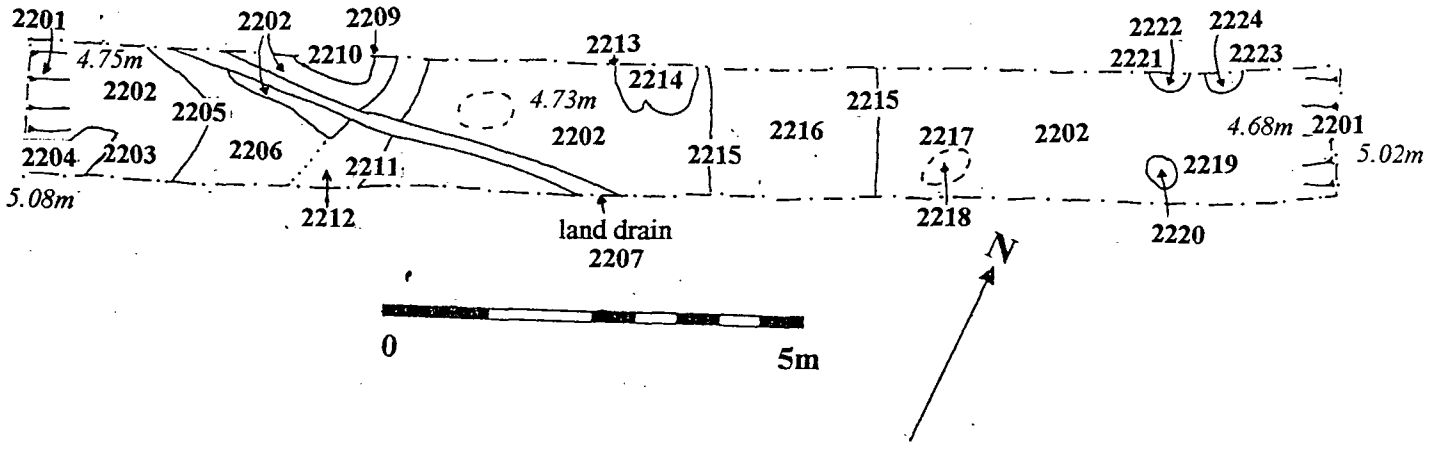


Figure 9 Plan of T22

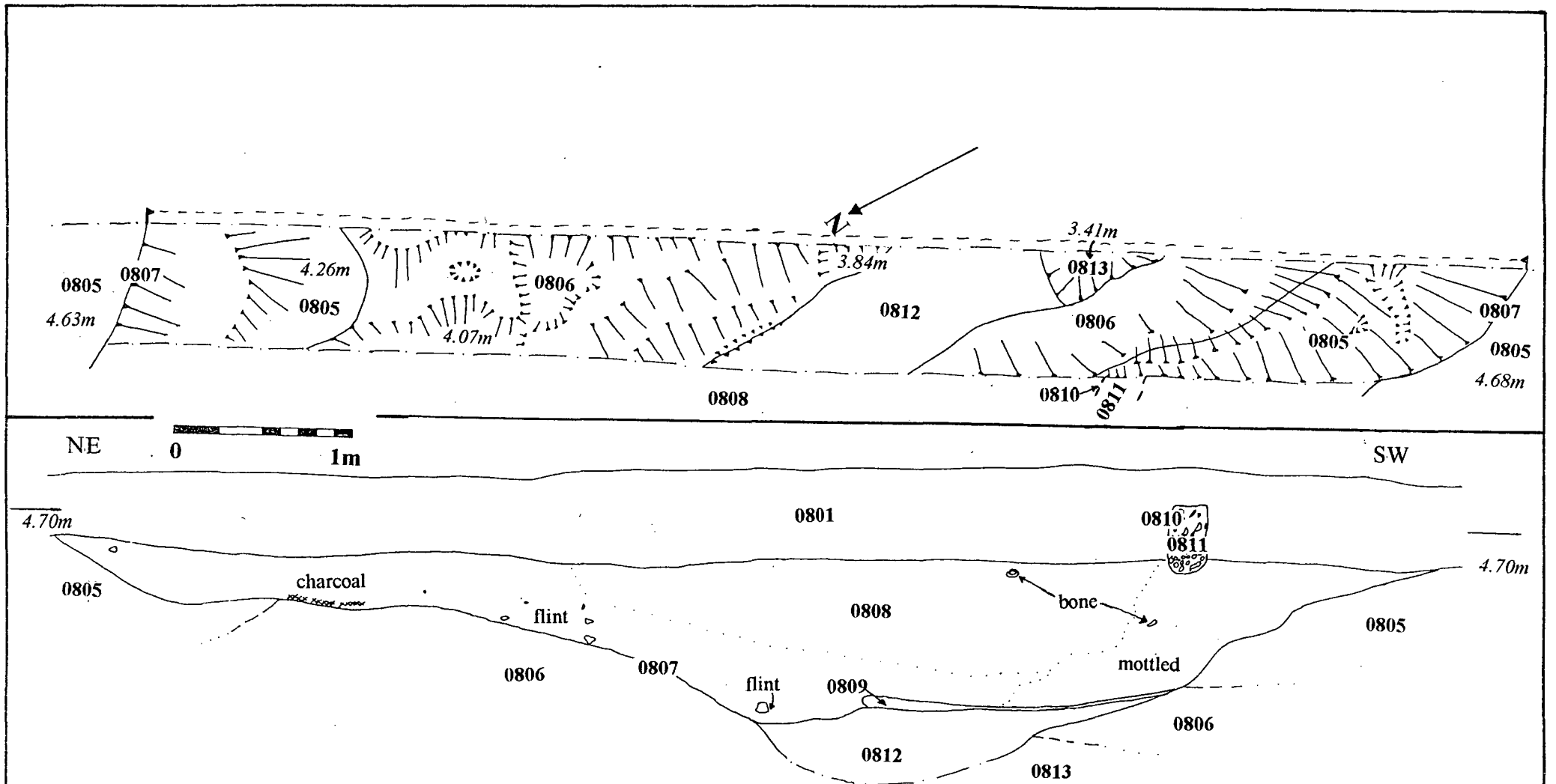
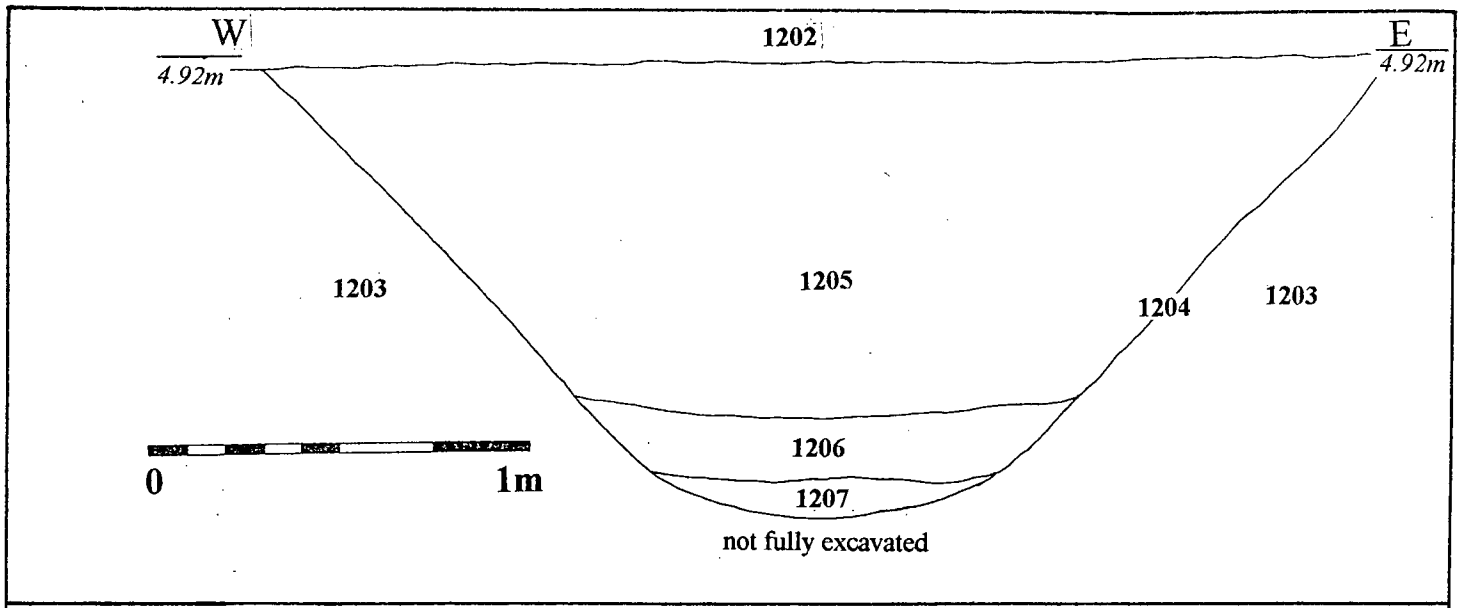


