Exeter Archaeology

EXETER
CITY COUNCIL

ARCHAEOLOGICAL EXCAVATION AT HAZEL GROVE, ELBURTON, PLYMOUTH

by

T.H. Gent

Exeter Archaeology

Report No. 96.04

September 1996

Contents

List of illustrations

1. INTRODUCTION

This report describes the results of an archaeological excavation undertaken in January and February 1995 by Exeter Museums Archaeological Field Unit (EMAFU; now Exeter Archaeology (EA)) on land formerly belonging to Widegate Nursery, Elburton, Plymouth (Fig.1). This followed an archaeological evaluation carried out the previous year (Sage 1994) which highlighted the potential for the preservation of prehistoric deposits on part of the site. A project brief including specifications for the excavation was provided by Dr K. Ray, Plymouth City Archaeologist (Ref: PROJ9405/141793.2).

2. TOPOGRAPHY AND GEOLOGICAL BACKGROUND

The site was located at the western extremity of a *c.* 2 ha development area between the southern end of Vinery Lane and Hazel Grove at SX53395351 (Fig. 1). The excavated area of 728m^2 lay at 32m OD in a shallow depression (Fig. 2), within which up to 0.7m of clay-rich colluvium had accumulated. This ground was steepest to the south and south-east.

Two distinct subsoils lay beneath the colluvium on the site. To the east, dark brown clays overlay limestone brash and umber deposits. The clays were divided into broad parallel bands by protruding narrow ridges of limestone and umber. These ran downslope to the north-west. Umber deposits, the product of a chemical reaction between the limestone brash and water infiltrating from local, igneous tuffs, were presumably responsible for the dark colour of the overlying clays. Manganese oxide, a common feature of both volcanic tuffs and umber beds, also produced dark speckling throughout the local subsoil and the fills of archaeological features. Overlying these deposits to the west was an accumulation of orange/brown clays containing abundant pea-grit and small waterworn stones. A distinct transition was visible between the two clay subsoils.

3. SUMMARY OF EARLIER INVESTIGATIONS

In 1965 a scatter of worked flint including three arrowheads and five scrapers dating to *c.* 3000 BC was recovered from a garden off Sherford Road at SX54065331, 600m to the south-east of the site (Ray 1993, 3.22; SMR SX55SW/73). Other flint scatters have been located within 3km of the site (see Appendix 2 Discussion). In 1992, fieldwalking undertaken within the Moorcroft Quarry extension to the north of Widegate Nurseries and halfway between the present site and a rectangular double-ditched enclosure of suspected Iron Age or Romano-British date (SX53225468; SMR SX55SW/111) produced further worked flints. This scatter of cores and flakes is considered to date from the period between the earlier Neolithic period and the Middle Bronze Age (Ray 1993, 5.1.2). Roman coins have also been found in the vicinity (Plymouth Museum Record Sheets 33, 3619; SMR SX55SW/78, 79).

In 1994, 11 trenches (each 1.5m-wide, and with a combined length of *c.* 447m) were machine-excavated to the level of the natural subsoil at points throughout the proposed development site. To the west of the site, linear and other features were revealed together with pottery dating predominantly to the Middle to Late Iron Age. A limited number of Late Neolithic or Early Bronze Age sherds were also found. Additional pottery of similar dates and a small number of struck flint flakes were recovered from unstratified sources, and limited fieldwalking in a ploughed northern section of the field also produced 42 struck flints, including a thumbnail scraper, a broken end-scraper and a crude side-scraper.

The above evidence suggested localised prehistoric activity and a thus a full excavation was initiated to determine the nature of the features on the site and to record them prior to their destruction.

4. EXCAVATION METHOD

An area to the west of the development area, centring on evaluation Trench 9 of the 1994 investigation, was stripped of topsoil and colluvium using a tracked excavator with a swing-shovel. This revealed archaeological features cut into the underlying subsoil. Following the line of these features, further overburden was removed to uncover a total area of 728m^2 (Fig.2).

