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An Archaeological Investigation
at

Broadbridge,
Bosham, West Sussex

P-98-035

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An Archaeological Investigation at Broadbridge Farm, Bosham, West Sussex

1. Summary

The site owners have submitted a planning application (ref. BO/98/00419/FUL) for the conversion of redundant chicken houses to light industrial use and for the construction of a car park. Because of the wealth of archaeological finds in the Broadbridge area (see below), the local planning authority, Chichester District Council, has required the applicants to submit the results of an archaeological evaluation of the proposed parking area so that the impact of the scheme may properly be assessed and, if necessary, mitigation measures be imposed when the planning application is considered in order to protect archaeological deposits. The applicants commissioned Southern Archaeology (Chichester) Ltd to carry out the work.

2. Introduction

The fieldwork element of the evaluation at Broadbridge Farm was carried out over the period of June 11th-15th, 1998, using in total five person-days. This task was undertaken by temporary staff under the supervision of a qualified field officer, by whom this report has been produced. The weather during this period was ideal for the identification of archaeological features in this area, being generally overcast with regular light showers. Subsequent to the excavation a further person-day was used in processing and recording the artefacts recovered during the evaluation.

3. Geology and Archaeological Background

The area under development is part of the coastal strip running east-west along the south of West Sussex. The topographic regime is dominated by a gentle south facing slope, with an underlying geology of brickearth (Soil Survey of England and Wales, SU 70 and SU 80), an aeolian deposited sediment laid down during the Devensian Glaciation, circa 70,000 BP (Melville and Freshney, 1982). This deposit is noted agriculturally for its free draining and fertile qualities (Hodgson, 1967). Also in the proximity lies the flinty silty head of the Binsted Series (Soil Survey of England and Wales, SU 70 and SU 80), this being equally free draining but considerably less malleable agriculturally (Hodgson, 1967). Presently the area lies under pasture as it has in recent times.

Archaeologically the area of Broadbridge appears to be rich, but unfortunately most of the previous archaeological investigations have either been ad hoc methodologically, or the results have not been written up and are therefore unavailable. As a result the summary that follows may not be completely representative. An excavation in 1832, questionably located by the OS at SU 81020513, notes coins of Antonine date found embedded in a mortared wall (Mitchell, 1866), provisionally interpreted as a temple (Black, 1985), based upon its conjectured plan; a pair of three-roomed ranges abutting a large central room (*piscina*). During contemporary investigations a scatter of Roman finds were also retrieved from the area of Bosham church (Mitchell, 1866), and Mitchell also reports that a locals' relative remembers seeing 'the remnants of the tiers of seats' allegedly in the form of a basin. Black (1985) notes that theatres are often found in the immediate vicinity of temple sites.

More recent investigations in the area have also been carried out. An investigation in 1967 (Rule 1968) prior to the construction of the telephone exchange, located by Pitt (1979) and Toller (1981) at SU 812052, revealed three phases of timber construction on different orientations and probably of differing function. At about the same time at Broadbridge Farm, the chicken sheds were built which are adjacent to the evaluation trench (**Figure 1**). During the excavation of the footing and service trenches a local man, Mr Homan, recorded the range of material that was unearthed. His records intimate the strong probability of extensive Romano-British archaeology in the immediate locality, including buildings of relatively high status, as attested by bricks and roof tiles, wall-plaster and tesserae. This was confirmed by the discovery, and subsequent destruction, of a mosaic under Shed A (**Figure 1**); it has also been suggested that a second mosaic may be located at the north-east corner of House A (Black, 1985). A further excavation in 1976, at SU 05208105 (Toller, 1981), which Toller felt lay between the two buildings reported by Mitchell (1866), did not reveal any further Roman archaeology. In addition to the *in-situ* archaeology, Broadbridge and Bosham have produced several large fragments of sculpture which may represent souvenirs from 'grand tours' (Pitt, 1979); the chancel arch at Bosham Church springs from two reused Roman column bases of uncertain provenance.