Figure 10 Plan and section of ditch **0807**



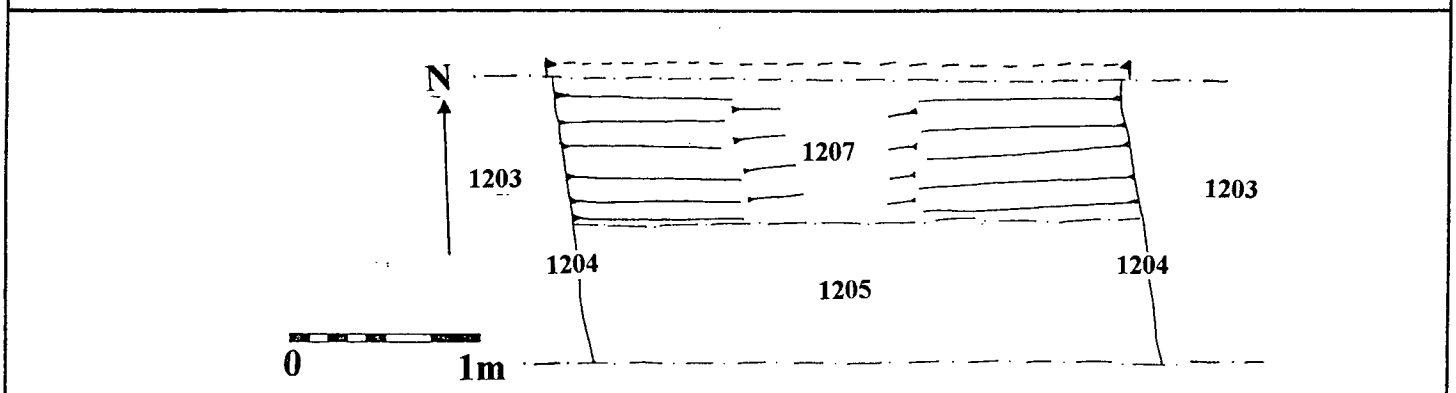
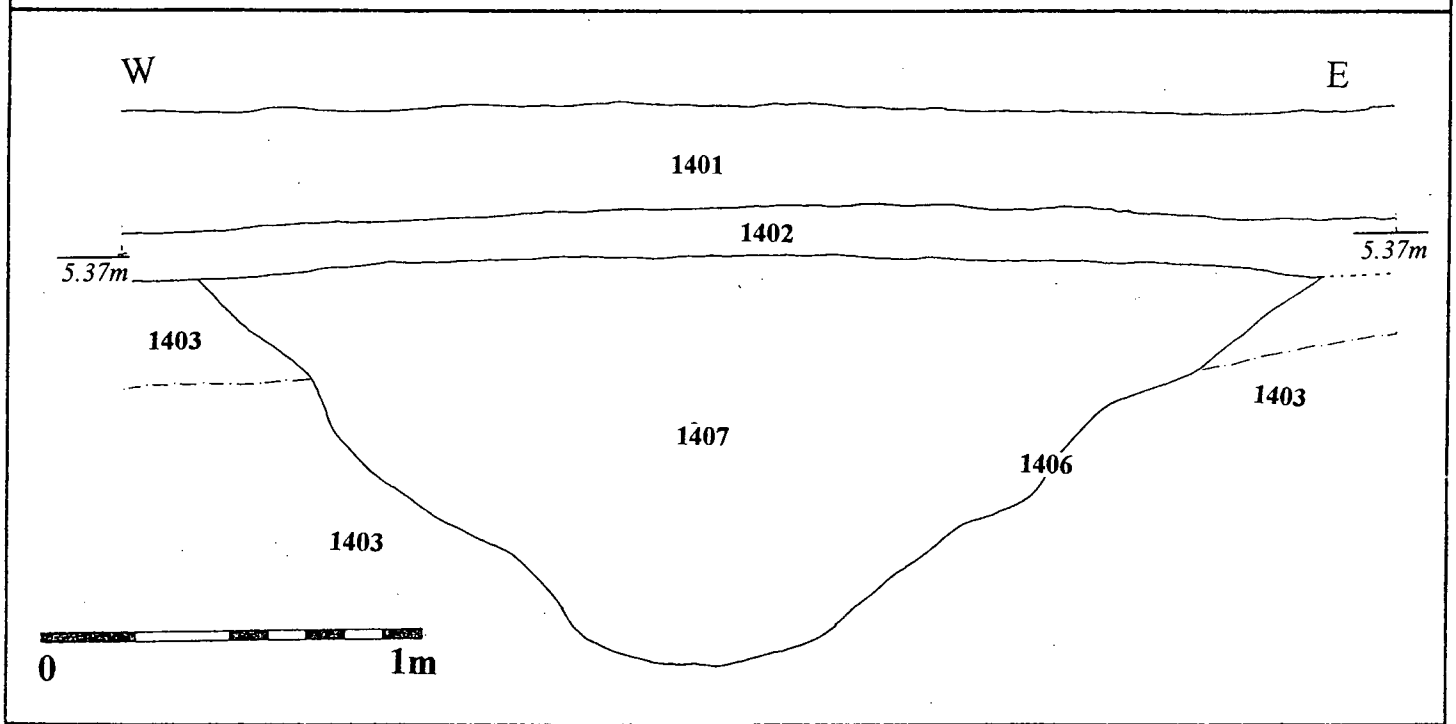