Upon full exposure of a sample area, which included lengths of linear features, the surface was cleaned by hand and inspected. The linear features were selectively sampled, while discrete features were half-sectioned to remove fills on their northernmost sides. The only features which were fully excavated were a horse burial (634) and two pits (602, 603). The fills of these features were sampled for the purposes of palaeoenvironmental analysis (see Appendix 3) and radiocarbon dating (University of Arizona Ref: AA20853-5A/B; see section 6, Conclusion).

Individual small finds were numbered and three-dimensionally located. Limited, unstructured fieldwalking was also carried out over ploughed ground to the north of the site, producing a small number of additional flints.

Stratigraphic information was recorded on pro forma context sheets, while drawn records were completed according to standard EMAFU procedure. A photographic record of the excavation was produced in black-and-white, colour slide and colour print. The site was surveyed using a Sokkia Total Station EDM, which was also employed to provide a contour survey of the immediate area.

5. EXCAVATION RESULTS (Figs 3-7)

Six linear features (600, 614, 616, 620, 622, 628) and four pits (602, 603, 624, 626) were revealed cut into the bipartite clay subsoil (Fig. 3). Subsequent cleaning identified a potential post-hole (613) between features 602 and 603, to the south of the site, and a stakehole (640) cutting the western edge of linear feature 622. In addition, bones were seen projecting from the south-facing section to the west of the site (opposite Pit 626).

With the exception of features 602 and 603, the site was exposed in varying states of truncation. Considerable worm action had penetrated the subsoil and produced a graded transition between the subsoil and the overlying colluvium which was particularly noticeable on the red clay to the west of the site. This disturbance to the upper archaeological levels was compounded by the need to machine-cut into the transitional layer (often to a depth of over 0.1m in depth) in order to reveal the edges of features. However, the survival of the features originally identified during the 1994 evaluation excavation illustrated that this exercise was not too destructive (see 5.1).

5.1 **Linear features** (Figs 3-4, 6-7)

Contexts 600, 614, 616, 620, 622 were interpreted as the truncated bases of linear boundary features. Features 600, 614 and 616 were located predominantly on the darker umber-stained subsoil to the west of 620 and 622.

Linear feature 600 (evaluation context 523; Figs 4, 7)
This was the only linear feature exposed in its entirety with both its rounded terminals being revealed. It is thought that the northern terminal, which encroached onto the orange subsoil, represented the southern side of a gateway or entrance. Context 600 survived to a width of 0.5m and a depth of 0.28m, and its position and alignment suggested that it respected feature 614 (Fig. 3). Three round stakeholes (618, 636, 638) were driven into its base which may suggest a possible use as a palisade trench. No further stakeholes were encountered and it must be assumed that either a wide gap existed between the stakes or that other evidence had been removed (perhaps through recutting). Two sherds of Iron Age pottery were found in the upper fill (601) of 600.

Linear feature 614 (evaluation context 517; Figs 4, 6)
This survived to a width of 1m and to depth of 0.22m, where a rounded base cut the underlying umber deposits. Heavily truncated at its western end, feature 614 crossed the site on a WSW-ENE alignment to meet linear feature 616 at an acute angle on the eastern side of the excavation. Two sherds of Neolithic pottery had been recovered from the secondary fill of 614 (517) during the evaluation excavation (within context 516; see Appendix 2), but no further finds were retrieved in 1995.

Linear feature 616 (Figs 4, 6
This survived to a width of only 0.4m and a depth of 0.06m, and the feature disappeared completely to the west. It was either very heavily truncated, or was never a large feature. Although on a similar line and axis to linear feature 620, the two contexts did not appear to represent the same feature since their profiles and fills were markedly different (Fig. 6).

The fill (617) of 616 was indistinguishable from the upper fill (615) of 614. The latter (linear feature 614) appeared to halt (or had been lost through truncation) immediately to the north of the line of 616. The relationship of these features at their junction suggested that 614 had been cut while 616 was in use, or immediately following its abandonment.

