



Archaeological Field Unit

**An Archaeological Assessment at
Huntingdon Racecourse (Areas A and B)
Preliminary Report**

K. Welsh

1993

REPORT 86

Cambridgeshire Archaeology

Commissioned By Daniel Smith Chartered Surveyors (Client's Agent)

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Huntingdon Racecourse (Areas A and B)
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NON-TECHNICAL SUMMARY

In June 1993, Cambridgeshire Archaeology undertook an archaeological assessment on two areas at Huntingdon Racecourse. This fulfilled the second part of a two stage, pre-planning, evaluation as part of proposals for developing the racecourse.

Recent investigations in the vicinity have produced substantial Prehistoric and Romano-British remains. In the current evaluation, Area A produced extensive settlement remains provisionally dated to the Bronze Age, as well as some evidence of Iron Age activity. Also revealed was a prehistoric stream channel, with associated organic deposits, well-sealed beneath a thick layer of alluvium. It is hoped that analysis of these deposits will provide much information concerning the ecology of this ancient landscape. In Area B, evidence of woodland clearance was uncovered along with a series of pits and ditches. These have been tentatively dated to the early Neolithic period. Analysis of material from some of these features was inconclusive in terms of identifying specific activities, but further sampling could well be more fruitful. Similar analysis of material from archaeological features in Area A is in progress, but the results are not yet available.

In both areas, indications of at least two distinct periods of alluvial deposition were noted. Evidence for occasional flash floods was recorded in some of the less deeply alluviated trenches. These floods would have had tremendous energy and may have been responsible for the truncation of many of the archaeological features.

These archaeological and environmental remains have great potential for extending our understanding of Neolithic land-use and its development in later prehistoric periods, as well as the causes and dating of episodic alluviation.

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Appendix B Macrobotanical and other remains from Area B

Appendix C The Assessment of the buried landscape and soils

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1 INTRODUCTION

Between the 7th and 23rd June, 1993, Cambridgeshire Archaeology carried out an archaeological assessment at Huntingdon Race Course (see *Figure 1*). The work was carried out following a brief provided by the County Archaeology Office in order to produce a planning determination. Area A, centred on TL 206 720, is within the circuit of the racecourse and it is intended to extract the underlying gravel thereby creating an irrigation lagoon. In Area B, centred on TL 200 723, it is again planned to extract the underlying gravel leaving a second lagoon. It is hoped that this will prevent the racecourse being affected by flooding.

No previous records exist for any archaeological finds in the immediate area of the racecourse, but it was felt that the area was in close enough proximity to extensive cropmark and excavated sites (scheduled ancient monument (SAM) 121), which had produced an extensive Neolithic ritual landscape, along with Iron Age and Roman settlement remains (Malim 1990, Malim & Mitchell 1993), to warrant an archaeological investigation.

2 TOPOGRAPHY AND GEOLOGY

The area of the Racecourse lies on the north side of the small Alconbury Brook, a tributary of the Cambridgeshire Ouse. The geology of the site is defined on the 1:50,000 British Geological Survey map as alluvium over 1st terrace river gravels lying on an Oxford Clay base.

Area A (see *Figure 2*) lies in the south-eastern part of the racecourse, bounded to the north and west by a Site of Special Scientific Interest (SSSI), and to the south and east by the racecourse itself. It is crossed by a drainage ditch marking the parish boundary between Brampton and The Stukeleys. Presumably, this represents a former course of the Alconbury Brook within the historic period. The depth of alluvium varies considerably over the site, with a maximum depth of about 1.8m in the south-east. In the north-west, medieval and later activity has disturbed the alluvial layer to a certain extent. The underlying gravel subsoil gradually rises to the north.

Area B (*Figure 2*) lies to the north-west and is bounded on three sides by the Alconbury Brook with the eastern limit being the racecourse. An artificial bank, roughly 1.5m high, runs parallel to the brook. The alluvium is 1.0- 1.1m thick over most of the area, decreasing to only 0.7m in the north where a low gravel ridge causes the Alconbury Brook to deviate round it.

3 BACKGROUND

Brampton and its surroundings are an area rich in archaeological activity. A series of archaeological features, interpreted as a group of Neolithic ritual monuments (including henges, a cursus and a long mortuary enclosure), Bronze Age burial monuments and Iron Age/Romano-British field systems, has been identified from aerial photographs. The area, lying to the south-west of the racecourse, is now a scheduled ancient monument (SAM).

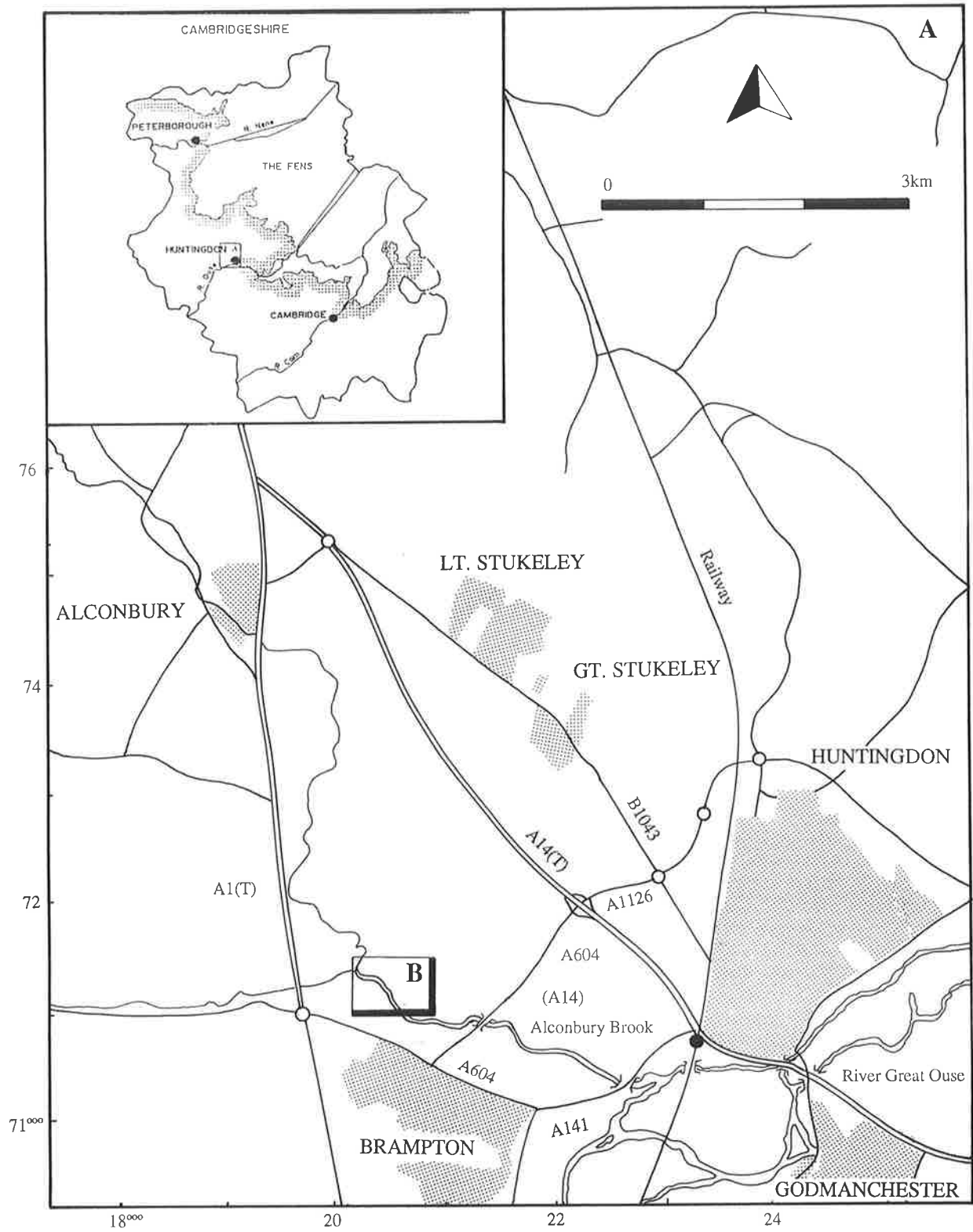


Figure 1 Site Location Map

Excavations south of the Thrapston Road in 1966 (White, 1969), investigated a Bronze Age triple ring-ditch. A rectilinear enclosure was also excavated which contained Iron Age roundhouse remains. A cinerary urn and "maritime" beaker fragments were discovered with these sites, which led Clark to argue for Early European Bronze Age contact (Clark in White 1969). Subsequent work, to the southwest of Thrapston Road (Malim & Mitchell, 1993), uncovered an Iron Age settlement containing a round house which survived as features cut into the top of the gravel. This was associated with a contemporary ditch system and earlier parallel ditches which have been given a Neolithic date and interpreted as territorial boundary markers. All these features were sealed beneath alluvium.

In 1990 and 1991, an investigation of a portion of the scheduled monument north of the Thrapston Road (SAM 121, Figure 2) found evidence for a Neolithic mortuary enclosure at the end of a cursus seen in aerial photographs (Malim, 1990). Further excavations, in advance of road construction in the pasture field to the east, revealed Romano-British field ditches and evidence of agricultural processing in an area where archaeological remains had previously not been suspected (Robinson, pers. comm.).

From historical records it is clear that the area under investigation has been under pasture for at least a century. Since the process of identifying hidden archaeological features from aerial photographs relies on the differential growth of crops above such features, this technique cannot be applied to areas of long-term pasture. A second method of locating archaeological sites is field-walking, where experienced observers search a ploughed and weathered surface for artefacts disturbed from underlying features. It is therefore clear that the absence of known archaeological evidence (such as cropmarks or surface finds from field-walking) in this area cannot be taken as an indicator of the absence of archaeological sites since the evidence is under thick alluvium and long-term pasture.