Figure 11 Plan and section of **1204**



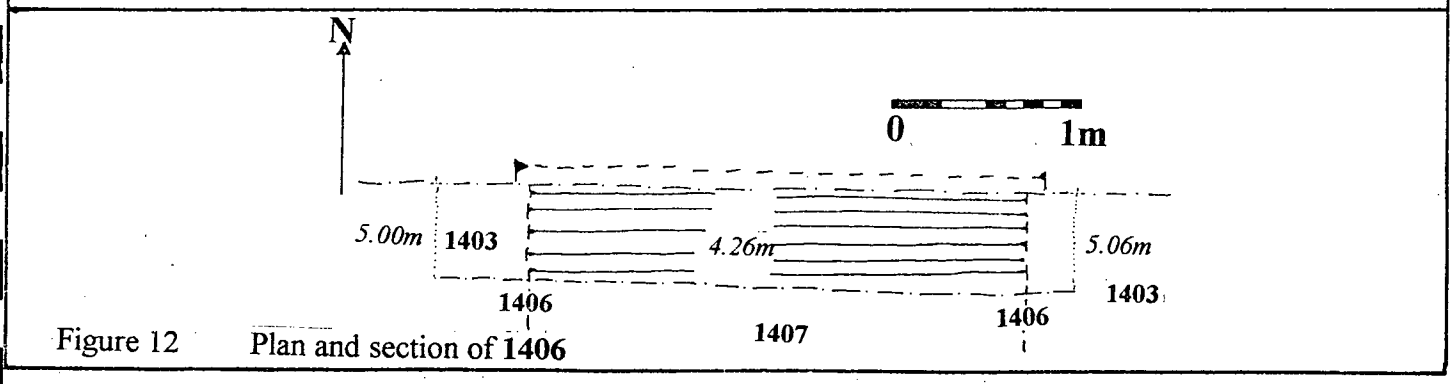


Figure 12 Plan and section of **1406**

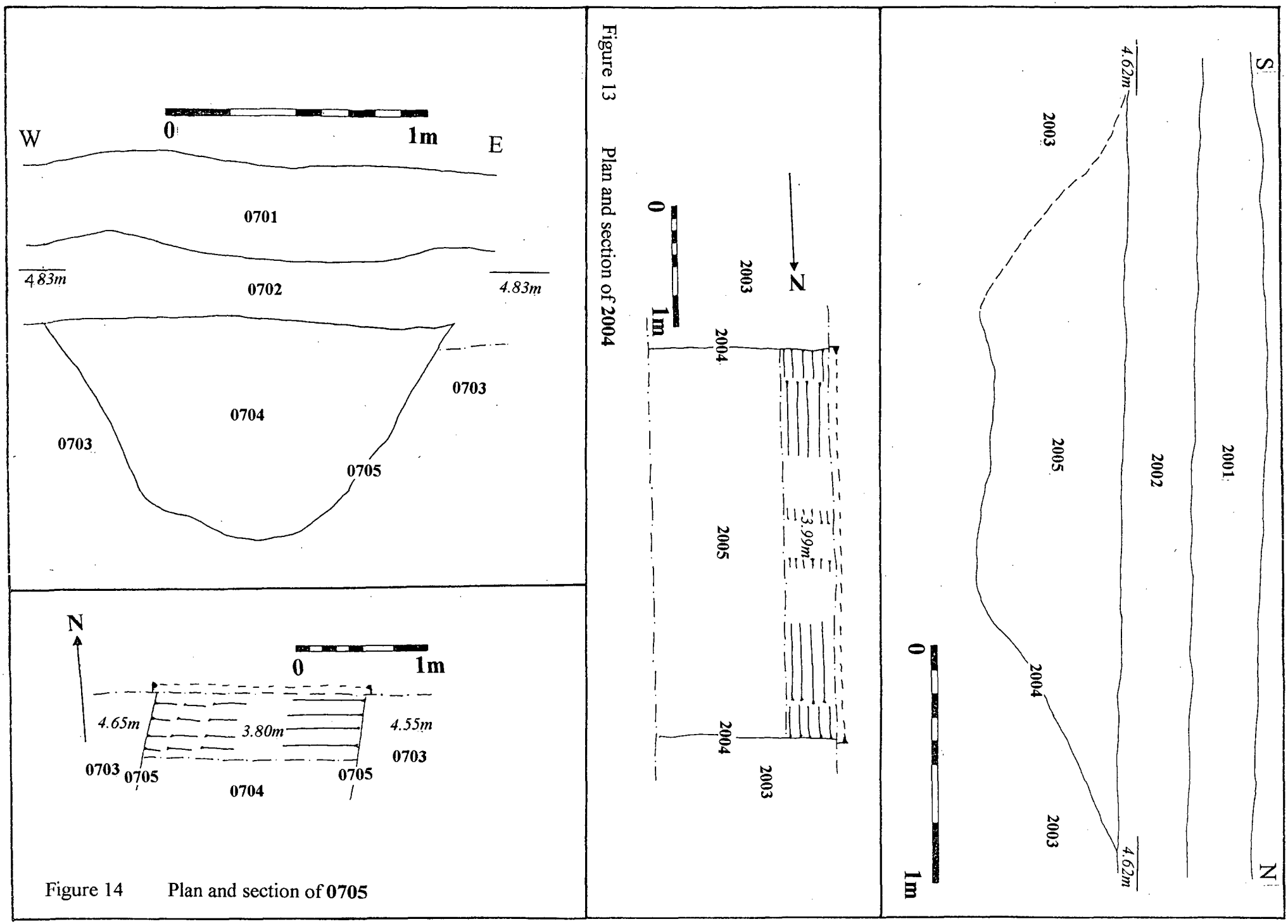


Figure 13 Plan and section of **2004**

Figure 14 Plan and section of **0705**

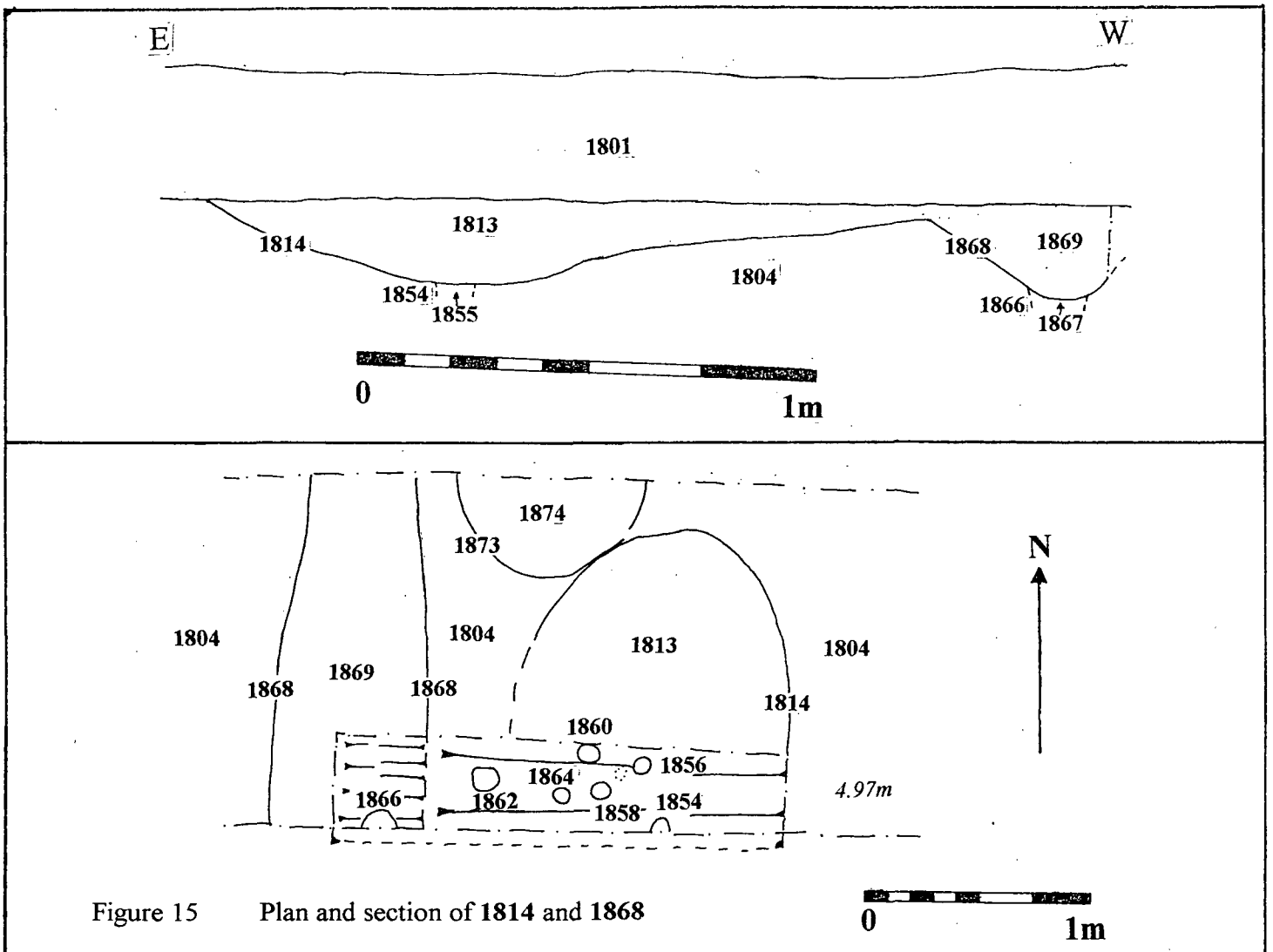


Figure 15 Plan and section of **1814** and **1868**

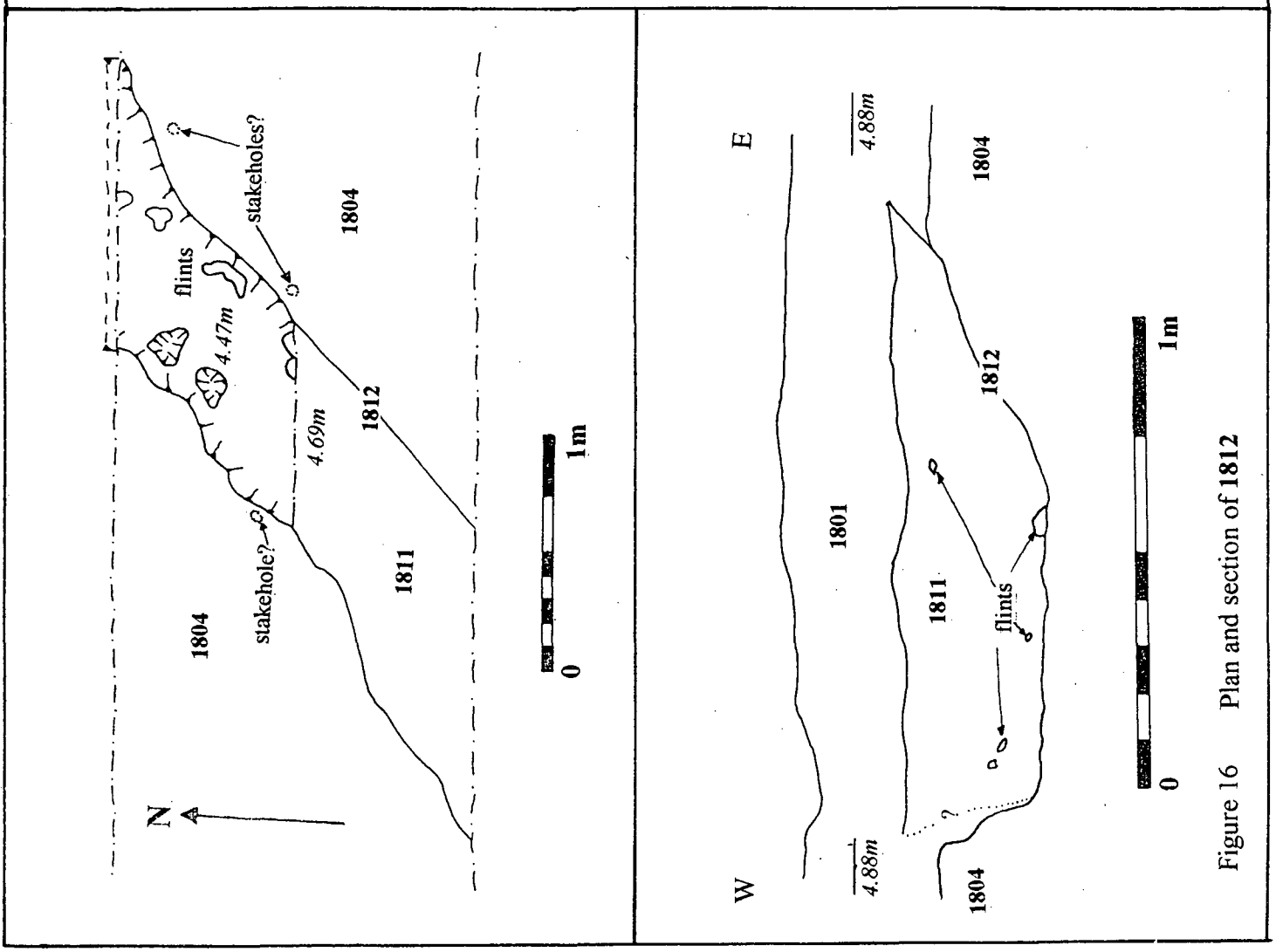


Figure 16 Plan and section of **1812**

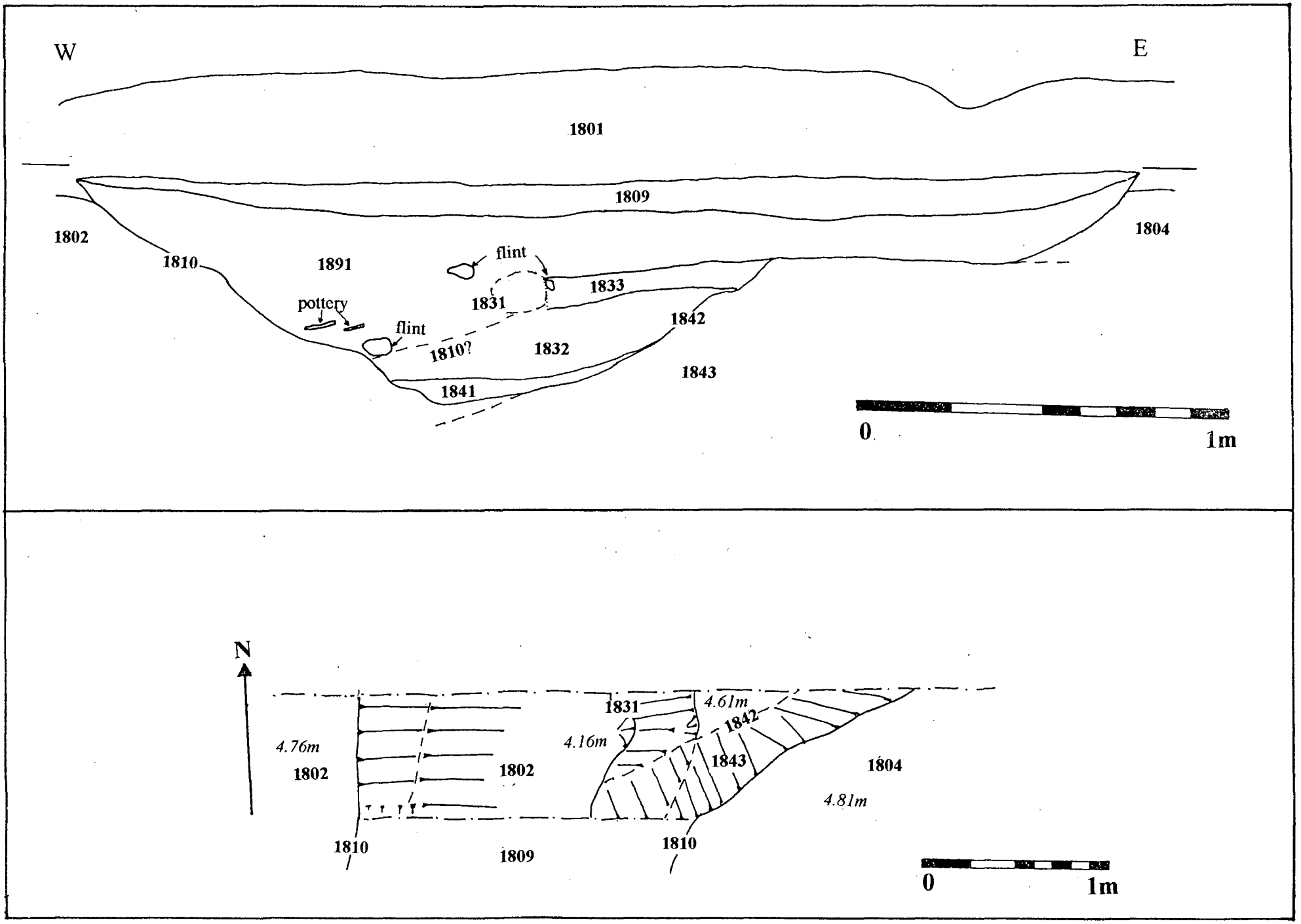


Figure 17 Plan and section of **1810**

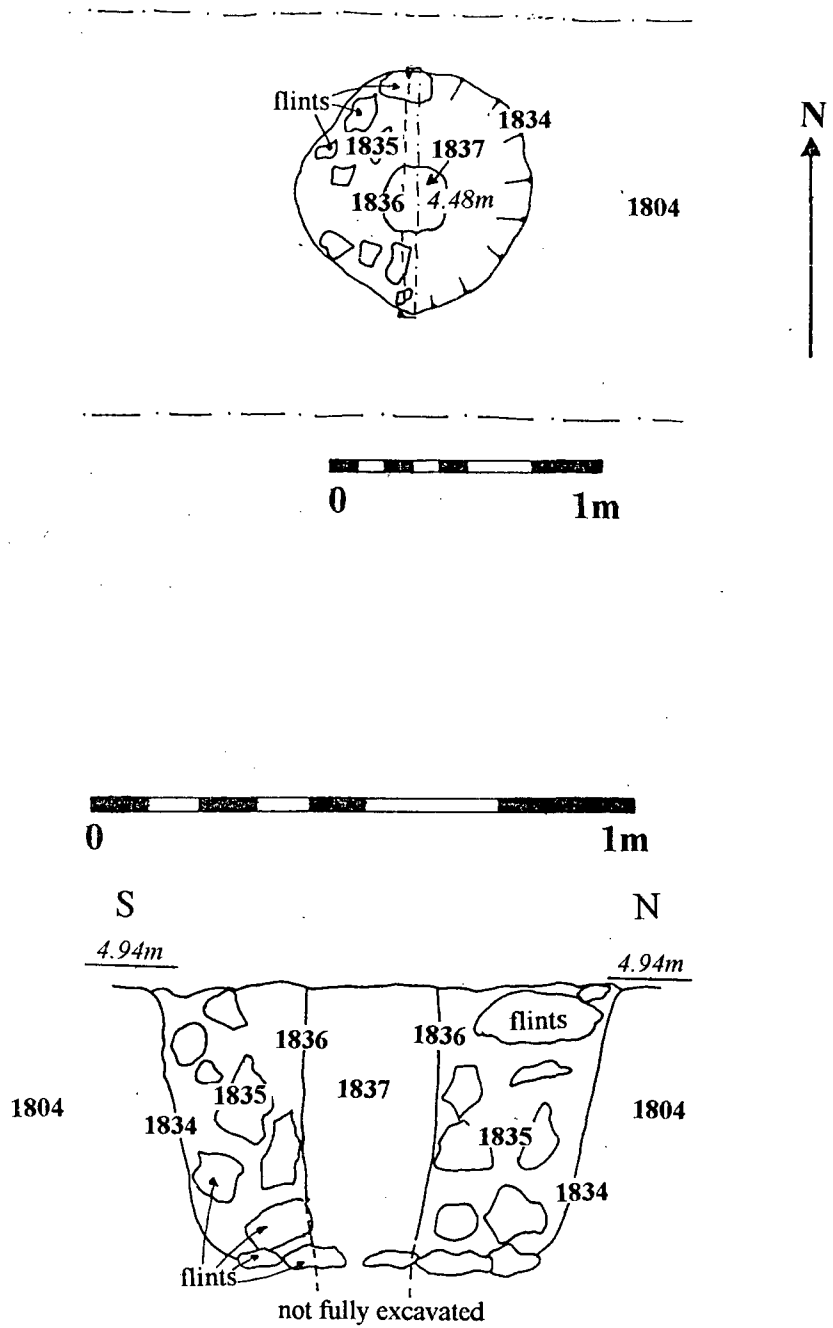


Figure 18 Plan and section of **1834** and **1836**

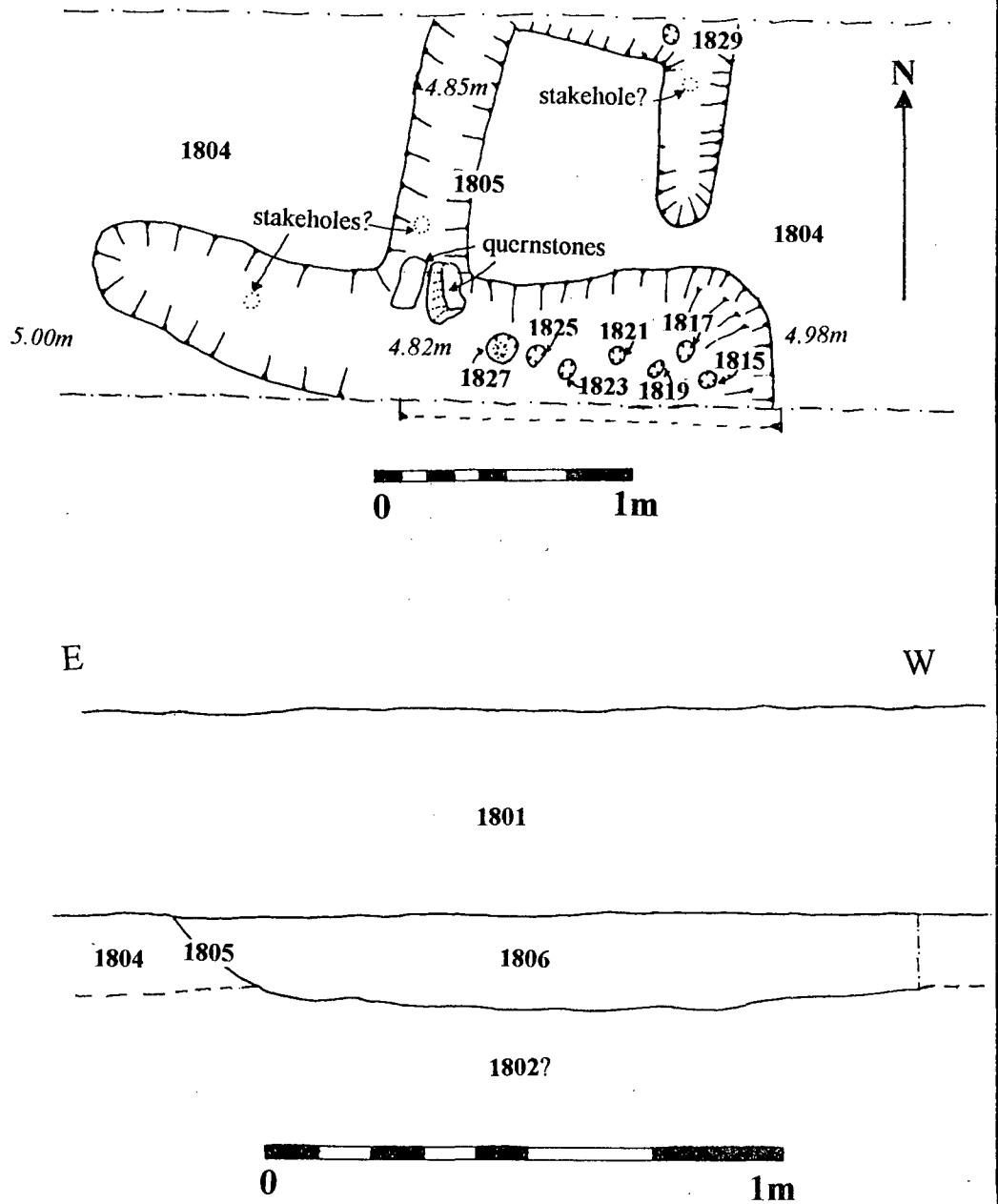


Figure 19 Plan and section of **1805**

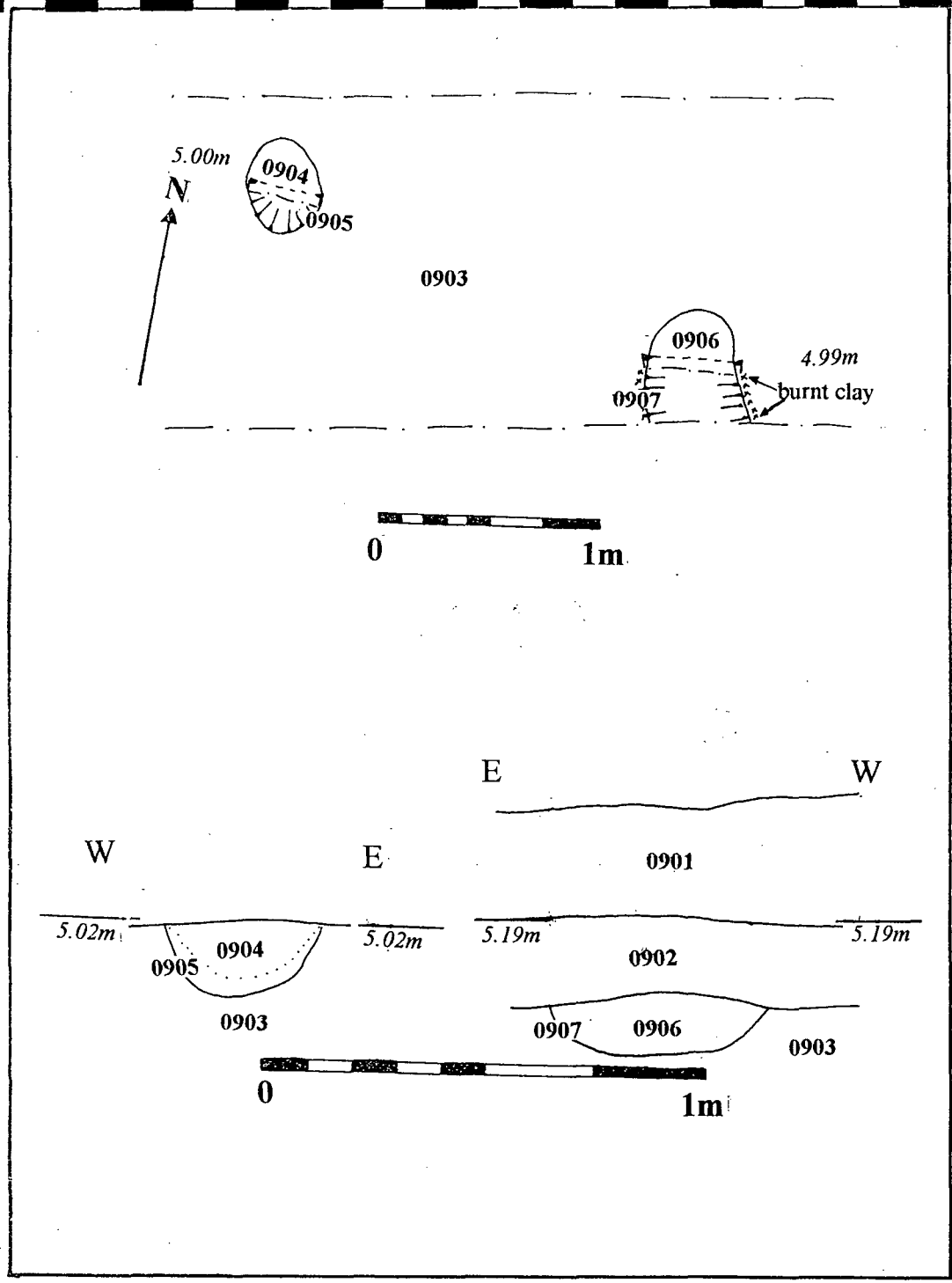


Figure 20 Plan and sections of **0905** and **0907**

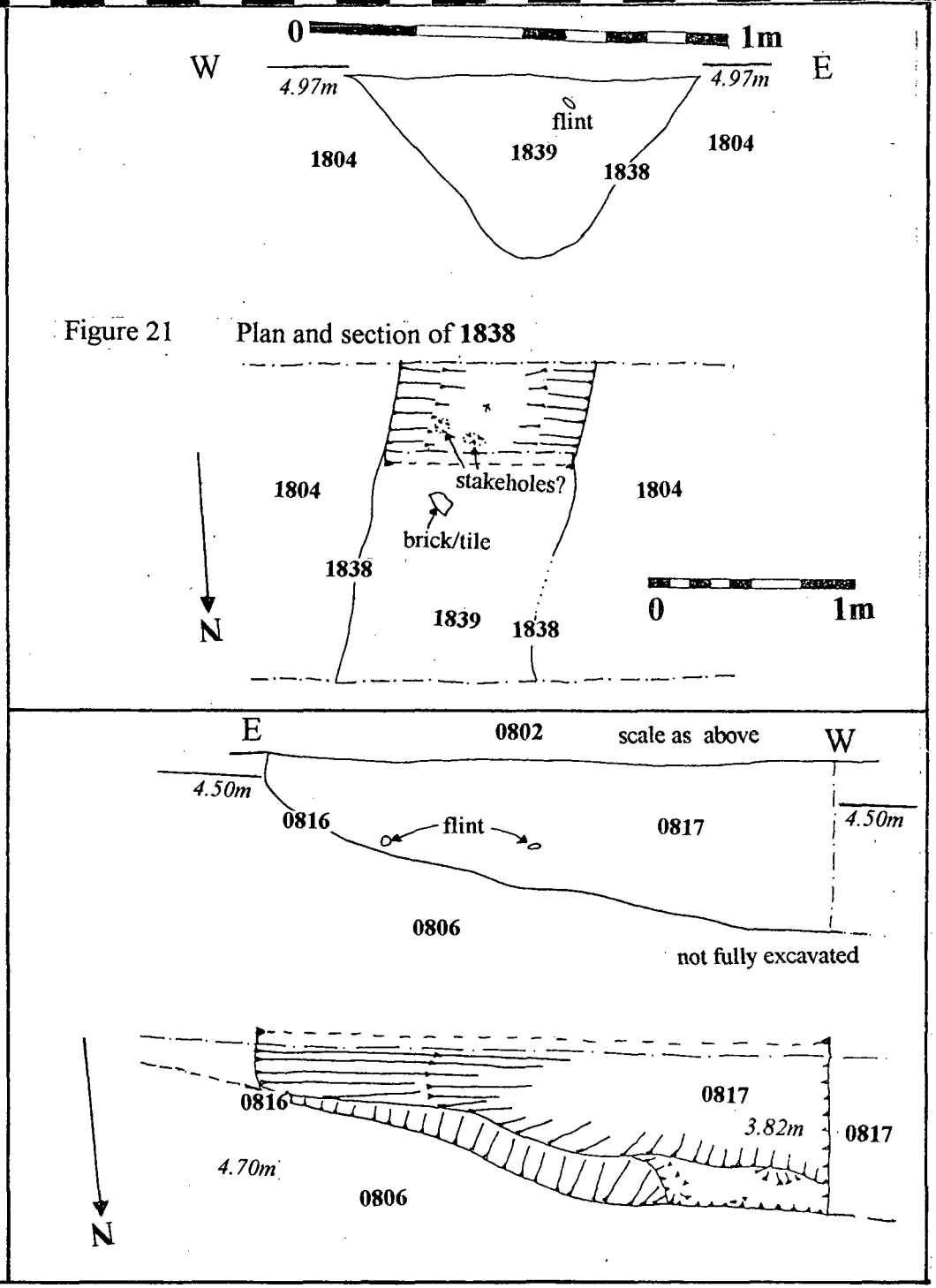


Figure 21 Plan and section of **1838**

Figure 22 Plan and section of **0816**