4. Methodology

One trial trench, orientated north-south, was machine-excavated using a toothless ditching bucket. The topsoil was removed to a depth of 0.40-0.54 metres (increasing north to south), to expose a silty (brickearth) substrate, in which the archaeological features were apparent. The undisturbed substrate, and the archaeological features within, exhibited evidence of bioturbation from both worm and root activity In most cases the features were dark grey or dark brown, but lighter coloured features were also evident once the whole trench had been cleaned manually. In addition to detailed soil descriptions all the features visible in the trench were recorded in plan at 1:20 scale and photographically (using both colour slide and black and white print films). Potentially recent features were recorded in order to elucidate the degree of truncation the Roman archaeology has suffered. Artefactual and/or environmental remains were collected during the cleaning process and from the spoilheaps, the latter aided by use of a metal detector. Due to the number of features present, and the attendant complexity and sensitivity of the archaeology in a relatively small trench, only one feature (context 3) was regarded as sufficiently discrete to be excavated. This was done in order to increase the quantity of dating evidence and to provide a better understanding of the degree, and mode, of preservation. Since no other features were excavated their context numbers refer to possible fills, rather than the features themselves.

5. Results

Figure 2 shows the extent and distribution of all the features recorded in the evaluation trench. This section will describe the features chronologically, if possible, or relatively based upon the matrix (see **Appendix 2**). A 'blow-by-blow' description of the features is outlined in **Appendix 1**, so this section will be more discursive. It must be noted that it is often difficult confidently to interpret features in narrow trenches. This is compounded by the fact that they are not excavated and that there is such a high concentration of archaeology, whereby truncation may confuse the already vague picture further.

Feature 11, a chalk rubble-filled gully orientated north-west to south-east is probably a post-medieval land drain (the developer confirmed this interpretation, stating that they were ubiquitous on the farm). No cut was obvious for this feature in section, but this is presumably due to rapid construction. Feature 12, orientated in an east-west direction, may also be a land drain; the fact that its cut, represented by an area of a light brown clay, was visible in the topsoil supports this interpretation. Feature 14 may also be a land drain, but this is less certain than was feature 12, and therefore there is the possibility that it is an archaeological feature, perhaps either a drain, narrow gully or sill.

Underlying Features 12 and 14 were Features 15 and 13. These may well represent the same feature, but this is stratigraphically irresolvable without excavation. Both of these deposits are fairly ephemeral and it is by no means certain whether they represent a fill of a feature or if they are both spreads of archaeology representing either occupation or refuse activities. To the east of Feature 15 a concentration of flints was visible in the section. It is uncertain whether this is the edge of another feature, or chance.

Feature 9, is probably a fill of a ditch, aligned north-west south-east. Within this deposit two concentrations were evident, one containing fragments of wall plaster (all white) and the other dominated by the presence of oysters. These variations in the fill probably reflect episodic deposition, and may appear as 'tip lines' if they were excavated. Underlying 9, and Feature 11, was Feature 10; to the north 10 continued under 9, so its extent and form are uncertain, however a 'good' edge was evident to the south, suggesting that this too was a ditch fill, running parallel with Feature 9. Whether this is a fill of the same ditch as Feature 9, or an earlier feature, possibly recut by 9, is uncertain.

To the north of Feature 9, and stratigraphically divorced from all other features, is Feature 8. It is likely that this represents either a posthole or a small pit, but it should be considered that this may be the rounded terminus of a linear feature. Further north again, and similarly stratigraphically stranded are three features, Features 5, 6 and 7. Feature 6, running north-north-west to south-south-east, is a compact homogenous linear feature; it resembles in plan a brickearth sill, but this may only be confirmed if a larger area is exposed. Feature 6 truncates Features 5 and 7, which seem to have a degree of uniformity suggesting that they are archaeological features (though they may represent animal disturbance), in which case they may be one or more postholes.

Context 27, the only feature excavated during the evaluation, is demonstrative of the problems inherent in interpretation without excavation. Originally it was felt that Features 27 and 28 were the same feature, a ditch aligned north-east to south-west; it was only upon excavation that it became apparent that there were two contexts, and that Feature 27 was either a recut of 28 or a separate ditch. As part of the excavation a bulk sample was taken to elucidate the environmental potential of the site (see **9**). Running almost parallel to 27, and also cutting into 28, was a narrow linear feature; this may or may not be associated with the ditch and its relationship with other archaeological features in the immediate area is unknown. Underlying 27 was Feature 2; this was a very compact area of gravel which seemed to overlie the brickearth and may represent a natural outcrop of the Binsted Series (Toller (1981) reports the presence of a gravel approximately 50cm below the brickearth), a palaeochannel or a man-made feature.