4 METHODOLOGY

In Area A, eight trenches were opened with a mechanical excavator using a 5ft toothless ditching bucket in order to leave a clean surface in which archaeological features could be identified. The trenches, totalling 375m in length, were excavated under the close observation of an archaeologist. In Area B, six trenches were opened with a total length of 115m.

In both cases, the trenches were positioned in an attempt to investigate a representative sample of the proposed areas of gravel extraction. The depth and nature of the alluvium encountered in many of the trenches slowed the machining considerably. Indeed, in the deeper trenches, the mechanical excavator was barely powerful enough to remove the heavy clay alluvium, a problem exacerbated by the need to use a toothless bucket. This had one fortunate side-effect, in that it was possible to observe the exposed alluvium, in some detail, every few centimetres of its depth. This minimised the chance of missing archaeological features within, rather than beneath, the alluvium.

Once opened the trenches were cleaned by hand, photographed and planned, so that any features could be excavated and recorded using the standard techniques of the Archaeological Field Unit.

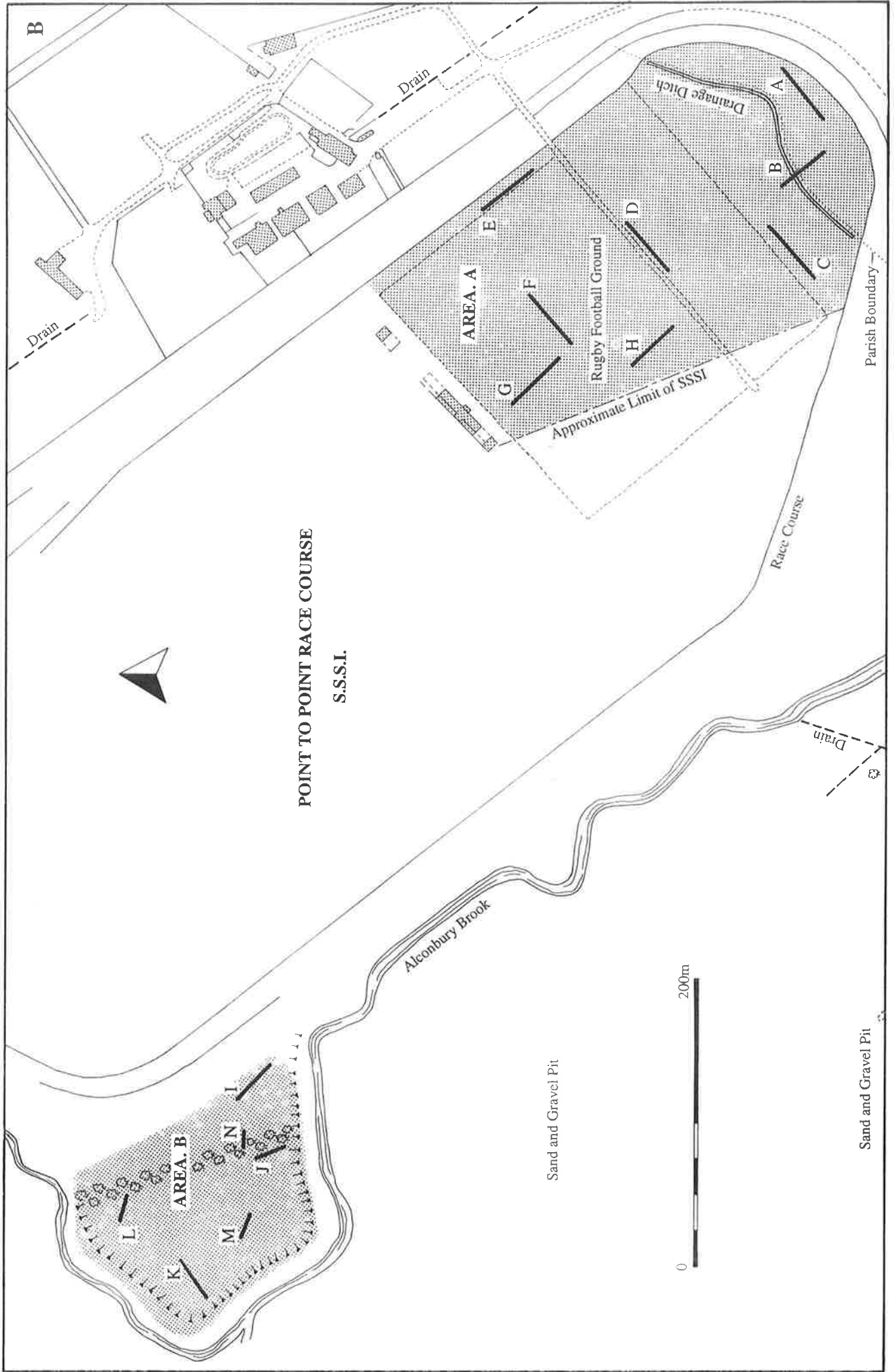


Figure 2 Trench Location Map

5 RESULTS

5.1 Area A

Most of the area exhibits a layer of yellow-brown, almost stoneless, silty clay. It varies in depth across the site, being deepest in the south, and is an alluvial deposit, laid down during seasonal flooding of the valley floor. As the gravel terrace rises to the north, a second, gravelly, alluvial layer underlies the first. To the north, ridge and furrow earthworks can be seen. These extend into the north-western half of Area A, although much of it has been destroyed in order to create the existing rugby pitches. The combination of ridge and furrow and modern landscaping has caused a degree of mixing of the alluvial deposits in Trenches F, G, and H.

Trench A This trench showed a depth of 0.3m of topsoil overlying 0.7m of alluvium. No archaeological features were present. The surface of the gravel subsoil varied from 10.04m OD in the south-west to 10.24m in the north-east.

Trench B This trench was very much deeper than any of the others and the water table was encountered at about 1.8m below the surface. The sides of the trench were stepped-in in an effort to make the trench safe but standing water, combined with heavy rain, caused large sections of the trench-sides to collapse. It was, therefore, considered too dangerous to work in. Nevertheless, it was possible to record the major deposits on first opening the trench.

A depth of 0.35m of topsoil overlay the alluvial deposits which varied from 1.25m thick at the south-east end, 0.8m at the north-west end, to a maximum depth of about 1.7m in the central part. In the lowest 0.5m, the alluvium became mottled grey and very sticky. The alluvium sealed a relict stream bed, running from south-west to north-east, and about 25m wide. This contained about 0.3m of brown, twiggy, detritus mud in the surface of which were occasional pockets of gravel. A bulk sample of this deposit was taken for an assessment of macro-fossil content and preservation.

Two areas of burnt soil were observed, characterised by a strong red coloration and fragments of charcoal. One area occurred within the alluvium to the south-west of the stream channel, the other defined itself on the surface of the gravel to the north-east.

The surface of the gravel subsoil was at a height of 9.42m OD at the south-west end, 9.78m at the north-east, and 8.96 in the centre.

Trench C A depth of 0.3m of topsoil overlay about 0.75m of alluvium. This sealed a number of archaeological and natural features including a shallow, circular pit, Cut 145, 0.45m in diameter and 0.17m deep. This contained an olive brown, sandy clay, Fill 136, with frequent large burnt flint and limestone cobbles (up to 0.20m across) and a single sherd of Iron-Age pottery.

A narrow ditch, Cut 157, 0.53m wide and at least 1.6m long, ran north-west to south-east across the trench. It contained two fills, 156 and 181, both sandy silty clays but no artefacts were retrieved.

A series of small features containing yellowish-brown, silty clay and several irregular patches of very sticky clay were also investigated but appeared to be of natural origin.

The gravel subsoil gently sloped from 10.13m OD at the south-west end to 9.87m at the north-east.

Trench D (Figure 3) A depth of 0.25m of topsoil overlay about 0.7m of alluvium, the lower 0.3m of which contained a much higher gravel content. This sealed a considerable number of ditches and pits containing sandy-clay fills. Some of these showed grey mottling indicative of periodic waterlogging (gleying).

Ditch 194, more than 2.20m long and 1.50m wide, and 0.50m deep, orientated north to south, contained a mottled grey and yellowish-brown, sandy silty clay, Fill 193.

Pit 176, 0.65 wide, and 0.36m deep, contained a brown, sandy silty clay, Fill 175.