Linear feature 620 (Figs 4, 6
Feature 620 was 1m wide and 0.1m deep. It had a flat bottom and its base had been heavily disturbed by animal action. Sections of the southern edge of this feature had been recorded during the evaluation excavation as contexts 529, 531 and 535. Cutting and post-dating linear feature 622 (see below), context 620 possessed a single fill that was heavily mottled with manganese oxide specks. Two sampled sections, totalling 2.5m of the surviving length of this feature, produced two small flint flakes and an oyster shell.

Linear feature 622 (evaluation context 533; Figs 4, 7)
Initially observed on the south side of the site as a 0.4m-wide linear feature filled with a slightly humic version of the surrounding subsoil, the northern continuation of 622 was located during manual excavation downslope. At this point it was recorded as being up to 0.9m in width, probably reflecting the original width of the feature as a whole. Six worked flints were found in the upper fill (623) including a simple fabricator. A square-profiled, shallow, pointed stakehole (640) containing frequent charcoal fragments and a single struck flint had been driven through the western edge of the feature.

Context 628 (Fig. 3)
This represented the recutting of a trench for a local sewer and dates to the second half of this century.

5.2 **Other features** (Figs 3-6)

Four other features were investigated which were all loosely defined as pits, although they were very different in nature. Two pits were half-sectioned (624, 626) and two were fully excavated (602, 603).

Pits 602 and 603 were at first thought to be possible human graves. Lying on slightly raised ground to the south of the site and exactly 2.2m apart, they were both orientated north-west/south-east (Fig. 5). This common axis, combined with the setting of a 0.2m x 0.3m diameter post-hole (613) almost equidistant between the two features, suggested a temporal, if not functional, relationship. However, this could not be archaeologically demonstrated.

Pit 602 (Figs 5, 6)
Pit 602 was almost rectangular in plan (1.1m wide and 1.6m long) with a flat base. Seven rough limestone slabs were set on edge to line part of each side of the feature, but at least two of these had been slightly dislodged by the machine. The compacted primary fill contained pea-grit, occasional charcoal and manganese staining. Above this, the remainder of the pit was filled with a humic version of the surrounding subsoil containing a few charred grains.

Pit 603 (Figs 5, 6)
This feature was round-bottomed with gradually sloping sides and had the appearance of a grave. At its northern end, 0.09m below the surface of the subsoil, a raised level area projected 0.4m into the pit. The pit was 0.95m deep and contained four distinct fills which produced considerable evidence of burning in the form of fragile, partially-baked clay and charcoal (abundant in the upper two layers). Tertiary fill 607 contained occasional pockets of yellow sand, the majority of the baked clay and a single flint flake. Almost 9g of charred grain were recovered from this pit, of which 7.4g came from secondary fill 608 (see Appendix 3). The upper fill (605) also contained a single piece of iron slag. Further evidence of burning came from a band of red-coloured clay (642) that surrounded the upper levels, where the natural subsoil had been discoloured by heat.

Pit 624 (Fig, 6)
Pit 624, located just to the west of linear feature 600, was circular (0.6m diameter) with a rounded base surviving to a depth of 0.18m. It was lined with a 0.04m-thick deposit of orange/red clay which had been discoloured by heat (633).

Pit 626 (Fig 6)
Sub-circular Pit 626 (0.8m in diameter, 0.3m deep) was situated between the south end of ditch 622 and the sewer trench 628. The fill (627) contained two pieces of granite which showed signs of burning.

Evaluation context 528
This feature, interpreted as a pit during the evaluation excavation (1994), was not observed in 1995. It is assumed to have been lost during re-machining of the line of the earlier evaluation trench (Trench 9) when the central sections of the shallow ditches 620 and 622 were also lost.

5.3 **Horse burial** (Context 634; Figs 3-5)

Opposite Pit 626, the south-facing section of the excavation was cut back to expose the area to the north of the bones uncovered earlier. This revealed a sub-rectangular pit (length 1.05m, width 0.5m). A foal had been tightly interred slightly to the east side of the pit with its head to the north. Its neck was twisted, placing the muzzle in the region of the upper chest. The forelegs were flexed to the west of the head with the hoofs uppermost. The body of the foal was contorted, leaving the chest lying on the animal's right side, sternum to the west, and the pelvis lying flat on its dorsal face. Both hind legs lay flexed symmetrically above. The rear hoofs appeared to have been lost during machining. To the north of the pelvic region, the pit survived to a depth of 0.19m. In the vicinity of the hind legs and pelvis, the pit had been severely truncated.