Judging by their size, Features 18, 19 and 20 appear to be stakeholes. They are all arranged, approximately centrally, along the length of Feature 17. Feature 17, a linear, homogenous, compact feature, runs east-west and its form suggests that it may be the brickearth sill of a building. This is reinforced by the presence of the stakeholes, which would have taken a timber subframe, possibly a wattle structure, in the construction of a wall. Truncated by 16 is Feature 25, which appears to be a posthole, but, being truncated, its small size and square shape in plan could be misleading; since it runs into the western section there is the possibility that it is the end of a much larger feature. This is also true for Feature 26, running into the eastern section. It should also be noted that the fills of these two features are similar, and they may be contemporary. Features 21 and 16 may be one and the same, but without excavation their stratigraphic relationships are unknown. These features appear to be a ditch although the function is uncertain, as it is the orientation - there appears to be a dog-leg to the south, whilst the northern edge runs north-east to south-west. The northern edge appears to truncate Feature 23 - a narrow ditch running east-west and whose function is unknown. Below Feature 23 lie Features 22 and 24; once again these features appear similar, suggesting they are the same feature, but this cannot be ascertained without excavation. The presence of brickearth to the north of 24 suggests that it may represent a ditch terminus, the ditch possibly running to the south-west.

Amongst the material collected from the topsoil was a rejuvenated Mesolithic core; no Mesolithic material was found in-situ.

The Environmental Evidence

Due to the non-intrusive approach to the evaluation assessment of the environmental potential, beyond the 'ecofacts' listed in **Appendix 3** (namely the animal bones and marine mollusca), is limited to the one sample taken from Feature 27. Particularly since feature type often influences the mode and speed of deposition (Dennell, 1974) it should be borne in mind that this sample is probably only representative of its feature and not be of the entire site.

The sample was sieved using a flotation tank similar to the Siraf tank (French *et al.*, 1973), screened to a >1mm, and floated to a >300μm, and subsequently scanned using a binocular microscope (Griffin, BM-1). The table in **Appendix 4** outlines the material recovered. Although charcoal is ubiquitous, most of it non-identifiable due to its fragmentary nature. The presence of *Ceciliodes acicula* (Muller), being a burrowing species, indicates a degree of bioturbation (Kerney and Cameron, 1994), but this is hardly surprising as this context directly underlay the topsoil. For the same reason it is also likely that the small mammal bones are also intrusive. It is however apparent that there is reasonable environmental potential, with a moderate amount of identifiable animal bone (all of domesticates), marine mollusca and carbonised plant remains. No firm association can be ascertained between the cereal and the weed seeds, but one is plausible since the weeds represented are common arable pests. It should also be noted that the presence of glume bases may infer on-site cereal production Additionally a reasonable quantity of finds were recovered, demonstrating the richness of this context; this is probably representative also of the features in the immediate vicinity.

The Artefactual Evidence

All artefacts have been cleaned and quantified by type (see Appendix 3). It is appropriate here to give the latest dating artefact(s) from each context and then to comment briefly on general significance.

Context	Identification/date
3	New Forest indented beaker, Fulford type 27, c.AD270-350; BB1 cooking pot, Gillam type 146, c.AD280-350.
3/4/28	Fishbourne type 313 pot, c.AD 3rd century.
9	Fishbourne type 109.3 bowl, c.AD150.
13	Fishbourne type 313 pot, c.AD 3rd century; ?New Forest indented beaker, AD 4th century?
15	?Portchester type 123 pot, c.AD300-350.
23	?Colchester colour-coated beaker, c.AD2nd; BB1 dish, Gillam type 317, c.AD130-220.