TRENCH D

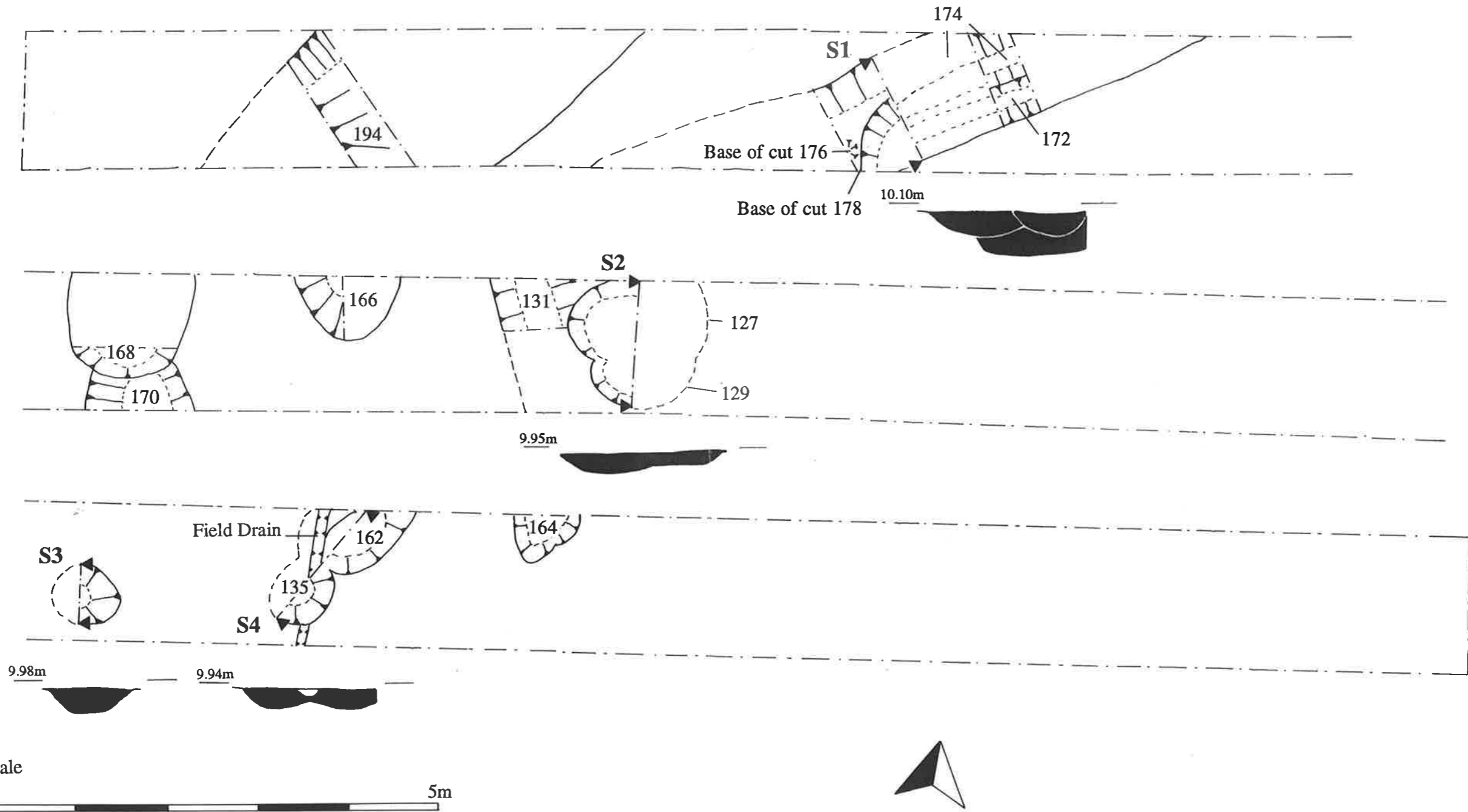


Figure 3 Plan of Features, Trench D

Ditch 172, more than 3.70m long, 0.50m wide, and 0.15m deep, cut by Pit 176, contained a yellowish-brown, sandy silty clay, Fill 171.

Ditch 174, more than 4.0m long, 0.70m wide, and 0.23m deep, running parallel to, and cut by, Ditch 172, contained a yellowish-brown, sandy silty clay, Fill 173.

Pit 178, more than 0.95m by 0.65m, and 0.38m deep, cut by Ditch 174, contained a yellowish-brown, silty clayey sand, Fill 177.

Several tiny fragments of pottery were retrieved from these intercutting features, although it is not certain from which.

Pit/Ditch terminal 168, at least 1.20m long, 1.15m wide, and 0.28m deep, contained a silty clay sand, Fill 167.

Pit/Ditch terminal 170, more than 0.50m long, 1.15m wide, and 0.25m deep, contained a yellowish-brown, silty sand, Fill 169. The stratigraphic relationship between 168 and 170 was unclear.

Pit 166, more than 0.70m long, 1.00m wide, and 0.48m deep, contained a yellowish-brown, silty clay sand, Fill 165.

Ditch 131, More than 1.6m long, 1.35m wide, and 0.22m deep, orientated north-north-west to south-south-east, contained a yellowish-brown, silty clay sand, Fill 130.

Pit 127, 1.5m long, 0.8m wide, and 0.19m deep, contained a yellowish-brown, silty clay sand, Fill 126. It was cut by Ditch 131.

Pit 129, 1.0m long, more than 0.65m wide, and 0.12m deep, contained a yellowish-brown, silty clay sand, Fill 128. Its stratigraphic relationship with Pit 127 was unclear.

Pit/Post-hole 133, 0.72m in diameter, and 0.22m deep, contained a yellowish-brown, silty clay sand, Fill 132.

Pit 135, 0.75m long, 0.60m wide, and 0.21m deep, contained a yellowish-brown, silty clay sand, Fill 134.

Pit 162, more than 1.0m long, 0.9m wide, and 0.21m deep, contained a yellowish-brown, silty clay sand, Fill 161. The stratigraphic relationship between Pits 135 and 162 was obscured by a field drain.

Pit 164, 0.65m long, more than 0.50m wide, and 0.20m deep, contained a yellowish-brown, silty clay sand, Fill 163.

The gravel subsoil is at a height of 10.00m OD in the south-west and 10.17m in the north-east.

Trench E Topsoil, 0.25m in depth, overlay 0.45m of alluvium which became more gravely towards the base. A few natural features, containing sticky clay, were present in the gravel subsoil.

The height of gravel subsoil varied between 10.09m OD and 10.22m OD.

Trench F (Figure 4) A depth of topsoil of 0.25m overlay about 0.4m of alluvially-derived silty-clay. At the base of this was a thin, discontinuous, gravely layer.

Beneath these deposits, a large number of pits and ditches, some intercutting, were present, all containing mid- or dark-brown, sandy silty clay. The dark colour of these fills probably indicates a relatively high organic content and many of the features also contained charcoal and other burnt material. Two sherds of pottery, a flint flake and fragments of daub were found in one small pit.

Pit/Post-hole 100, 0.97m long, 0.72m wide, 0.20m deep, contained Fill 107, a dark greyish-brown, silty sandy clay but no artefacts.

Pit 102, 1.20m in diameter, contained Fill 109, a dark brown, sandy silty clay with charcoal fragments. No artefacts were retrieved.

TRENCH F

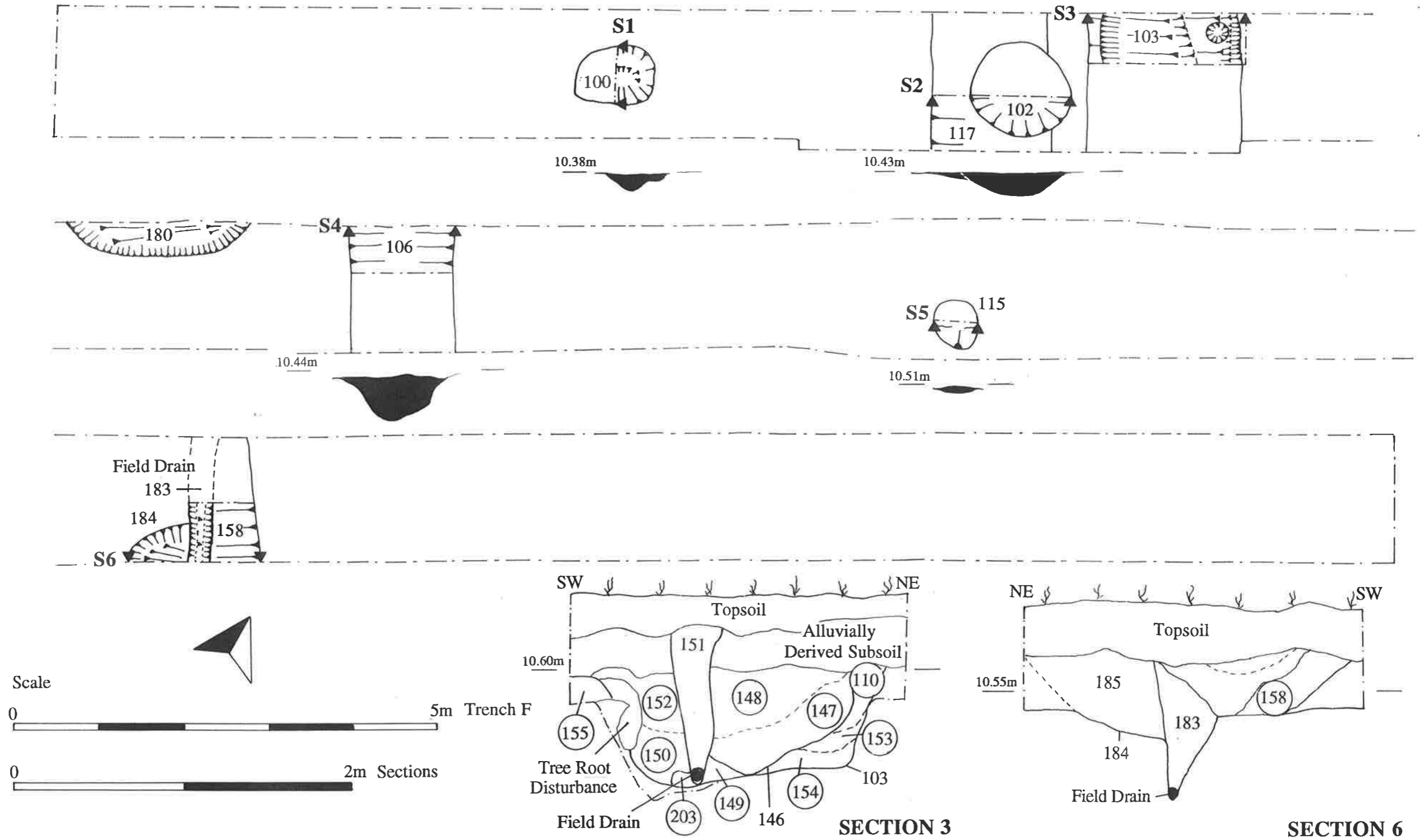


Figure 4 Plan of Features, Trench F

Ditch 117, more than 1.6m long, 1.25m wide, and 0.08m deep, was cut by Pit 102. The fill, 116, was a mid brown, sandy clay. No artefacts were retrieved.

Cut 151, more than 1.6m long, 0.30m wide, and 0.95m deep, contained a field drain, probably dating from the end of the nineteenth century.

Ditch 146, more than 1.6m long, 0.90m wide, 0.65m deep, orientated north-west to south-east, contained an upper fill, 148, a yellowish-brown, clay-silt. Below this, Fill 147 was a dark greyish-brown, silty clay. The south-western edge of the ditch was completely removed by Cut 151.