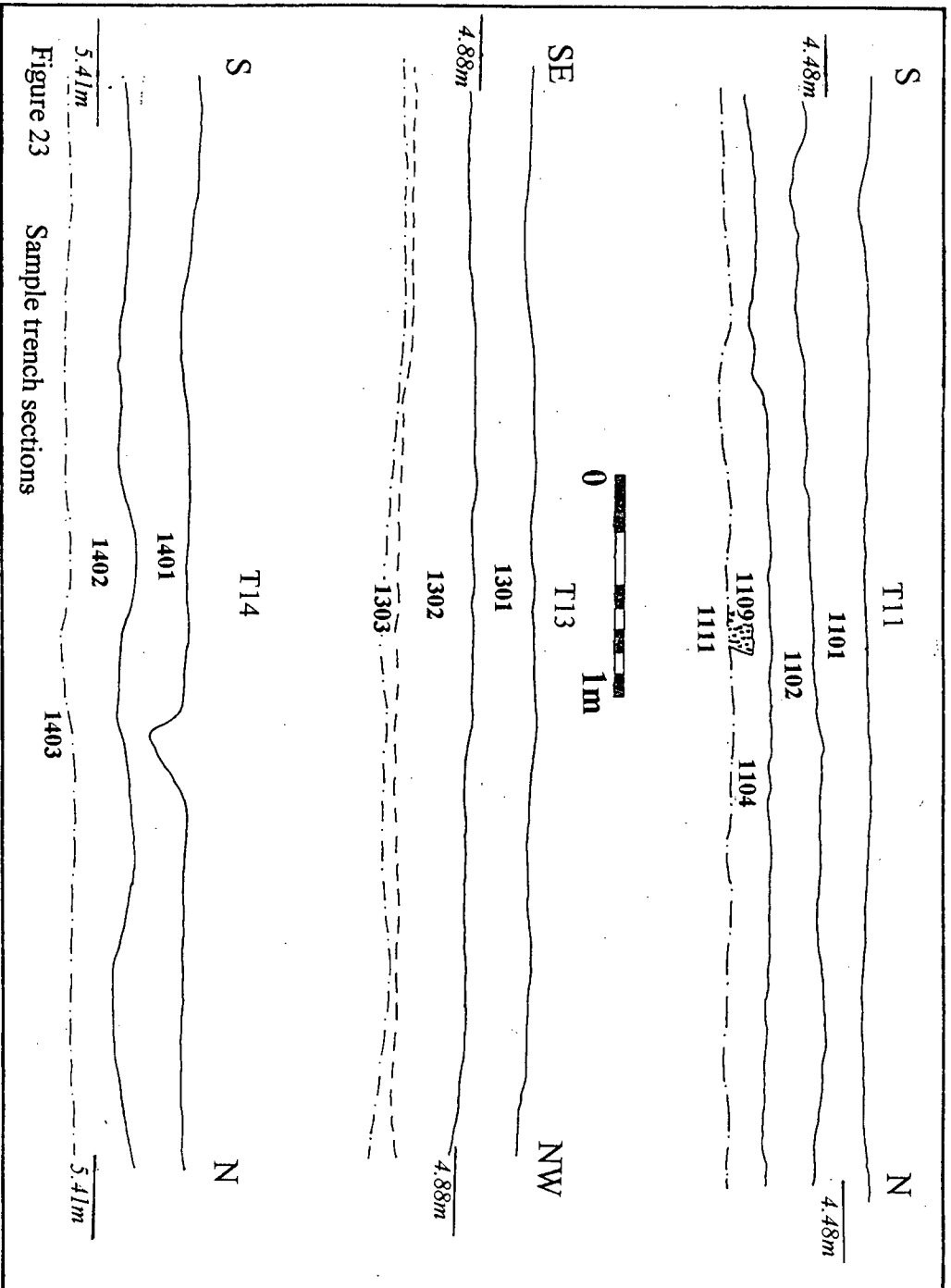


Figure 23 Sample trench sections

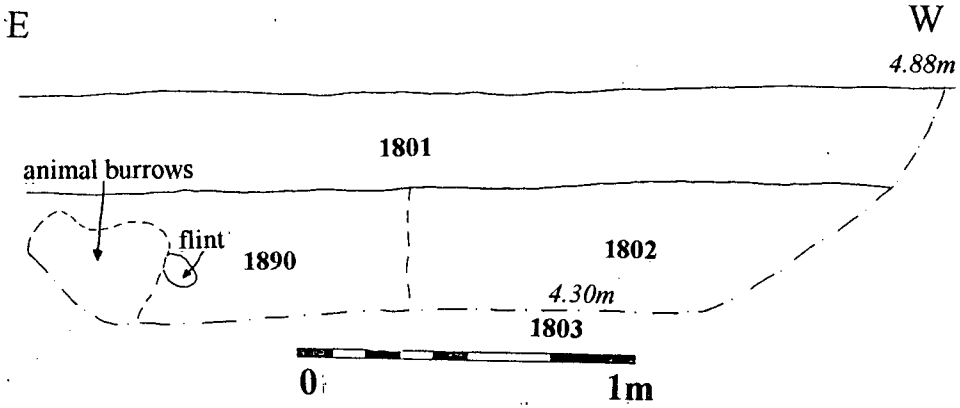


Figure 24 Sample section, west end of T18

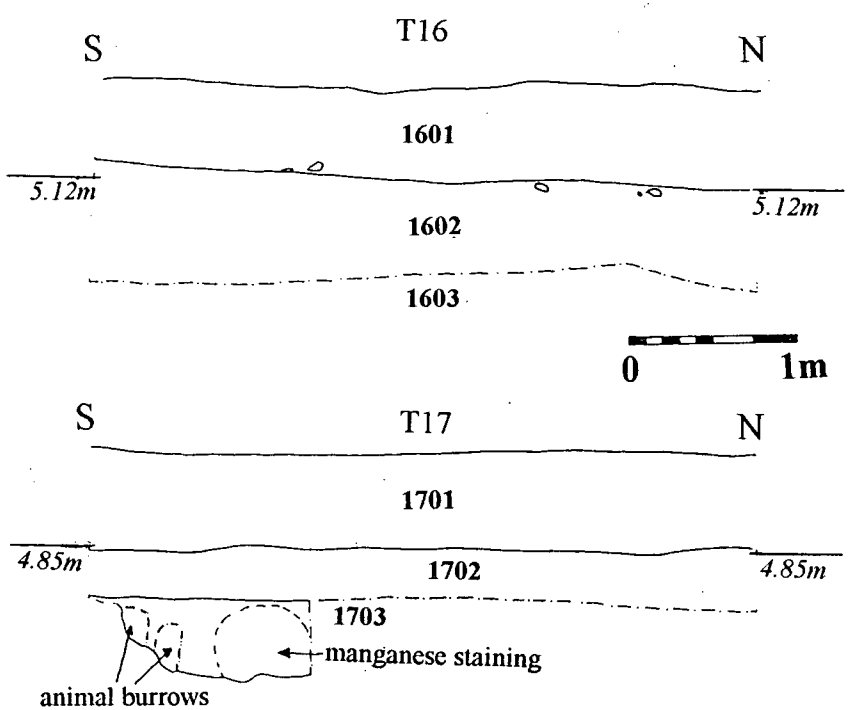


Figure 25 Sample trench sections

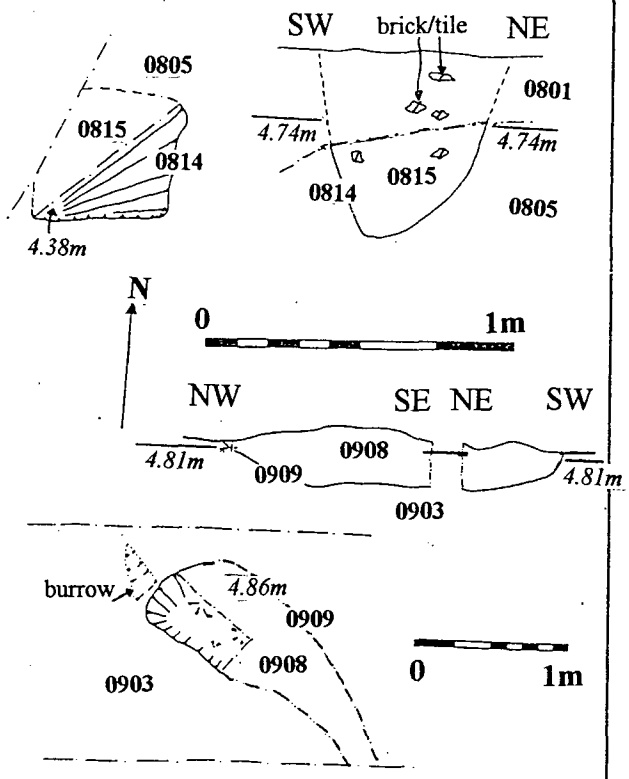


Figure 26 Plans and sections of **0814** and **0909**

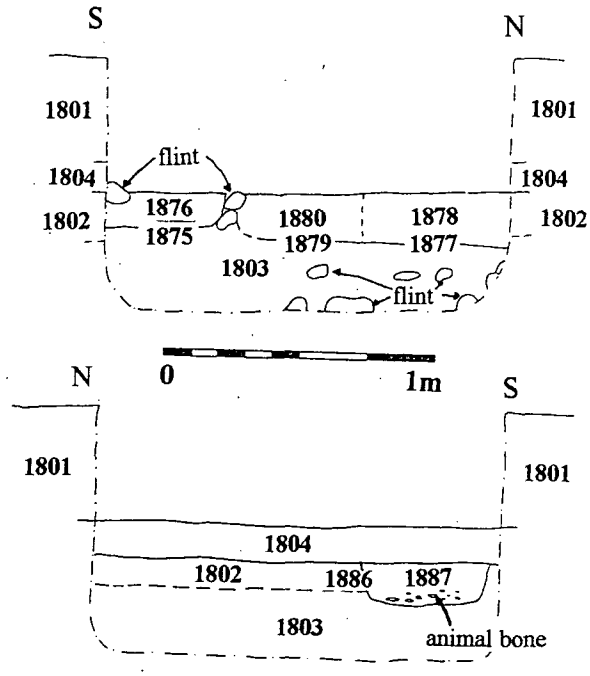


Figure 27

Sections of **1875**, **1877**, **1879** and **1886**

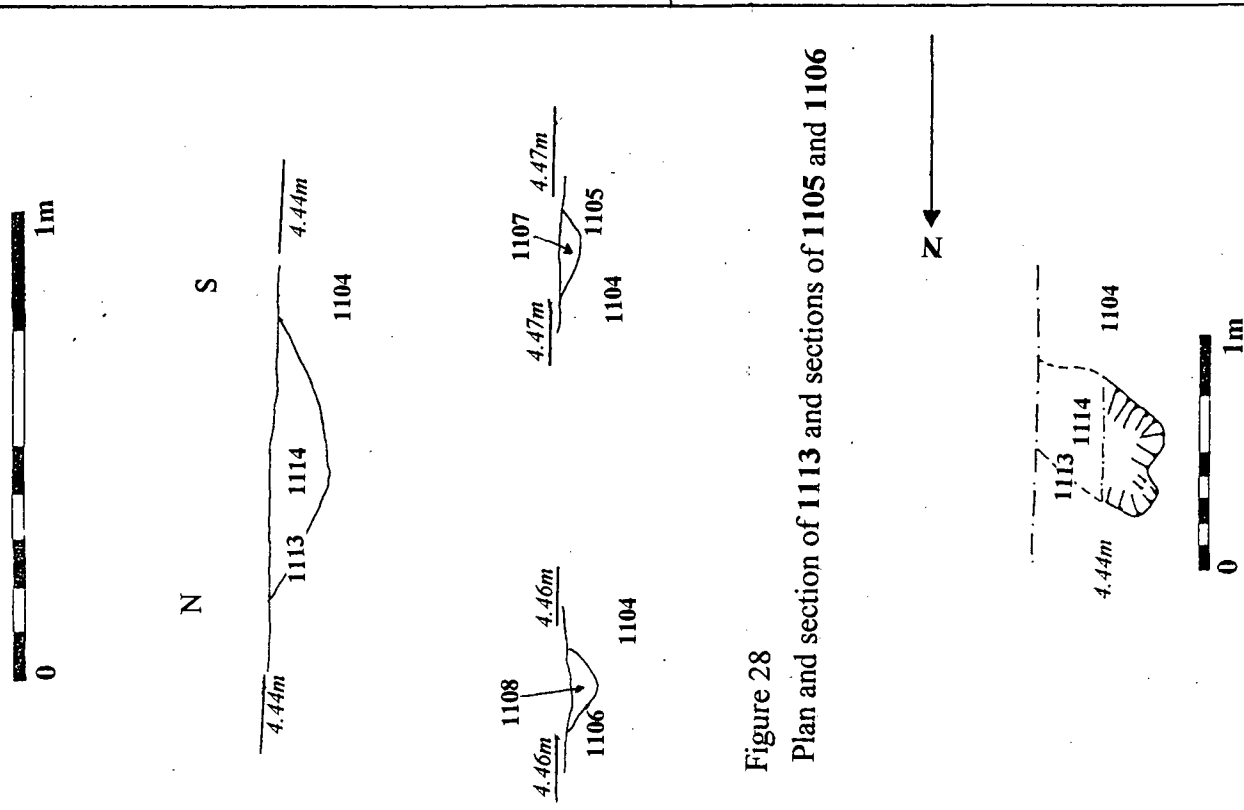


Figure 28

Plan and section of **1113** and sections of **1105** and **1106**

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SAS 177	X	400	C	FUJI SENSIA						20	1-20

Photo No.	Date	Weather	Direction	Scales	Description of subject / list of contexts	Drwg Equiv. No.	Initials	Success Y/N
1	3/11/99	OVERCAST	NE	2x1m	FEATURES [1105] [1106] FILLS (1107) (1108) NATURAL 1104			