Many of these contexts also contain earlier Roman finds, such as samian ware sherds and, in the case of context 13, a late prehistoric (Iron Age) sherd. The overall Roman date range seems to be c.AD mid. 2nd to 4th; the apparent lack of 1st century material is perhaps confirmed by the relatively large quantities of black burnished ware (BB1, above). Most contexts produced quantities of Roman ceramic building material. Of particular note are the unusual use of crushed tile instead of moulding sand on the bases of some *tegulae* and *imbrices* and an apparent *imbrex* waster; together these may be taken as evidence for the presence, somewhere fairly locally, of a tile kiln

6. Discussion

6.1. <u>The significance of the Archaeology:</u>

The evaluation at Broadbridge Farm has confirmed the suspicion that the area has great archaeological potential, particularly with regard to the Romano-British period. Unfortunately it is not possible from the evaluation trench to discuss how the evidence from Broadbridge farm fits into the scrappy picture of the area, but certain features of the site merit attention.

- The presence of the wall plaster, flue tiles, *opus signinum* and glass infers a relatively high status building in the area but the function of this building is uncertain; it is likely either that this building is part of the temple complex that Toller (1981) proposes, or a villa.

- The artefactual evidence suggests occupation from the second to fourth centuries, with as yet no finds from the first century. This contrasts sharply with Fishbourne, where intense activity in the first and second centuries (Cunliffe, 1971) was followed by decline in the third. It is conceivable that the activities at Broadbridge may to some extent be related to the demise of Fishbourne.

- Although the Roman archaeology is obvious and intensive, the Mesolithic core confirms the presence of remote prehistoric activity. Mesolithic material has previously been found in the Bosham area (SU 799053) (Pitts, 1981, 159) as well as at Fishbourne (Goodburn, 1996), but as yet no *in situ* Mesolithic material has been found archaeologically.

- The presence of an imbrex tile that appears to be a 'waster' is interesting in that it may infer the presence of a local factory somewhere in the vicinity. The context (Feature 27[3/4/28]) was 'spot dated' (see above) to the third century. Most of the contexts also yielded tiles with crushed flint, rather than moulding sand, on their basal surfaces; this seems to be peculiar to this site and reinforces the possibility that there is a local kiln.

- No systematic study to elucidate how marine resources (notably the marine mollusca) may have been managed or exploited in the Roman period has ever been attempted for this area. This is in part due to poor preservation of calcium based material on the coastal plain, whilst on areas further inland, with a chalk substrata and subsequently with better preservation, poor retrieval (*cf.* Payne, 197?) has hindered drawing valid conclusions. The preliminary investigation at Broadbridge Farm has indicated that preservational bias is negligible and the onus now rests squarely with any future archaeological investigations to supplement this gap in our understanding of the region, using a rigorous sampling strategy. In addition, the bone is similarly well preserved and material not often recovered, e.g. fish remains, may well be recovered. The evaluation yielded a relatively high numbers of faunal remains, and it is felt that this may also serve to fill a fairly sizeable void in our understanding of past economic practices on the coastal plain.

6.2 Conclusions

The first aim of archaeology is to preserve in-situ, where possible, important remains so that they survive to be investigated by future generations with better techniques and resources. The evaluation has confirmed the circumstantial evidence for archaeological deposits on this site and given an insight into their nature. Given the proposed use of the area in question for car parking , and the known depth below the current land surface of deposits it is feasible to construct parking in such a way that the site is preserved beneath the car park surface. There may be some degradation to the site due to e.g. compression, but this loss is preferable to the total excavation of the area likely to be affected. If planning permission is granted for the scheme, it is likely to be subject to a condition or agreement designed to safeguard the archaeological resource.

6.3 Reconsideration of methodology and confidence rating.

It was unfortunate that only one feature could be excavated during the evaluation, but this was prudent given the complex and sensitive nature of the archaeology. Due to this complexity some of the features are not as well understood as they may have been if excavated and seen in a larger trench. However, for the purposes of a preliminary investigation the exercise was a success in that it answered the basic questions inherent in any archaeological evaluation in as efficient a manner as is conceivable.

7. Other

7.1. Location and Nature of the Finds:

Presently the artefactual evidence collected during the evaluation have been washed, bagged and boxed and are held at the premises of Southern Archaeology, none of this material has been marked. The fragile finds, e.g. the glass, are individually bagged and stored in an air tight box, similarly the metal finds are stored in an air tight container with silica gel to create a drying atmosphere. No conservation has been carried out.