Ditch 103, more than 1.6m long, 1.75m wide, 0.75m deep, orientated north-west to south-east, contained six fills. Fills 110, 150, 152, 153, and 154 were yellowish-brown, sandy silty clays. Fill 149 was a light grey, clayey silt, possibly caused by contamination from field drain 151.

Cut 186, 2.15m long, more than 0.45m wide, and 0.36m deep, contained a yellowish-brown, sandy silty clay, Fill 187. It was probably a tree-hole.

Ditch 106, more than 1.6m long, 1.28m wide, and 0.57m deep, orientated north-west to south-east, contained a dark greyish-brown, sandy silty clay, Fill 113, with occasional small fragments of burnt clay and charcoal.

Post-hole 115, 0.48m in diameter and 0.08m deep, contained Fill 114, a dark greyish-brown sandy silty clay with frequent fragments of charcoal, and occasional fragments of burnt flint and daub. It also contained two sherds of pottery and a struck flint flake.

Ditch 158, more than 1.6m long, 1.15m wide, and 0.40m deep, contained a very mixed fill and was clearly modern

Cut 183, more than 1.6m long, 0.3m wide, and 0.8m deep, was cut by Ditch 158 and contained a nineteenth century field drain.

Pit 184, at least 0.70m long and 0.45 wide, and 0.55m deep, was cut by field drain 183. It contained a yellowish-brown, silty sandy clay, Fill 185, but no artefacts.

The sandy gravel subsoil was found at a height of between 10.36m and 10.42m OD.

Trench G (Figure 5) The topsoil, with a depth of about 0.3m, overlay a layer, 0.3m thick, similar to that in Trench F.

This sealed a number of archaeological features with fills like those seen in Trench F. As well as these, there were several ditches containing yellowish-brown, silty clay. At the north-western end of the trench was a large ditch, cut from beneath the topsoil.

Ditch 121, more than 1.6m long, 0.95m wide, and 0.43m deep, orientated south-west to north-east, contained a yellowish-brown, silty clay, Fill 120.

Pit 188, at least 1.4m by 0.7m, and 0.18m deep contained a very stoney yellowish-brown, silty clay, Fill 189. In the base of Pit 188 was a small post-hole, 190, 0.2m in diameter, and 0.11m deep. It contained a yellowish-brown silty clay, Fill 191.

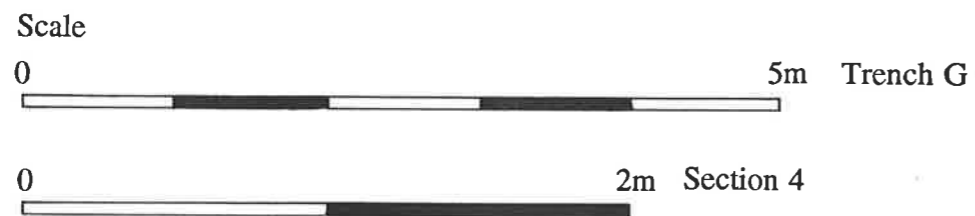
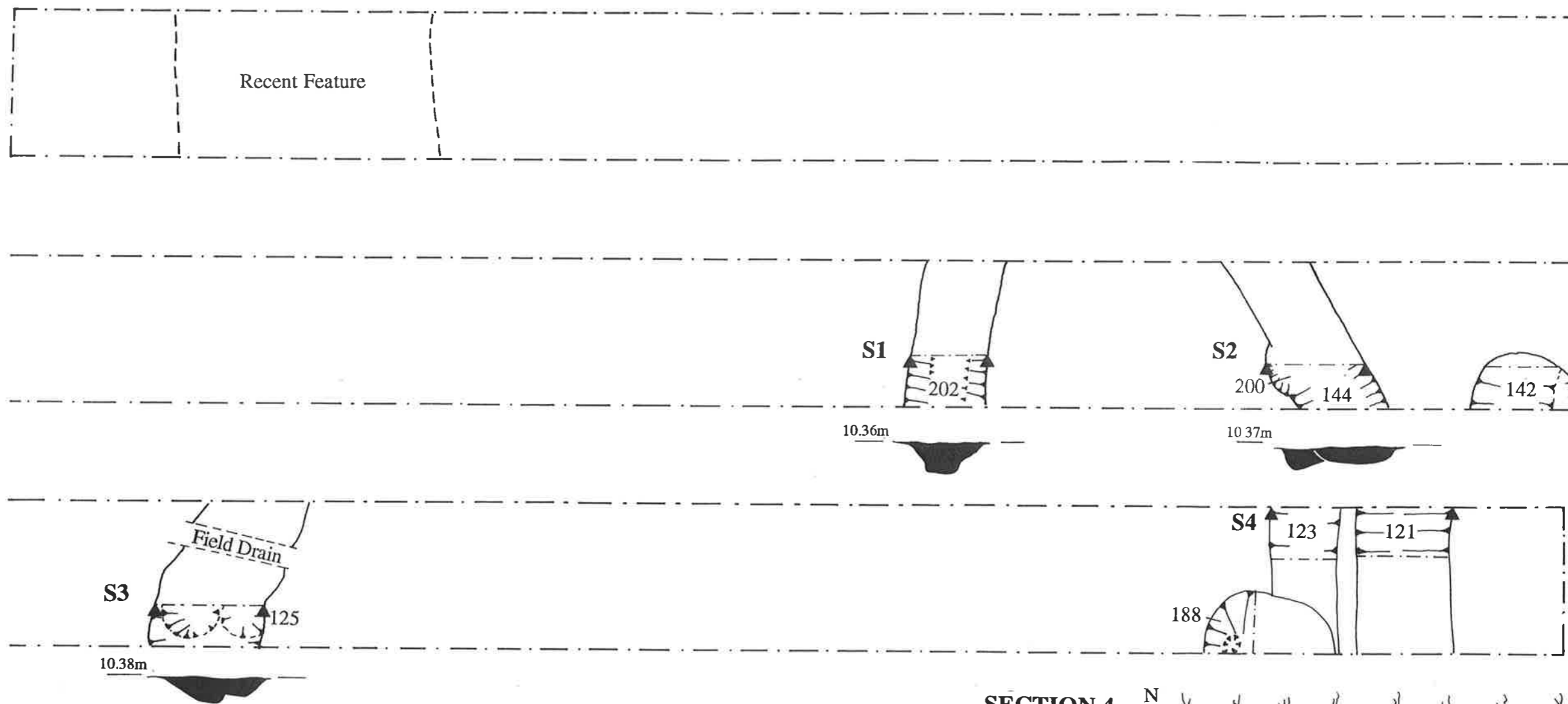
Ditch 123, more than 1.6m long, 0.75m wide, and 0.12m deep, was cut by Pit 188, and contained a brown sandy silty clay, Fill 122.

Ditch 125, more than 1.6m long, 1.15m wide, and 0.28m deep, orientated west-south-west to east-north-east, contained a greyish-brown, silty clay, Fill 124.

Pit 142, 1.10m by at least 0.60m, and 0.20m deep, contained a greyish-brown sandy silty clay, Fill 141.

Ditch 144, at least 1.7m long, 0.75m wide, and 0.18m deep, orientated north-north-east to south-south-west, contained a dark greyish-brown, sandy silty clay, Fill 143.

TRENCH G



SECTION 4

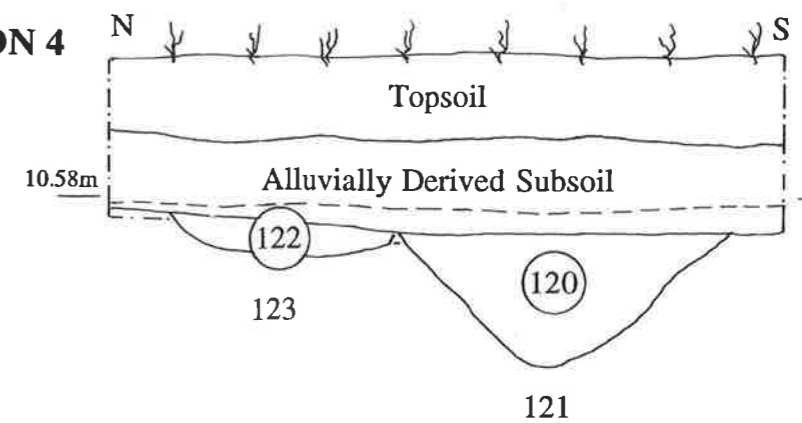


Figure 5 Plan of Features, Trench G

Post-hole 200, at least 0.55m by 0.32m, and 0.22m deep, was cut by Ditch 144. It contained a mid brown, silty clay, Fill 199.

Ditch 202, at least 1.6m long, 0.80m wide, and 0.32m deep, orientated south-west to north-east, contained a yellowish-brown, silty clay, Fill 201.

The gravel subsoil had a height of 10.59m OD at the north-western end of the trench, dropping to 10.49m at the south-eastern end.

Trench H A depth of topsoil of only about 0.1m overlay an alluvial layer of about 0.6m again becoming more gravelly towards the base.

Sealed by this were two pits containing fills similar to those in Trench F.

Pit 138, 0.95m by at least 0.60m, and 0.25m deep, contained a dark yellowish-brown, silty sandy clay, Fill 137, with fragments of burnt bone and two struck flint flakes.

Pit 140, 2.0m long, at least 0.75m wide, and 0.30m deep, contained a very dark brown, sandy silty clay, Fill 139, with occasional lenses of reddish burnt silty clay.

The subsoil had a height of 10.35m OD at the north-western end of the trench, gradually sloping to 10.23m OD at the south-eastern end.

5.2 Area B

This area is overlain by thick alluvial deposits, very similar to the upper alluvial layer in Area A.

Trench I Topsoil with a depth of 0.35m overlay an alluvial layer about 0.9m thick. This became more gravelly towards the base. Beneath this, a layer of very dark grey, silty clay was observed. This was only about 0.1m thick.