2	9/11/99	SUNNY	SW	2x1m	FEATURE [1305] FILL (1304) NATURAL 1303 HORSE BONES IN SITU			
3	10/11/99	BRIGHT	S	1x1m	FEATURE [1805] FILL (1806) + STAKEHOLES [1807] [1808] 'PLOUGHSOIL' 1804 TOPSOIL 1801			
4	11/11/99	FAIR	NE	2x1m	FEATURE [1812] FILL (1813) 'PLOUGHSOIL' 1804 TOPSOIL 1801			
5	11/11/99	FINE	S	1x1m	FEATURE [1805] FILL (1806) STAKEHOLES [1815]-[1829] 'PLOUGHSOIL' 1804 TOPSOIL 1801			
6	15/11/99	FINE	N	1x2m; 1x1m	FEATURE [1810] FILLS (1809) (1832) (1833) (1841) NATURAL F. [1842] NATURAL 1843			
7	15/11/99	FINE	W	1x2m; 1x1m	T6 PARTLY STRIPPED OF TOPSOIL TOPSOIL 0601 SUBSOIL 0602			
8	16/11/99	FINE	S	1x2m	POSTHOLE + FILL [1834] (1835) POSTPIPE + FILL [1836] (1837) 'PLOUGHSOIL' 1804			
9	16/11/99	FINE	S	1x2m	FEATURES [1814] [1868] FILLS (1813) (1869) + STAKEHOLES [1854]-[1866] 'PLOUGHSOIL' 1804 NATURAL 1803			
10	22/11/99	DULL	S	1x1m	FEATURE [0610] FILLS (0611) (0612) SUBSOIL 0602 + PLOUGHMARK			