7.2. Intended Depository of Finds and the Archive:

The finds are to be stored at the Chichester and District Museum's store, along with the archive.

Patrick Hunter

Southern Archaeology

Appendix 1: Context Descriptions.

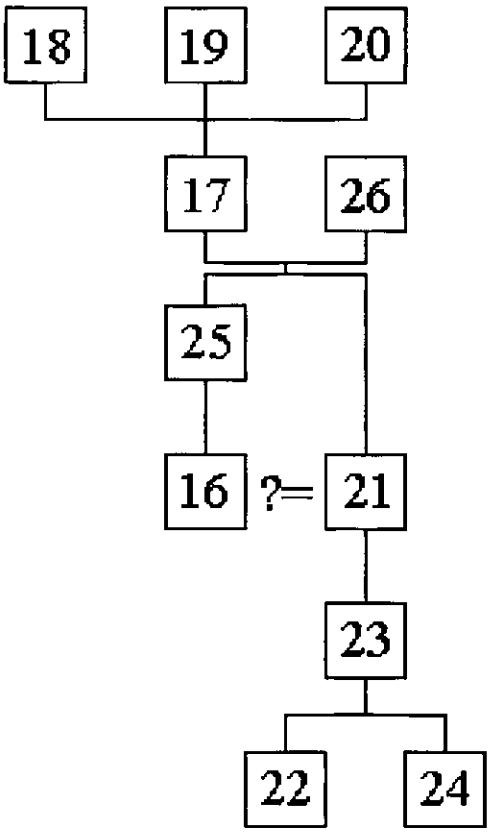
Context	Colour	Composition Sand; Silt; Clay	Flint Gravel	Chalk	C.B.M.	Mortar	Pot	Metal	Glass	Bone	Marine Mollusca	Charcoal
1	10YR 4/3 (Brown)	10;70;20	xxx[1]	xxx	x		x	x		x	x	xx
2	10YR 5/6 (Yellowish Brown)	10;0;0	xxx (905[2])									
3	10YR 4/1 (Dark Grey)	10;70;20	xx		xx		x	x	x	x	xx	xxx
4	10YR 4/1 (Dark Grey)	10;80;10	xx	xxx	xx	x	x				x	xx
5	10YR 4/1 (Dark Grey)	10;70;20	x	x		x						
6	10YR 5/4 (Yellowish Brown)	0;80;20	x	xxx								
7	10YR 4/1 (Dark Grey)	0;70;30		x		x						x
8	2.5Y 6/4 (Light Yellowish Brown)	0;60;40										
9	10YR 4/1 (Dark Grey)	10;70;20	xx		xx	x	x			x	x	xxx
10	10YR 3/2 (Very Dark Greyish Brown)	10;80;10	xx								x	xx
11	Chalk	100% Chalk										
12	10yr 6/8 (Brownish Yellow)	10;70;20										
13	10YR 3/2 (Very Dark Greyish Brown)	10;70;20	xx		xx		x				x	x
14	10yr 6/8 (Brownish Yellow)	0;50;10	xxx (40%)									
15	10YR 3/2 (Very Dark Greyish Brown)	10;70;20	xx		xx		x				x	xx

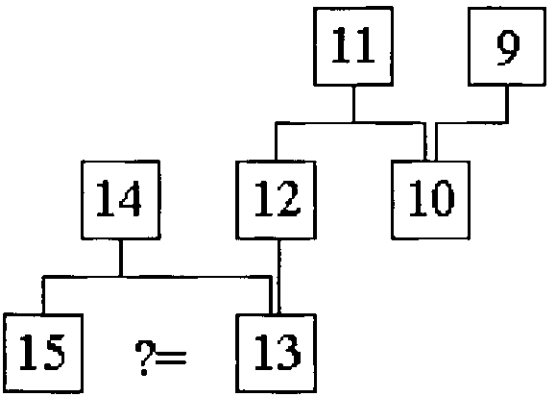
Context	Colour	Composition Sand; Silt; Clay	Flint Gravel	Chalk	C.B.M.	Mortar	Pot	Metal	Glass	Bone	Marine Mollusca	Charcoal
16	10YR 4/3 (Brown)	10;80;10	xx		z					x	x	xxx
17	10YR 5/6 (Yellowish Brown)	0;80;20										
18	10YR 5/4 (Yellowish Brown)	0;80;20			x							
19	10YR 5/4 (Yellowish Brown)	0;80;20										
20	10YR 5/4 (Yellowish Brown)	0;80;20										
21	10YR 4/3 (Brown)	10;80;10	xx		x		x				x	xxx
22	10YR 4/3 (Brown)	0;70;30		xxx			x			x	xx	xx
23	10YR 3/2 (Very Dark Greyish Brown)	0;70;30		xxx	xxx	x	x					xxx
24	10YR 4/3 (Brown)	0;70;30		xxx		x	x					xx
25	10YR 4/1 (Dark Grey)	0;70;30	x									xxx
26	10YR 4/1 (Dark Grey)	0;70;30	x									xxx
28	10YR 4/3 (Brown)											