6. CONCLUSION

A total of 16 small, abraded sherds of prehistoric pottery were located during the excavations in 1994/5. These were recovered from linear features 600 and 614 (providing two small sherds each), during the cleaning of the evaluation trenches, and as unstratified finds from both excavations. The two sherds recovered from linear feature 600, and the majority of the unstratified material, have been tentatively allocated to the later part of the Iron Age (Appendix 2).

Three sherds of pottery possessed characteristics indicating an earlier manufacture. Evaluation Trench 1 (1994), lying 100m-150m to the east of the 1995 site, yielded one sherd which, in fabric and decoration, is in keeping with known Beaker material of the Late Neolithic or Early Bronze Age. A similar date is possible for the two joining sherds from 614 (listed as linear feature 517 in Appendix 2), which have characteristics in common with the Grooved Ware tradition.

Features 620 and 622 yielded no datable evidence. Of the linear features investigated, 620 differed in that it was shallower, wider and flat-bottomed. Containing only two small flint flakes which were probably residual, it can only be said that it was later than feature 622. Its base had been considerably disturbed by small burrowing animals, perhaps indicating a change in the environmental conditions at the time of its use.

Although Pits 602 and 603 resembled graves, this possibility has been rejected due to the absence of bone and the shallowness of 602. The functions of these pits remain unclear and, although assumed, no clear relationship between them could be demonstrated. Pits 603, 624 and 626 all produced evidence of burning which was most likely connected with agricultural activity or grain-drying. The recovery of a single piece of iron slag from 603 was insufficient to suggest that ironworking had been undertaken in the immediate area and, indeed, other material from the site originally perceived to be slag has subsequently been identified as natural mineral formation.

A sample from the horse burial (634) was taken for the purposes of radiocarbon dating. This has produced a date range of 1632-1955 AD (calibrated to 2σ; University of Arizona, ref. AA-20855A/B), making the burial either post-medieval or modern in origin.

The archaeological evidence suggests a long-standing prehistoric presence in the immediate area. The rare Mesolithic microlith found close to linear feature 622 indicates, at least sporadic, human activity at or near the site for the last 8000 years. Numerous flints, found both as surface finds at the level of excavation and as unstratified items, also suggest the presence of local Late Neolithic or Bronze Age domestic activity. This is supported by the discovery of sherds with Beaker and

Grooved Ware attributes (rare in Devon). The possibility that certain features uncovered during the excavations might also relate to this period should not be discounted. Although the limited amount of pottery recovered from the site does not establish with certainty the existence of an actual settlement *in situ*, there is little doubt that some form of Iron Age occupation existed in close proximity.

The charred grain from Pit 603 has produced two radiocarbon dates. Calibrated to 2σ, these give date ranges of 620-925 AD and 540-800 AD (University of Arizona, Refs AA-20853-4), suggesting that the pit was in use in the post-Roman or Saxon period.

A multi-period presence in the immediate vicinity is confirmed by the broad temporal range of the recovered artefacts, with strong evidence for a long-term prehistoric presence. However, from the site itself, only Pit 603 can be allocated a date (through the radiocarbon dates) with any security.

It is unlikely that Pit 603 represents the only post-Roman feature on the site. Its shared orientation and probable contemporaneity with Pit 602 has already been mentioned, and the shared axis or right-angled alignment with the majority of the exposed features should be noted. There is the possibility that all the exposed features are of a similar post-Roman date, the prehistoric pottery and flintwork surviving in archaeological contexts merely as residual debris from nearby and earlier occupation. The recovered pottery sherds are all small and abraded, as would be expected in these circumstances.