Cut from within the alluvium, there was a shallow channel, Cut 301, containing a yellowish-brown, sandy clay, Fill 340. A single, struck flint flake, probably dating from the early neolithic period, was found at the base of this fill. Due to the oblique angle at which the channel appeared in the trench, it was difficult to judge its full width. It was, however, at least 3m wide.

The gravel subsoil had a maximum height of 10.55m OD, dropping to 10.32m OD at the south-east end and to 10.43 at the north-west.

Trench J (*Figure 6*) The topsoil, with a depth of 0.3m, overlay 0.9m of alluvium, becoming more gravelly towards the base.

The alluvium sealed a number of irregular features containing mid greyish-brown silty clay. Towards the southern end of the trench were two areas of burning, marked by deep red and purple, burnt silty clay and frequent charcoal fragments.

Ditch 324, more than 1.6m long, 0.80m wide, 0.05m deep, orientated west to east, contained two fills. An upper fill, 322, of dark grey, silty clay, containing frequent charcoal fragments, overlay Fill 323, a mottled brown, silty clay with occasional charcoal fragments.

Cut 311, very irregular but at least 2.0m by 1.5m, contained two fills. An upper fill, 309, of yellowish-red and dark reddish-brown, clayey silt, contained frequent charcoal fragments and two struck flint flakes. One of the flakes appears to be a fragment of a Neolithic polished flint axe. This fill was not continuous, but formed irregularly shaped lenses within Fill 310, an olive-brown, silty clay.

Cut 306, 2.35m by 2.0m, contained two fills. An upper fill, 304, of yellowish-red and dark reddish-brown, clayey silt, contained frequent charcoal fragments. It formed irregularly shaped lenses within Fill 305, an olive-brown, sandy silty clay.

Cut 321, 0.70m long, 0.30m wide, and 0.09m deep, contained Fill 320, an olive-brown, silty clay.

TRENCH J

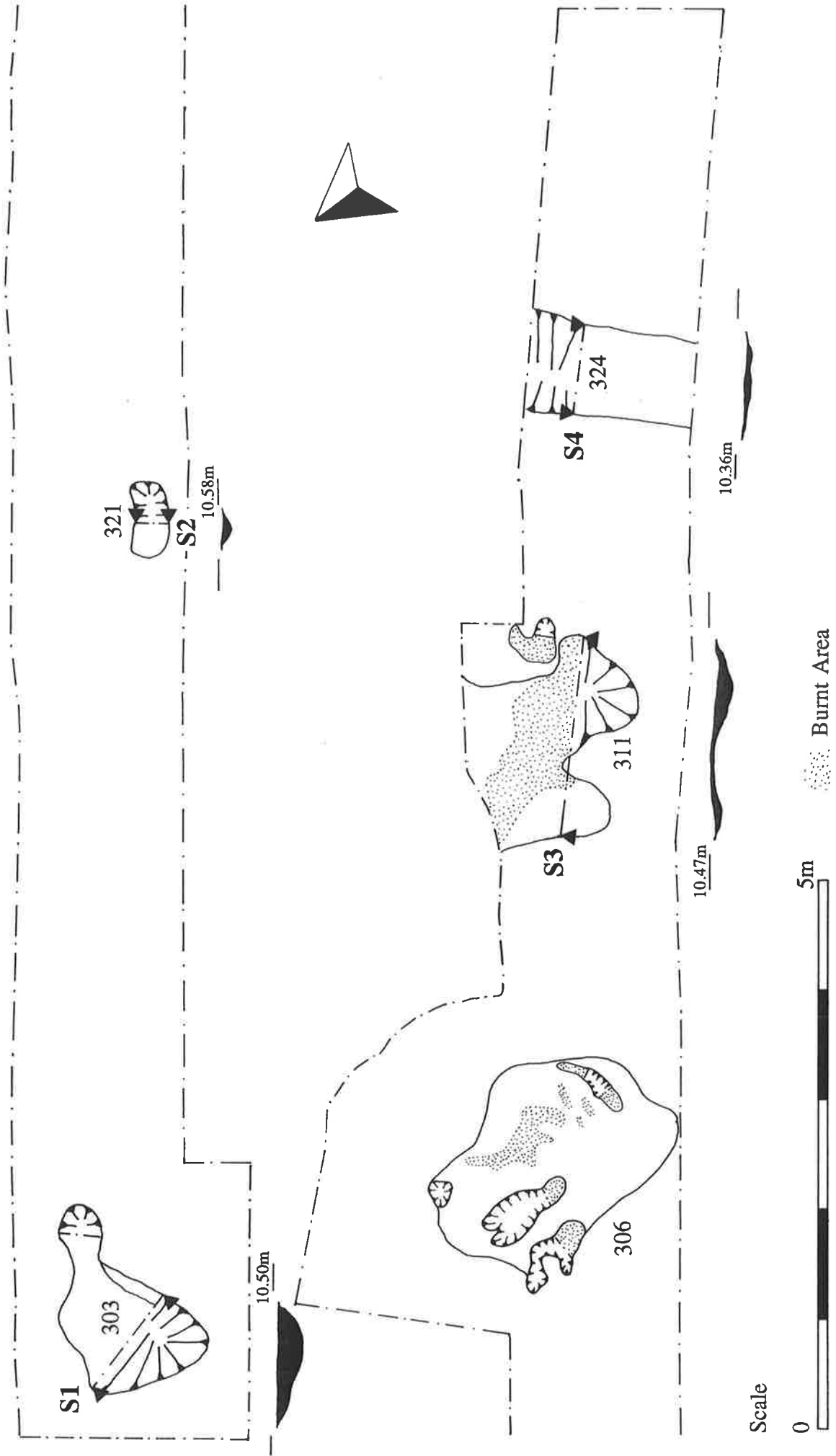


Figure 6 Plan of Features, Trench J

Cut 303, very irregular but 1.85m by 0.95m, and 0.20 m deep, contained an olive-brown, silty clay, Fill 302, over a yellowish-brown, silty sandy gravel, Fill 338.

The gravel subsoil had a maximum height of 10.54m OD, dropping down to 10.33m OD at the southern end.

Trench K For much of the length of this trench the topsoil had already been removed. It survived in the north-eastern part of the trench and was about 0.2m deep. Under this was about 1.2m of alluvium, becoming more gravelly in the lowest 0.3m.

Beneath the alluvium, were two burnt areas similar to those in Trench J. There were also several irregularly-shaped features containing yellowish-brown silty clay.

Cut 312, very irregular but at least 3.65m by 1.30m, and 0.35m deep, contained three fills. An upper layer, Fill 313, red silty clay, overlay lenses of dark grey and red, silty clay, Fill 314. Under this was a brown silty clay, Fill 315.

Cut 316, very irregular but at least 2.30m by 0.75m, and 0.45m deep, contained two fills. Fill 317, a dark grey, silty clay, over lay Fill 318, a reddish-yellow sandy silt.

The gravel subsoil had a maximum height of 10.43m OD.

Trench L The topsoil in this trench was about 0.3m deep, overlying 0.7m of alluvium. No archaeological features were present.

The maximum height of the gravel subsoil was 10.90m OD.

Trench M (*Figure 7*) The topsoil had a depth of about 0.3m and overlay alluvial deposits about 1.1m thick. The lowest 0.25m of alluvium contained slightly more gravel.

Ditch 337, more than 1.6m long, 2.60m wide, and 0.40m deep, contained a yellowish-brown, silty sandy clay, Fill 336, with a high gravel content. The fill contained large (up to 0.8m across) concretions of gravel, ferrous and manganese compounds.

Pit/Post-hole 335, 0.42m by more than 0.25, and 0.14m deep, contained a mottled grey and yellowish-brown, silty clay, Fill 334, with occasional charcoal flecks.

Ditch terminus/Pit 331, very irregular but at least 2.2m by 1.2m, and 0.35m deep, contained a yellowish-brown, silty sandy clay, Fill 330, with occasional charcoal fragments.

Ditch 329, more than 1.6m long, 2.32m wide, and 0.52m deep, contained a mottled dark grey and yellowish-brown, sandy silty clay, Fill 328.

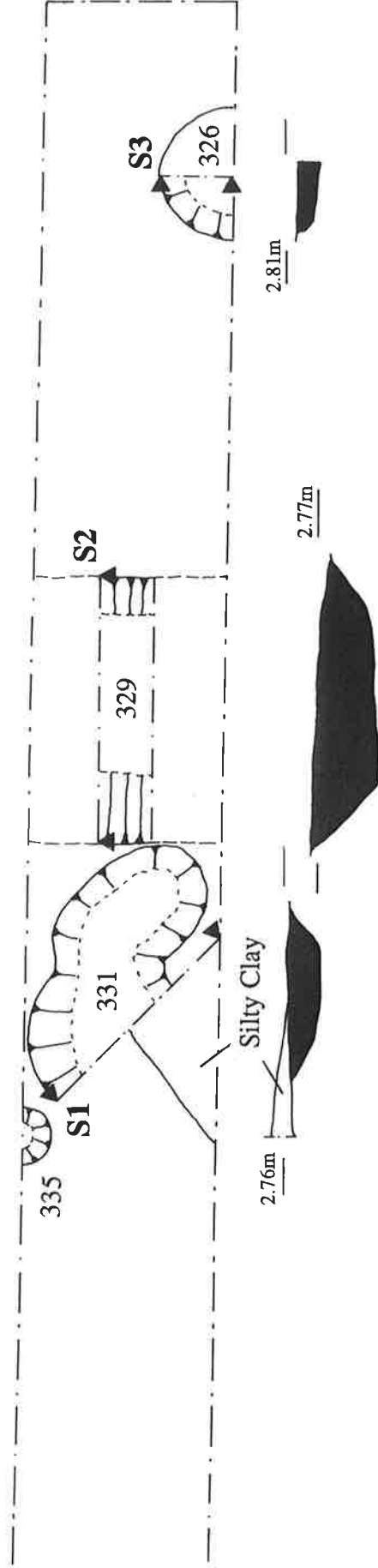
The gravel subsoil had a maximum height of 10.34m OD.