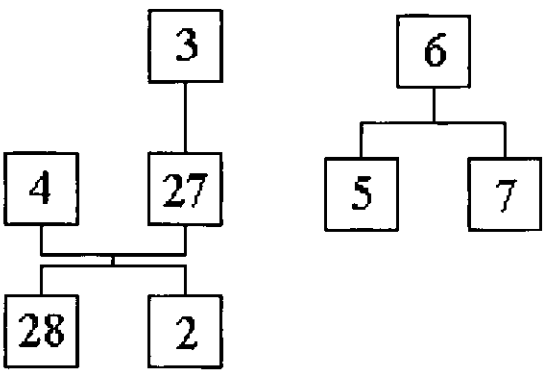
[1] The frequency of inclusions is denoted as follows: x= occasional, xx= moderate, xxx= frequent.

[2] The number in brackets refers to the percentage of the matrix that this inclusion represents, this is only stated when the inclusion exceeds frequent (c. 20%).

Appendix 2: The Context Matrix.







Appendix 3: Artefactual distribution for each context, both by weight (grammes) and quantity (in brackets).

Context	Coarse-ware	Fine-ware	Tile u/c	Brick	Tegula and ?tegula	Imbrex	Flue tile	Med. tile	Silty sandstone	Stone	Burnt flint	Mortar	Op. sig.	Wall-plaster	Burnt clay	Bone	Marine molluscs
3	2305 (135)	705 (17)	195 (6)	2255 (12)	5275 (24)	2170 (11)	495 (2)	45 (1)	155 (5)	435 (1)			15 (1)			1375 (45)	810 (27)
4												75 (3)			15 (2)		5 (1)
6												145 (1)					
9	410 (29)	5 (1)									45 (1)				10 (1)	40 (5)	
3/28/4	955 (72)	65 (3)	195 (8)	1245 (3)	630 (6)	375 (2)	345 (3)					35 (1)	10 (1)		10 (1)	125 (7)	145 (7)
9														140 (14)			1155 (52)
13	390 (39)	30 (3)	55 (3)	85 (1)	480 (4)	145 (2)										40 (3)	
15	420 (19)				165 (1)										15 (1)		10 (1)
16	20 (4)	25 (1)															
21	85 (7)	5 (1)			290 (1)	400 (1)											
22					2520 (2)												
23	265 (14)	25 (6)			245 (2)											25 (10)	200 (5)
24	60 (4)																

Appendix 4: The Remains Recovered from The Bulk Sample Taken From Feature 27.

Quantity Processed:	c.12 Litres	
Residue:	c.3.5 Litres	
Ecofact/ Artefact	No. of Fragments	Comments
Charcoal Frags.	>100	Many non-identifiable.
Carbonised Grain	7	*Triticum*[1] *sp.* (1[2]), *Triticum monococcum* (1), *Triticum spelta* (1), *Hordeum sp.* (2), *Secale sp.* (1), Cereal indet. (1).
Carbonised Glume Base	4	*Triticum monococcum* (4).
Carbonised Wild Seeds	6	*Silene sp.* (1), *Malva sp.* (1) *Melilotus/Trifolium sp.* (1), *Lolium sp.* (2), *Bromus sp.* (1),
Large Mammal	22	All domesticates, butchery evident.
Small Mammal	5	Possibly intrusive.
Marine Mollusca	10	*Ostrea sp.*. (7), *Littoralis sp.* (3), *Mytillus sp.*
Terrestrial Mollusca	c.50	c.1/2 are *Ceciliodes acicula* (Muller).
Pottery	43	
C.B.M.	4	
Burnt Flint	1	
Mortar	1	
Pottery	14	

[1] Nomenclature follows Stace (1991). [2] The bracketed numbers are real numbers.