ACKNOWLEDGEMENTS

The project was commissioned by Carkeek Developments Ltd through Mr K. Eke (Carkeek) and administered by Dr K. Ray (Plymouth City Archaeologist) and C.G. Henderson (EA). Dr K. Ray provided the specifications for the fieldwork, which was directed by T.H. Gent and previously (evaluation) by A.J. Sage. J. Bedford undertook a survey of the site and its environs. The finds were catalogued by G. Langman. H. Quinnell (Exeter University) commented on the pottery, K. Hunter analysed the plant macrofossil remains, and the lithics were described by T.H. Gent. The illustrations were produced by N. Goodwin.

BIBLIOGRAPHY

Perkins, J. 1971 *Geology Explained in South and East Devon.*

Ray, K. 1993 *Hazeldene, Elburton (Moorcroft Quarry Extension): An Archaeological Appraisal of the Implications of Mineral Extraction*, Plymouth Directorate of Development. Archaeological Report **RD.1093**.

Sage, A.J. 1994 *Archaeological evaluation at Hazel Grove, Elburton, Plymouth*, Exeter Museums Archaeological Field Unit Report No. **94.64**.

APPENDIX 1: LITHICS REPORT

Forty-seven struck flints were recovered during the excavation, of which 20 were unstratified (seven of these came from limited fieldwalking immediately to the north of the site). This ploughed area had already been partially inspected during the evaluation excavation when a total of 42 struck flints were recovered.

The source material appears to vary considerably, with at least five distinct flint types being recognised. These range from rough, patinated, mechanically-transported flint to good-quality, dark grey material of the type commonly considered to derive from the Beer region of south-east Devon.

Although three flint scrapers were discovered during the evaluation excavation, including one of a thumbnail type usually attributed to the late Neolithic or early Bronze Age, only one firmly diagnostic artefact was produced by the excavation. A Mesolithic microlith was recovered from amongst ten flints located around and within linear feature 622. Produced in a mid-grey, slightly mottled flint it represents a very small lanceolate type, possessing fine retouching along one side, around the blunt proximal end, and along a short section of the opposite side of the tip to the worked edge. This is of a type that made an appearance in Britain c. 6000 bc. It is not considered to relate to the period of the construction of linear feature 622.

A further group of eight flints were found concentrated on a roughly north-south axis 3-5m to the west of linear feature 600. Other small finds were scattered randomly across the site. Only ten flints were recovered from the fills of archaeological features and included a possible fabricator from the upper fill (623) of linear feature 622.

Two flake cores were recovered as unstratified items, while three of the recovered flints showed signs of burning.

APPENDIX 2: POTTERY REPORT *By* H. Quinnell

Sixteen small sherds, weighing 40g, were examined. These were of five or six different fabrics, and probably include pieces with Grooved Ware, Beaker and Later Iron Age attributes. All the sherds are small and abraded to varying degrees; none merit illustration.

Description of the sherds

Trench 1, cleaning subsoil, SF 2 (evaluation 1994)
Four small body sherds about 13mm thick weighing 13g. Exterior surface (where surviving) reddish brown 5 YR 4/4, remainder dark reddish brown 5 YR 3/2. Two finger nail impressions angled towards each other about 10mm apart on the exterior of the largest sherd. Soft gritty fabric contains sparse inclusions of slate, burnt white and soft during firing, feldspar, tourmaline, some siliceous sandstone and quartz up to 2mm, and also very finely comminuted mica. An appropriate source would be slate within the Devonian succession west and south-west of Dartmoor, where the distinctive minerals derived from the granite would be incorporated in clay deposits. Such a source could occur within a kilometre or so from the site.

Trench 9, surface finds, SF 6 (evaluation 1994)
Four small body sherds about 7mm thick weighing 4g. Black (5 YR 2.5/1) with parts of ?exterior surface oxidized reddish brown (5 YR 5/4). Soft fabric has tendency for fractures to laminate. Sparse inclusions of quartz (though much more common than in SF 2), mainly angular, up to 3mm, occasional inclusions of feldspar and mica (not comminuted to any degree); slate is virtually absent and there is no tourmaline. The source of this fabric has little input of granite-derived minerals, except mica, and was probably some distance from Dartmoor.