Trench N The topsoil had a depth of 0.25m and overlay 0.95m of alluvium, the lowest 0.15m containing more gravel.

Sealed by the alluvium, were two archaeological features, a narrow ditch and a small pit. Both had light brown, sandy silty clay fills but were not excavated.

The gravel subsoil had a maximum height of 10.60m OD

TRENCH M



Scale



Figure 7 Plan of Features, Trench M

6 INTERPRETATION

6.1 Area A

Trench A The lack of archaeological features here, combined with similar findings just to the east (Macaulay, 1993), suggests that this area, immediately to the south of the relict stream channel, was not occupied during the prehistoric period. The reasons for this are not immediately apparent, but it may have been too wet due to changes in the course of the stream.

Trench B This trench showed a cross-section of a relict stream channel. The organic detritus mud represents a period in which the channel was drying up. This may have been caused by a change in the course of the stream, a process which has, apparently occurred more than once. The deposition of gravel lenses in the surface of this deposit would have required a high velocity stream flow. This would have been necessary to scour the channel somewhere upstream and carry the gravel for some distance, before depositing it here. Such velocities would occur during a flash flood.

The two burnt areas could not be excavated, although a sample was taken. Their origins are not known, but they were almost certainly not produced by natural means.

Trench C The shallow pit, 145, contained burnt cobbles, and may have been used for heating water. This technique, in which heated stones are added to water, allows poorly-fired pots to be used for food preparation where direct heat would cause cracking. A single sherd of pottery was also retrieved from this feature and has been dated to the later Iron Age. Ditch 157 may have been a small drainage ditch, running down towards the relict stream channel.

Trench D The large number of pits and ditches with very similar fills are, unfortunately, undated. Their density suggests that they represent settlement activity, but they are very different to the complex of features found just to the north-west, in Trenches F, G, and H. They may, therefore, date from a different period or, possibly, they may be the result of activities peripheral to the main settlement as represented in Trenches F, G, and H. The limitations of excavation in a narrow trench precludes much detailed interpretation, but the two parallel ditches, 172 and 174, may be post foundation trenches, perhaps for some kind of fence. The sherds of pottery, from one of these ditches or from the underlying Pit 178, are too small for dating purposes, but are unlike either the Iron Age pottery from Trench C, or the Bronze age pottery from Trench F, but may, of course, still date from one of these periods.

Trench E The features contained in this trench were interpreted as alluvial deposits filling natural gullies and depressions in the subsoil.

Trench F This trench contained a high density of features with dark brown or greyish-brown, organic-rich fills, almost all of which show clear signs of truncation, probably caused by medieval and later disturbance. The base of a small post-hole, Cut 115 contained two sherds of Bronze Age pottery as well as a fragment of a Neolithic flint blade. On this basis, these features have been provisionally dated to the Bronze Age. Two fragments of burnt clay, containing the impressions of grass or straw, were retrieved from the same post-hole. This is almost certainly daub, used in the construction and weather-proofing of wooden-framed walls. It therefore seems likely that a reasonably extensive settlement existed in this area.

Several features cut, or were cut by, other features, for example, Pit 102 was cut into the top of Ditch 117. Along with evidence that Ditch 146 was a re-cut of Ditch 103, this suggests that the site was in use for a considerable period, allowing time for the function of individual features to be superseded.

Trench G Several features containing yellowish-brown silty clay were excavated in this trench, although it was not possible to date them. However, the profile of Ditch 202 may imply that it functioned as a post foundation trench and may, therefore, be contemporary with the features in Trench F. Alternatively, it may be evidence for a second period of occupation in this area; a not improbable interpretation given the presence of Iron Age activity closer to the relict stream channel.

Ditches 125 and 144, Post-hole 200 and Pit 142 all have very similar fills to those in Trench F, and it is reasonable to assume that they form part of the same period of occupation.

Trench H This trench contained only two archaeological features. One of them, Pit 138, contained fragments of burnt bone, not yet identified, and two struck flint flakes not inconsistent with a Bronze Age date.

6.2 Area B

Trench I The origin, whether natural or anthropogenic, of the channel, Cut 301, is not clear but it may be a relict stream channel representing a small tributary of the main brook. Although it is not possible to securely date the channel from a single artefact, the flint flake dates from the early Neolithic, or even from the late Mesolithic, and so is of a similar age to the few other artefacts retrieved from this area.

Trench J Although it also contained a truncated ditch, the most striking features were the two irregular cuts, 306 and 311, containing burnt clayey silt and many charcoal fragments. The shape of the cuts and the nature of the fills strongly suggest that they are the result of tree-roots which have burnt *in situ*. Since most British tree species are extremely reluctant to burn and, in general, do not fall prey to forest fires, it is very unlikely that this has occurred naturally. The alternative is that they have been deliberately burnt to clear the land for agriculture or settlement. The only artefacts retrieved were two struck flints from one of the tree-holes. One of these is almost certainly a fragment from a Neolithic polished axe and, given the lack of artefacts from any other period in Area B, the period of land clearance has been provisionally assigned to this period.

Trench K This trench contained two irregularly-shaped features, filled with burnt soil, very similar to features found in Trench J, and they have been interpreted as part of the same process of land clearance.

Trench L The gravel subsoil in this trench is about 0.5m higher than in the rest of Area B. It seems likely that this is a low gravel ridge which is, nevertheless, substantial enough to force the Alconbury Brook to deviate to the west in order to avoid it.

Trench M This trench contained several ditches and pits, all with similar fills, two of which showed signs of periodic waterlogging. The feature density is such that it is reasonably likely that some settlement activity occurred in this area. This may have been associated with the original clearance of the area as inferred from the features in Trenches J and K. However, no artefacts were retrieved, and so this must remain uncertain.

Trench N Two features were recorded in this trench but neither was excavated.

7 CONCLUSIONS

Area A shows two distinct zones. In the southern part, there is a relict stream channel fairly deeply buried beneath alluvial deposits, whilst a gravel terrace gradually rises to the north. In this latter area, the alluvial overburden has been considerably disturbed and mixed by, possibly, medieval agriculture and by modern landscaping to produce level rugby pitches. The upper, almost stoneless, silty clay alluvium, found in Areas A and B, is derived from the clayey soils to be found in the upland catchment area of the Great Ouse and its tributaries. It is generally supposed that it was laid down during the medieval period after woodland clearance had exposed these areas to soil erosion. However, there is no direct dating evidence for its deposition, and it may be that burnt material within the alluvium (for example, in Trench B) could provide this. The presence of ridge and furrow, if it dates from the medieval period, obviously provides a *terminus ante quem* for this process.

The relict stream channel seen in Trench B, is well-sealed by alluvial deposits. A sample of the organic detritus mud found in the channel was sent to Dr. P. Murphy at the University of East Anglia for a brief, preliminary assessment of macro-fossil content (Appendix A). This revealed that, although some desiccation of the deposit has occurred in the past, there is relatively good preservation of more durable seeds. The deposit does, therefore, hold the potential to provide valuable information about the palaeoecology of the prehistoric landscape. The presence of gravel pockets in the top of this deposit implies a period of erosion which may be contemporary with the more gravely silty clay seen in the less deeply alluviated trenches. The larger particle size in these deposits would require a high water velocity and may well be evidence for a period of flash-floods.

A brief assessment of the buried landscape (Appendix C) by Dr. C.A.I. French of the Department of Archaeology, University of Cambridge, shows that a buried soil exists across a large part of the site, sealed beneath the alluvium. The upper horizon, representing the topsoil and turfline, is difficult to distinguish since it formed in combination with alluvial deposition and, in practice, makes up the lower portion of the alluvium. Micromorphological analyses of this soil should offer a good deal of information on the development of the pre-alluvial landscape. The presence of this soil horizon also means that any *in situ* midden or occupation deposits could survive relatively intact.

Some features, in both areas, show signs of periodic waterlogging. Although not observed during excavation, this, combined with the thick overlying alluvium, may have helped to preserve organic remains. An assessment of organic remains from features in Area B (Appendix B) shows macrobotanical material present in all the samples taken. The low densities found mean that the results are inconclusive, however, the lack of food plants appears to indicate that the features sampled were not from a domestic context. Further sampling could well provide more detailed information relating to landuse. A similar assessment, of features in Area A, is not yet available but should be completed before the end of July, 1993.

Trench A, to the south-east of the stream channel, did not contain archaeological features. Work carried out just to the east (Macaulay, 1993), revealed little evidence of prehistoric activity on this side of the relict stream and it would appear that settlement did not occur here.

Close to the stream, on its north-western side, there is at least one Iron Age feature (in Trench C), providing evidence of stream-side activity though not necessarily of settlement. It is, however, possible that other features (for example, in Trench D) may date from this period.

In the north-western part of the area (Trenches F, G, and H), a relatively high density of features survives, although truncated by medieval and later activity. The nature of the fills of many of these features suggests a high organic content and the presence of charcoal and other burnt material gives further scope for the preservation of organic remains by charring. These factors, density of features and nature of deposits, strongly indicate that this is a fairly intensive settlement area. Many of these features cut, or are cut by, features with similar fills with the implication that the area was occupied for some time. Based on the limited number of artefacts retrieved, this occupation has been tentatively dated to the Bronze Age. Further excavation of the area should make it possible for the extent and nature of the settlement to be elucidated as well as providing information about the immediate environment of the area.

In Area B, the areas of burnt soil and charcoal have a very irregular shape, with burnt material extending under and within the natural gravel sub-soil. These characteristics are typical of tree-roots and the burnt areas appear to be the result of the deliberate burning of tree stumps (British tree species do not burn well and are unlikely to catch fire naturally). Struck flint flakes (including a fragment of polished axe) associated with these tree roots have been dated to the Neolithic period. This was the period of the first farming communities and so it is possible that this burning was part of the initial clearance of the site. The larger fragments of charcoal should be dated, using radiocarbon dating, as part of any future work on the site.