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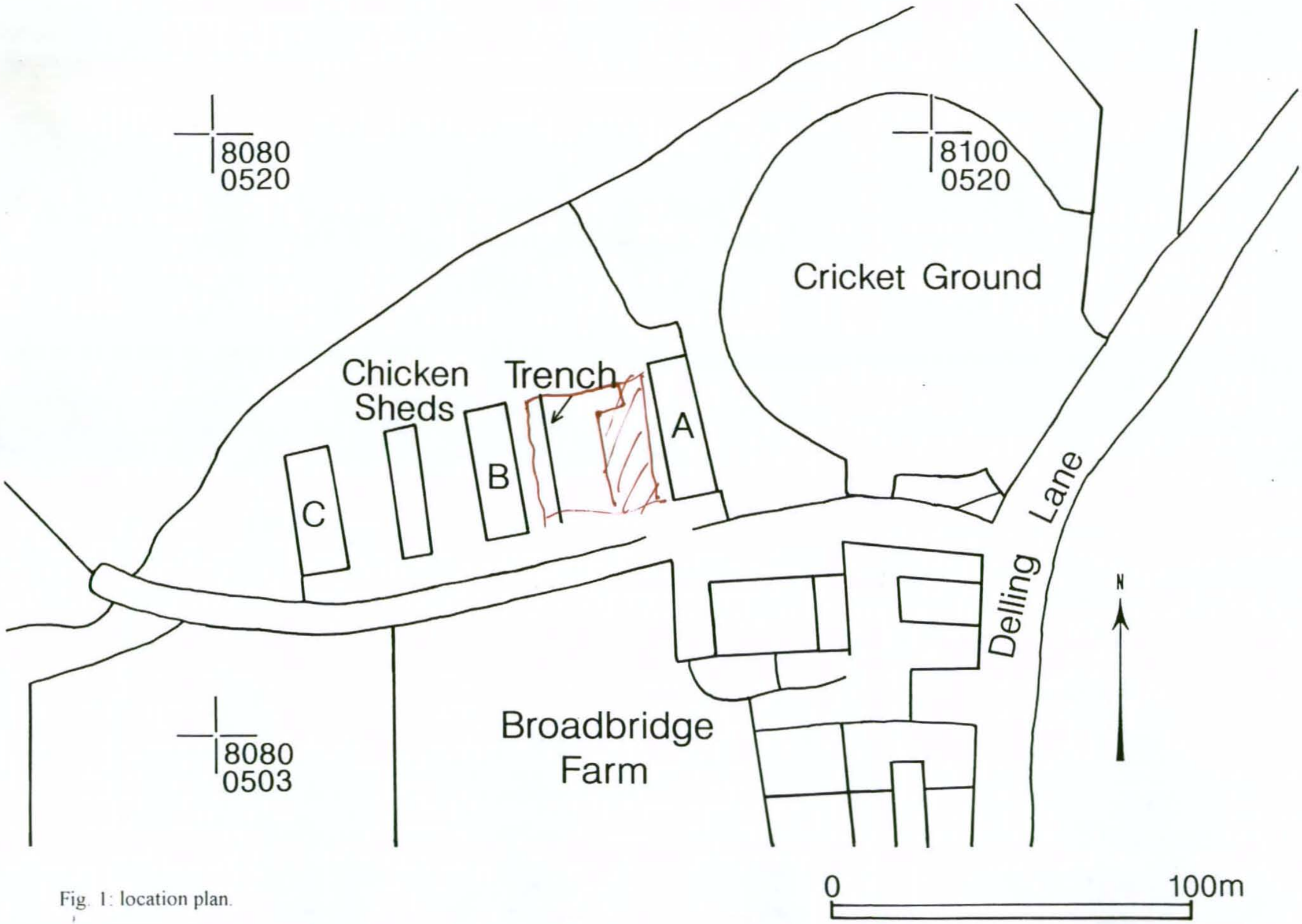

Fig. 1: location plan.