Trench 9, cleaning subsoil, SF 8 (evaluation 1994)
One body sherds 6mm thick weighing 1g. Very dark grey (5 YR 3/1). Hard fabric contains sparse feldspar, mica (comparatively common) and quartz up to 4mm; there is no tourmaline or slate. The source must be in an area in which minerals derived from the granite occur.

Trench 9, secondary fill (516) of linear feature (517) (evaluation 1994)
Two joining body sherds 8mm thick weighing 5g. Black throughout. Hard fabric with laminated fracture. Sparse angular quartz inclusions up to 6mm with smaller (up to 2mm) pieces of quartz, altered slate and occasional mica flakes; there is some finely comminuted mica which could come from weathered slate. The absence of feldspar and

tourmaline suggest a source some distance from the granite. Exterior ribbed by parallel grooves 5mm across with close-spaced diagonal incisions across the grooves. Lamination indicates that the clay has been well-worked.

(601) (excavation 1995)
Two joining body sherds 6mm thick weighing 9g. Black except for smoothed exterior, oxidized yellowish red (5 YR 4/6). Hard fabric has sparse quartz, feldspar, slaty and fibrous amphibole inclusions up to 3mm; some finely comminuted mica. The inclusions indicate clay deriving from a basic rock. Dolerite dykes occur in the South Hams and some outcrops in the New England quarry at Brixton 2km to the east of the site where veins of fibrous amphibole are a feature of the rock.

Unstratified (1994 and 1995)
One sherd weighing 2g joins those in (601). Two sherds weighing 6g, one from a possible base angle. Oxidized yellowish red (5 YR 5/6) core with slightly burnished exterior mainly very dark grey (5 YR 3/1). Hard with moderate inclusions up to 2mm, of which the most obvious appear to be feldspar, slate burnt white, tourmaline and finely comminuted mica. The source may be the same as that of SF 2 although the quality of the sherd is much greater. (One further sherd of hard granitic fabric, weighing 3g, is medieval (J. Allan pers. comm.)).

Discussion
The fabrics of SF 2/Unstratified, SF 6 and SF 8 contain material which could derive from the Dartmoor granite about three miles to the north; the first fabric is likely to come from a source closer to Dartmoor than the other two. (601) with its basic clay is distinctive but could be locally made. SF 5 on the other hand does not contain derivatives from either granite or basic rock and is likely to have been made in the area of a slate outcrop some distance away. No fabric can be matched with those from Mount Batten (Cunliffe 1988, 19) 6km to the west, or from Shaugh Moor (Wainwright & Smith 1980) 10km to the north, the two locations geographically closest to Elburton. There has been little archaeological work in the lower eastern part of the Tamar Valley system in which Elburton is situated. The site lies less than 1km west of the 1km transect studied in the South Hams Survey (Fordham & Mould 1982). The authors remark on the difficulties of retrieving prehistoric pottery from fieldwalking in the survey area and indeed none was found; numerous flint scatters were located however, some within 3km of the site at Elburton (*ibid.*, Fig. 24).

Identification of small sherds is at all times extremely difficult, and especially where there are no collections from the immediate area for comparison. It must be emphasised that the chronological periods suggested apply only to the sherds and need have no implications for the features excavated. Tentative interpretations may be advanced in three cases. The sherds SF 5, from (516) in linear feature (517) have distinctive grooves crossed by incisions. This decorative motif is not common and is best paralleled by those found on Grooved Ware vessels (cf. material from Wyke Down, Dorset (Cleal 1991, Fig. 7.18) and from Durrington Walls (Longworth 1971, Figs 31-50)). A Late Neolithic date would be appropriate for the fabric with its laminated soapy texture and large inclusions; it may also be relevant that this sherd is not local. Some of the lithics found on the site may belong to the same period. Grooved Ware is almost unknown in Devon, the only recently studied pieces (Smith 1975, Fig. 16, 4) being from Topsham. However a recent survey of the data from Cornwall (Griffith and Quinnell, forthcoming) and work on a watching brief near Probus (J. Nowakowski pers. comm.) indicate that the lack of Late Neolithic material in the South West may relate to survival rates and methods of study rather than to its real scarcity. If the Grooved Ware attribution of these sherds is accepted, a Late Neolithic date for linear feature 517 (linear feature 614) becomes a possibility.