The channel revealed in Trench I was cut from a level within the alluvium, suggesting that, after an initial period of alluvial deposition, there was a phase during which, alluviation ceased and the channel formed, or was cut, in these deposits. The presence of an early Neolithic flint flake in the fill of the channel may indicate a very early date for the initial alluviation although, of course, the flake could have been washed into the channel at some later time.

Excavation of large areas of the scheduled ritual monument (SAM 21), to the south of the Alconbury Brook, produced remarkably few artefacts. In comparison, the limited excavation undertaken in the current evaluation has produced several Neolithic struck flint flakes. This argues for a clear division of landuse between the southern and northern sides of the brook, with the south being utilised for ceremonial purposes. The northern side, on the other hand, appears to have been an area of agricultural and settlement activity.

The ditches and pits excavated in Trench M are, at present, undated but, as pointed out above, offer some potential for environmental analysis. It is not unreasonable to assume that these features may be more or less contemporary with the clearance of the site, and so could provide important information concerning the earliest farmers in the area, both in terms of the man-made and the natural environment.

8 ACKNOWLEDGEMENTS

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9 REFERENCES

Macaulay, S, 1993 *An Archaeological Evaluation at Huntingdon Racecourse, Cambridgeshire, 1993. Area 1 - Hotel Site*, Cambridgeshire Archaeology Report A8

Malim, T, 1990 *Brampton 1990 A1-M1 Link Road*; Cambridgeshire Archaeology Report 16

Malim, T and Mitchell, D, 1993 *Neolithic ditches and Iron Age Settlement at Thrapston Road, Brampton 1992*; Cambridgeshire Archaeology Report 81

Page, W (ed), 1974 *The Victoria County History of the County of Huntingdon.*, 1, 2

White, D, 1969 Excavations at Brampton; Huntingdonshire, 1966 *Proc Cambridge Antiq Soc*, 62, 1-20

APPENDIX A

Assessment of Macrofossil Preservation (Area A, Trench B)

Huntingdon Race-Course, Brampton, Cambridgeshire

Trenches excavated by Paul Sporrey (Field Unit, Cambridgeshire Archaeology) in areas of proposed gravel extraction revealed prehistoric features cut into gravel and a palaeochannel of the Alconbury Brook under a variable thickness of alluvium. The site was visited by the writer on 17th June 1993.

The palaeochannel

Torrential rain since a trench was cut across this feature had resulted in section faces becoming unstable and slumping and in flooding. It was unsafe to enter the trench. However it was clear that three main sedimentary units were present (maximum depths):

- | | |
|----------------|---|
| 0 - c 1.8m | Mineral alluvium; oxidised yellowish-brown above, mottled greyish-brown towards base. It seemed that there might be lithological variation within the alluvium but close inspection was not possible. |
| c 1.8 - c 2.1m | Brown twiggy detritus mud with occasional subangular flints, larger wood fragments and rare bone fragments. |
| c 2.1m + | Flint gravel in grey sand matrix. |

Samples from *in situ* deposits could not be obtained but a block of the detritus mud from the spoil heap was collected.

A 0.2kg sample was washed out over a 0.5mm mesh and material retained was partly scanned under a binocular microscope at low power to assess macrofossil preservation. The retent was largely composed of wood and twig fragments and other macrofossils were rare. Fruits/seeds present included Alismataceae (embryos), cf *Alnus glutinosa*, *Chenopodium album*, *Corylus avellana*, *Crataegus monogyna*, *Prunus spinosa*, *Ranunculus* subg. *Batrachium*, *Scirpus* sp and *Sambucus nigra*: a mixture of aquatics, wetland plants, weeds and scrub plants: A few caddis larval cases, some fragments of beetle elytra and a single abraded indeterminate gastropod shell were also noted.

This scan does not constitute a thorough assessment, though it seems that the sparseness of macrofossils and the predominance of durable seeds etc may imply desiccation of the deposit at some stage. Clearly, however, it does have the potential to provide palaeoecological information relevant to the prehistoric landscape and a formal assessment for both micro- and macro-fossils will be necessary during future work at the site.

Peter Murphy
19th June 1993.

APPENDIX B

MACROBOTANICAL AND OTHER REMAINS FROM AREA B, HUNTINGDON RACE COURSE (STU HRC 93) : AN ASSESSMENT

INTRODUCTION

METHODS

THE MACROBOTANICAL REMAINS

MOLLUSCS

CONCLUSIONS

BIBLIOGRAPHY

TABLE

V. Fryer and P. Murphy 7/93

INTRODUCTION

A total of ten samples were taken from Area B from trenches J,K and M. All were from prehistoric features sealed by approximately 1m. of alluvium.

METHODS

The samples were processed by manual water flotation, collecting the float in a 500 micron mesh sieve. The dried flots were sorted under a binocular microscope at low power. The macrobotanical and other remains noted are listed on Table 1. The residues were wet-sieved in a 1mm. mesh sieve and sorted when dry. No artefacts were recovered. Ferrimanganiferous concretions of varying sizes were noted in all residues and samples 12 and 19 contained quantities of burnt/heated stone. Modern contaminants in the form of fibrous roots, seeds/cereals, moss, invertebrates and small mammal bone were present in all samples.

THE MACROBOTANICAL REMAINS

With the exception of sample 12, carbonised plant remains including charcoal were present at very low densities in all samples. Seeds/fruits were extremely rare and poorly preserved having become puffed during carbonisation and subsequently abraded. Four seeds of a possible Papaver sp. (poppy) were present in sample 8 and a single seed of an indeterminate Labiatae (thyme family) was noted in sample 9. Sample 18 from a pit/ditch terminus fill contained possible seeds of Chenopodium ficifolium (fig-leaved goosefoot) and Rubus sp. (bramble). Sample 12 from a burnt silt deposit contained abundant small, medium and large charcoal fragments.

MOLLUSCS

Mollusc shells were noted in samples 9,14,15 and 18 at very low densities. Taxa present include the Trichia hispida group, Cochlicopa sp. and Vallonia sp. All belong to either the open-country species or intermediate/catholic species as defined by Evans (1972).

CONCLUSIONS

Because of the low densities of macrobotanical material present, it is not possible to say much positive about human activity on or near the site. The assemblages are, however, apparently not domestic in character: charred cereals or other food plants are absent. The mollusc assemblage is also inconclusive. It is possible that a more extensive sampling policy made possible by any further excavation may increase the probability of pinpointing specific activities. No further work is necessary on the current assemblages.

BIBLIOGRAPHY

Evans, John G., 'Land Snails in Archaeology',
1972

SAMPLE No.	8	9	12	13	14	15	16	17	18	19
CONTEXT No.	313	314	304	302	309	310	322	327	330	334
<u>Papaver</u> sp.	+cf	-	-	-	-	-	-	-	-	-
<u>Chenopodium ficifolium</u> Sm.	-	-	-	-	-	-	-	-	+cf	-
<u>Rubus</u> sp.	-	-	-	-	-	-	-	-	+cf	-
Labiatae indet.	-	+cf	-	-	-	-	-	-	-	-
Indet. root/rhizome/stem	-	-	+	-	-	+	+	+	+	+
Indet. thorn	-	-	-	-	-	-	-	-	-	+
Sm./med. charcoal (<5mm)	+	+	+++	++	+	+	++	+	+	+
Large charcoal (>5mm)	-	-	++	-	+	-	+	+	-	-
Ferrimanganiferrous concretions	+	-	-	+	+	-	+	+	-	-
Black porous cokey material	-	-	-	+	-	-	-	-	-	+
Burnt clay	+++	-	+++	-	+++	-	-	-	-	-
Molluscs										
<u>Intermediate/ catholic species</u>										
<u>Trichia hispida</u> group	-	++	-	-	+	+	-	-	+	-
<u>Cochlicopa</u> sp.	-	+	-	-	+	-	-	-	-	-
<u>Open country species</u>										
<u>Vallonia</u> sp.	-	+	-	-	-	-	-	-	-	-
Sample Volume (lit.)	3.5	2.0	7ss	8ss	4ss	3.5	2.0	7.0	8ss	8.0
% flot sorted	100	100	100	100	100	100	100	100	100	100

KFY ss = sub sample + = present ++ = common +++ = abundant

Table 1

Macrobotanical and other remains from Area B, Huntingdon Race Course.

APPENDIX C

Huntingdon Racecourse, Brampton : The assessment of the buried landscape and soils

C.A.I.French
(24/6/1993)

1. Introduction

The open trenches (A to N) were inspected by the writer on June 23, 1993. The following assessment takes the form of a series of observations and associated implications for the future study of this archaeological landscape.

2. Observations

2.1 Area A

Area A is dominated by two topographical zones - a substantial and relatively deeply buried relict stream channel in its southern part, with the remainder of the area dominated by a gravel terrace gradually rising to the north. The former is undoubtedly a previous version of the existing Alconbury Brook, which currently bounds the southern edge of Areas A and B. It contains a lower, possibly eroded, basal peat which is overlain by waterlogged, alluvially derived silty clays. The northern part of Area A has been utilised at some point in the medieval period for a north-south aligned ridge and furrow system. This appears to have been recently flattened.

The whole area is dominated by at least two different types of alluvium :

- 1) an upper, dark brown to black, organic silty clay loam which acts as the present day turf and topsoil horizon and overlies a brown, relatively stoneless silty clay loam exhibiting a medium sub-angular blocky ped structure; and
- 2) a reddish to greyish brown silty clay loam with common flint gravel pebbles evenly mixed with the fine matrix.

The upper alluvial layers probably represent one major phase of alluvial aggradation under conditions of seasonal overbank flooding and subsequent ponding on the valley floor. The relatively organic, very fine fabric and ped formation suggest that this material is derived from the clearance, mechanical disturbance and erosion of well structured, organic and fine textured soils from upstream and on higher ground which are characteristic of the subsoils and soils of this part of the east Midlands. This alluvium is generally believed to be of the medieval period, and in

this case was deposited in an active floodplain over a considerable length of time prior to the period of arable cultivation represented by the ridge and furrow system.