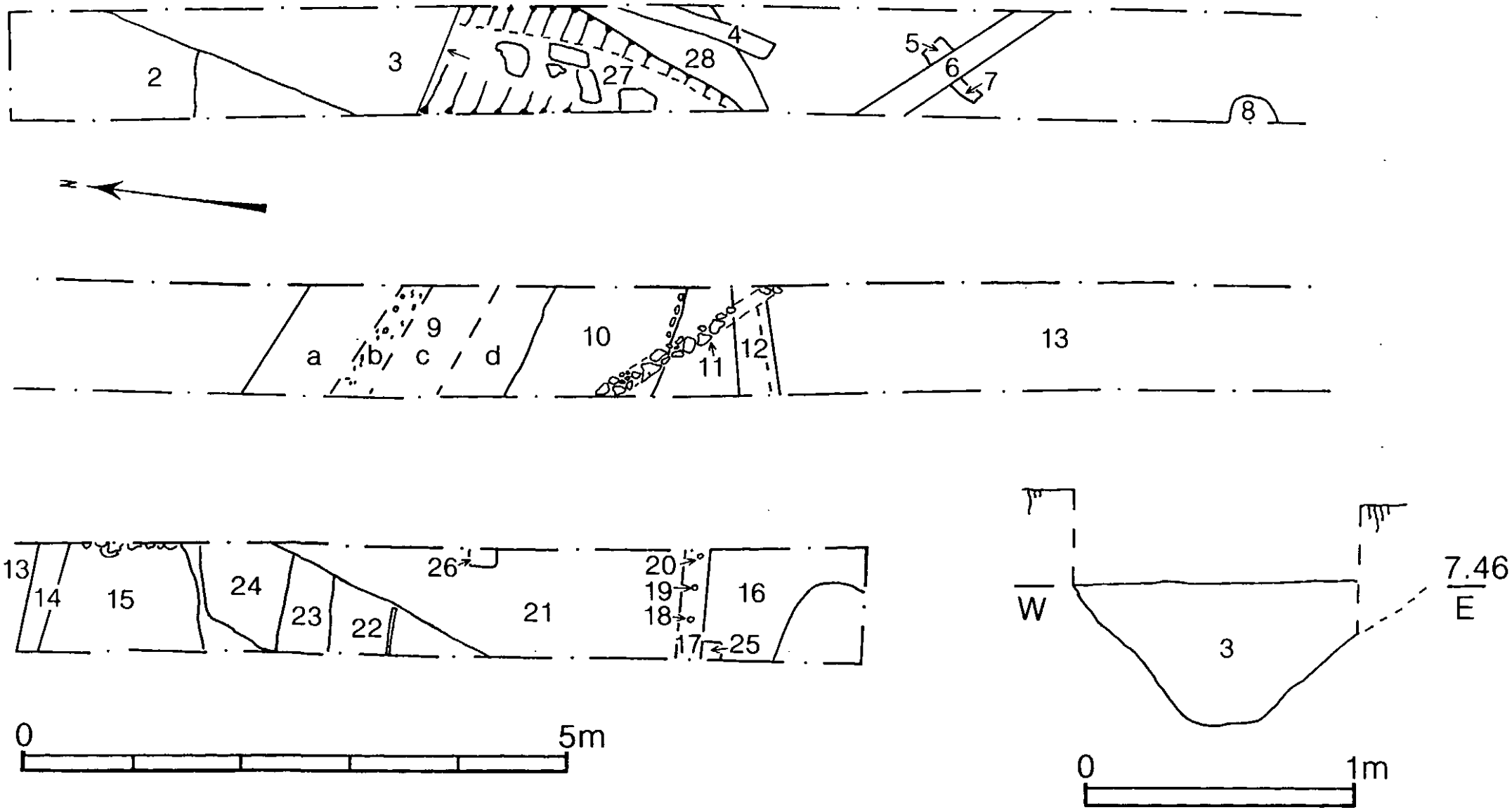

Fig. 2: trench plan and section of ditch 3.