11	23/11/99	FINE	N	1x2m; 1x1m	FEATURE [0705] FILL (0704) TOPSOIL 0701 SUBSOIL 0702 NATURAL 0703			
12	23/11/99	FINE	S	1x2m; 1x1m	POSTHOLE [1834] FULLY EXCAVATED EXCEPT BASE (1835) 'PLOUGHSOIL' 1804			
13	23/11/99	FINE	SW	1x2m 1x1m	FULLY EXCAVATED [1805] STAKEHOLES [1815]-[1829] 'PLOUGHSOIL' 1804 TOPSOIL 1801			
14	24/11/99	FINE	S	1x1m	CREMATION PIT + FILL [0907] (0906) TOPSOIL 0901 SUBSOIL 0902 NATURAL 0903			
15	24/11/99	FINE	S	1x1m	CREMATION PIT + FILL [0905] (0904) TOPSOIL 0901 SUBSOIL 0902 NATURAL 0903			
16	25/11/99	DULL	SW	1x2m; 1x1m	DITCH + FILLS [0807] (0808) (0809) (0812) TOPSOIL 0801 'PLOUGHSOIL' 0805 NATURAL 0806			
17	25/11/99	DULL	S	1x2m; 1x1m	DITCH + FILLS [0807] (0808) (0809) (0812) TOPSOIL 0801 'PLOUGHSOIL' 0805 NATURAL 0806			
18	29/11/99	DULL	SW	1x2m; 1x1m	DITCH + FILL [0816] (0817) TOPSOIL 0801 SUBSOIL 0802 NATURAL 0806			