The lowermost gravelly alluvium does not occur uniformly across Area A, and tends to concentrate in the less deeply buried part of Area A as the gravel terrace rises northwards. It probably represents material derived from overbank flooding which has been eroded by bank scour by fast running water. It may well represent an occasional 'flash flood' type of episode and deposit.

The alluvial overburden varies in thickness from about 40 cm to 2 m and seals a reddish brown silty clay loam buried soil about 25-30 cm thick. It does not exhibit any definite horizons. From extensive field observation and soil micromorphological analyses elsewhere in Cambridgeshire alluviated floodplains (ie. Maxey and Fengate; see French 1990, 1992, in press; French *et al.* 1992, French and Pryor 1992, 1993), this type of buried soil tends to have developed under base-rich, dry land conditions, which was subsequently subjected to intermittent conditions of waterlogging and drying out during periods of seasonal flooding and aggradation of alluvially derived silts and clays.

2.2 Area B

This area is dominated by thick deposits of alluvium, which are similar in character to the upper level of alluvium observed in Area A. Here, a small relict stream course runs northwest to southeast, approximately at a right-angle to the present day brook. To either side of the relict stream course are amorphous and irregular areas of burnt soil with charcoal fragments, which define in the top of the gravel subsoil. These are probably the result of the burning out of tree stumps as part of the initial clearance of the site.

2.3 Archaeological features

Archaeological features of possible Neolithic to Iron Age date are preserved sealed beneath the alluvium. Although no archaeological features appear to have remained waterlogged since burial, the combination of the fluctuating ground water table, the fine silty clay fill matrix and the thick, overlying deposits of alluvium may have all served to enhance organic preservation in the archaeological features.

3. Implications, potential and further work

If the logistical problems (of sampling, sieving and sorting) can be overcome, there is considerable potential for the preservation of organic remains in the archaeological features and relict stream courses.

The buried soil is well preserved across the whole site. This will mean that any *in situ* midden and/or floor/occupation deposits could survive if they are there to be found.

In addition, as very little archaeological/environmental work has been carried out in this tributary valley of the River Great Ouse, micromorphological analyses of the buried soil should be carried out. This would help to provide the history of development of the pre-alluvial landscape. Studied in conjunction with the micromorphological work being conducted for the Brampton prehistoric excavations of Malim (1990) in advance of road construction, as well as comparative work to that conducted by the writer in the lower Welland and Nene valleys (French 1990, 1992; French *et al.* 1992), this would provide a valuable contribution to the elucidation of this prehistoric landscape.

To conduct this work, it would be imperative to address the following problems :

- 1) the sequence and date spans of alluvial deposition;
- 2) the extent of each phase of alluvial deposition;
- 3) the sequence and courses of the former relict stream channels;
- 4) the spatial variation and development of the buried soil preserved in this alluvial floodplain with respect to the archaeological record.

4. Conclusions

This alluviated tributary valley of the River Great Ouse is a very rich and important area, from both the archaeological and environmental points of view.

The preliminary assessment has demonstrated that this valley contains sealed evidence of multi-period prehistoric use and development.

There is the potential for organic preservation, which when combined with the soil micromorphological analyses should provide a comprehensive sequence of landscape development associated with the human use of the valley.

Finally, there is considerable scope for comparative research with recent, adjacent excavations by the County Council Archaeology Section, as well as other more intensively investigated river valley areas in northwestern Cambridgeshire.

5. References

- French, C.A.I., 1990, Neolithic soils, middens and alluvium in the lower Welland valley, *Oxford Journal of Archaeology* 9(3), 305-311.
- French, C.A.I., 1992, Alluviated fen-edge prehistoric landscapes in Cambridgeshire, England, in M.Bernardi (ed) *Archaeologia del Paesaggio*, pp.709-731, Firenze.
- French, C.A.I., in press, The micromorphological analyses of the buried soils and ditch deposits, in F.M.M.Pryor *Excavations at the Etton Causewayed Enclosure*, HBMC Monograph, London.
- French, C.A.I., Macklin, M.G. and Passmore, D.G., 1992, Archaeology and palaeochannels in the lower Welland and Nene valleys at the fen-edge, eastern England, in S.Needham and M.G.Macklin (eds) *Alluvial Archaeology in Britain*, Oxbow Monograph 27, pp.169-176, Oxford.
- French, C. and Pryor, F., 1992, Floodplain gravels : buried Neolithic and Bronze Age landscapes along the fen margin, in M.Fulford and E.Nichols (eds) *The Archaeology of British Gravels : A Review*, Society of Antiquaries Occasional Paper 14, pp.63-77, London.
- French, C.A.I. and Pryor, F.M.M., 1993, *The South-West Fen Dyke Survey Project 1982-86*, East Anglian Archaeology Monograph 59.
- Malim, T., 1990, *Brampton A1-M1 Link Road : Birds Land Farm*, Cambridge County Council.

APPENDIX D

GLOSSARY OF ARCHAEOLOGICAL TERMS

Artefact Any object made by people. Generally, this word is used for finds such as pottery, stone tools, or metal objects, but it can be used in a much wider context in that the landscape we have today is a product of human activity and is thus an artefact itself.

Bronze Age Prehistoric period *c.* 2000 - 700 BC when bronze was used for many types of tools and weapons.

Cropmarks Archaeological features below the ploughsoil can affect the growth of sensitive crops through moisture retention or loss. For example, the growth of cereal crops over buried ditches or pits will encourage rapid growth leading to tall, dark coloured plants, whereas walls and roads will lead to stunting and faster yellowing of the crop. These discrepancies in crop growth can be easily detected from the air, and, by taking photographs, the cropmark patterns can be plotted onto maps and given provisional interpretation.

Cursus A linear feature of Neolithic date formed by a bank and ditch on both sides. Possible functions suggested for them have been trackways, horse racing tracks and ritual processional ways.

Earthworks Archaeological features that are still extant above the ground as banks and ditches, platforms, roads, ponds, canals, etc. They were either constructed of soil or became covered by it later, leaving the archaeology showing in relief.

Enclosure An area defined by a continuous surrounding ditch. These may be enclosures around human settlements, fields, or paddocks for stock. Rectilinear enclosures are those with straight sides and corners, whilst curvilinear enclosures are those with rounded sides.

Fieldwalking Technique of archaeological survey. Walking over ploughed and weathered soil, an experienced observer can collect many ancient artefacts, and, by plotting the distribution of such find spots on maps, an idea of the use of the landscape can be built up for each period of the past.

Henge See below, hengiform monument.

Hengiform monument A feature which has the form of a henge, i.e. a circular area with opposed entrances formed by a bank and ditch, the bank of which is outside the ditch and, therefore, unlikely to be a defensive earthwork. Some of these characteristics are lacking even in 'true' henges and a hengiform monument may grade into the ring ditch feature type, being, however, generally larger.

Iron Age Prehistoric period *c.* 700 BC - AD 43 when iron was used extensively for tools and weapons. The period traditionally ends with the Roman invasions of AD 43 but, in fact, there was a considerable time of adjustment after this date when the Iron Age way of life continued with little change from Roman influence.

Mesolithic The period from the end of the Last Ice Age, around 10,000 years ago until the start of the Neolithic period at *c.* 3500 BC. The life style of the people was a continuation of hunting and gathering, no polished stone tools or pottery are associated with it in England.

Midden A heap or stratum of refuse (broken pots and tools, ashes, food remains etc) sometimes found on the site of an ancient settlement.

Natural The local subsoil that is unaltered, in nature and location, by human activity.

Neolithic Prehistoric period c. 3500 - 2000 BC when farming and pottery were introduced. Stone tools of fine workmanship were produced and exchanged over long distances, but before the use of metals.

Posthole A hole dug to receive a post. It can also result from driving a post into the ground. The latter, however, does not have distinct fills such as packing and a post pipe. A post pipe is the fill of a posthole which formed in the place of a removed post.

Ridge and Furrow Medieval cultivation techniques led to the phenomenon of corrugated fields. Strips of land were allotted to individuals and a furrow was left between one person's strip and the next, leading to a corrugated ridge and furrow effect. Ridge and furrow shows up as cropmarks on aerial photographs and, more rarely, as earthworks in pasture fields.

Ring-ditch A continuous circular ditch which is all that remains of a ploughed out round barrow; or the drainage ditch (eavesdrip gully) that surrounded a round-house, normally of Iron Age date.

Roman Historic period AD 43 - 410 when much of Britain was part of the Roman empire. The term Romano-British is now widely used to describe the people of this period, as few were Roman themselves, but they were a provincial manifestation of the empire developing in a unique way. The legions were withdrawn in AD 410, but the Romano-British culture continued for some time into the 5th century in tandem with Anglo-Saxon migration.

Round barrow A Bronze Age burial mound formed by heaping up earth over a central burial. They have several forms, including numbers of encircling ditches, and can have many burials in them. The first burial is known as the primary burial, subsequent ones are referred to as secondary burials. It has been suggested that these burial mounds were a way of marking tribal territories, and they were often placed in prominent locations. They can occur in clusters known as 'barrow cemeteries'.

Sites and Monuments Record (SMR) A computer and paper database, maintained by the County Archaeology Office, of all known historic sites and individual findspots. The system can be applied in response to any query concerning the heritage of the county, e.g. the archaeology of a piece of land can be ascertained in response to a planning application and the archaeological requirement if needed can then be stated by the County Archaeologist.

Stratigraphy Order and relative position of strata. Deposits in archaeological sites will be layered one on top of another, with the highest layer being the latest deposit, thus giving a chronological relationship to the layers and the artefacts within them. Features (such as ditches, pits, or walls) which cut through these layers will obviously date to later events, and will in turn contain their own discrete sequence of deposits. On the other hand features that have been covered by layers are obviously earlier than the deposition of those layers that seal them.