19	29/11/99	RAIN	E	1x2m; 1x1m	TRENCH 22 FEATURES [2203]-[2223] TOPSOIL 2201 SUBSOIL 2202			

Checked by	Date	Revised by	Date	Sheet 1 of 2

Site No.	Film No.	ASA	M / C	Make	Loaded By / Date	Camera No.	Unloaded by / Date	Sent by / Date	Returned / Date	No. of Success. Photos	Photo Nos.
SAS 177	X	400	C	FUJI SENSIA	—	—	—	—	—	20	1-20

Photo. No.	Date	Weather	Direction	Scales	Description of subject / list of contexts	Drwg Equiv. No.	Initials	Success Y/N
20	30/11/99	SUNNY ~~[illegible]~~	SW	1x2m 1x1m	DITCHES [1881] + [1883] FILLS (1882) (1884) (1885) TOPSOIL 1801 SUBSOIL 1802 NATURAL 1803 'PLOUGHSOIL' 1804 MAINLY REMOVED			

Checked by	Date	Revised by	Date	Sheet of

NMR EXCAVATION INDEX REPORT FORM: WEST SUSSEX

1. Type of recording: (please tick)
   - (evaluation)
   - excavation
   - watching brief
   - other (specify)

2. Site name: NEWLANDS NURSERIES

   Address: LAGNESS

   Civil parish: PAGHAM

   National Grid Refs: SU 8980 0160 CENTRED

3. Director/Supervisor: BRIAN WHITEHEAD

   For (organisation): SOUTHERN ARCHAEOLOGICAL SERVICES LTD

   Funded by: DEVELOPER

4. Date fieldwork started: 1/11/99 Date finished: 1/12/99

5. Main periods and site types: BRONZE AGE CREMATIONS (x2), FEATURES (x2) MANY ROMAN FEATURES + FINDS; MEDIAEVAL FINDS; POST-MEDIAEVAL FEATURES + FINDS; UNSTRATIFIED FINDS (BRONZE AGE > POST-MEDIAEVAL):

6. Location of documentary archive:

   All/~~some~~ records ~~have been~~/will be deposited in the following museum, ~~record office etc.~~: CHICHESTER MUSEUM

   Archive contains (please circle):

   (NOT) (PLA) (PHO) (NEG) (SLI) COR (MSS)

7. Location of finds:

   All/~~some~~ finds ~~have been~~/will be deposited in the following museum, ~~other body~~: CHICHESTER MUSEUM

8. Bibliography: SUMMARY REPORT

Signature: B. Whitehead Date: 4/5/00