One sherd of SF 2 from cleaning in Trench 1 has a pair of fingernail impressions angled towards each other. Fingernail impressions occur on a wide variety of pottery but usually in bands in which the impressions are all roughly parallel. The latter form of decoration is seen around the centre of the biconical vessel P12 from the second millennium BC CAL enclosure at Shaugh Moor (Wainwright & Smith 1980, Fig. 19); both parallel and paired impressions are found on vessels of the Trevisker tradition (see Radford 1952 for examples from Dartmoor). Parallel impressions are also found on the shoulders of large jars occurring during the Late Bronze Age and Early Iron Age (Barrett 1980, Fig. 6) and illustrated locally from Foale's Arrishes by Radford (1952, Fig. 13). However the fabric of these second millennium BC and later vessels usually contains larger inclusions than SF 2. Paired fingernail patterns in various forms occur on Beakers, in which the fabric is generally finer. Such patterning appears on the Beaker from the Carvinack barrow near Truro (Dudley 1964, 437 & Fig. 5) and on sherds from Mount Pleasant, Dorset (Longworth 1979, Figs 50-51); the fabric of these is thinner than the Elburton sherd but much of that decorated in a similar way and described as 'Domestic Beaker' (Gibson 1982) tends to be thicker. On balance a Beaker attribution is suggested for this sherd. As with the Grooved Ware sherd there may be lithics from the site of similar date.

Sherds with an oxidized and/or burnished finish from (601) or unstratified seem, on the general appearance of their fabric, to belong to the later part of the Iron Age; this finish, in fabrics such as gabbroic, dates roughly from the fourth century BC until the first century AD in Cornwall (Quinnell 1986, 113, 120).

It is gradually becoming apparent that there is a great deal more archaeological material beneath the surface of lowland areas of Devon and Cornwall than was formerly supposed. This of course has been highlighted by the aerial reconnaissance work of Frances Griffith (e.g. Griffith 1984). As more evaluative work is done, and more intensive surveillance carried out on areas disturbed by construction, more may be expected to appear; the wide range from the Indian Queens-Fraddon A30 improvement scheme, producing material from early Neolithic until the end of the Roman period, is one example of this (Nowakowski 1994; pers. comm., present author). Against this background of 6000 years' potential activity, material such as that from Elburton cannot be expected to have immediate meaning, but in the long run will make its contribution to our understanding of the development of the landscape.

Acknowledgements
I am very grateful to Dr R.T. Taylor for discussing the petrology of the sherds with me and their potential source areas; my thanks also to John Allan for examining the medieval sherd.

Bibliography

Barrett, J. 1980 'The pottery of the later Bronze Age in lowland England', *Proc. Prehist. Soc.* **46**, 297-320.
Cleal, R. 1991 'Cranborne Chase A The earlier Prehistoric Pottery' in Barrett, J., Bradley, R. & Hall, M. *Papers on the Prehistoric Archaeology of Cranborne Chase*, 134-222.
Cunliffe, B. 1988 *Mount Batten, Plymouth: a Prehistoric and Roman Fort.*
Dudley, D. 1964 'The Excavation of the Carvinack Barrow, Tregavethan, near Truro, Cornwall', *J. Roy. Inst. Cornwall*, New Ser. **IV pt 4**, 414-51.
Fordham, S. & Mould, Q. 1982 'The South Hams Survey' in Balaam, N., Smith, K. & Wainwright, G.J. 1982 'The Shaugh Moor project: fourth report - environment, context and conclusions', *Proc. Prehist. Soc.* **48**, 261-66.
Gibson, A.M. 1982 *Beaker Domestic Sites*, BAR British Series **107**.
Griffith, F.M. 1984 'Aerial reconnaissance in Devon in 1984: A Preliminary Report and the Discovery of a Hillfort', *Proc. Devon Archaeol. Soc.* **42**, 7-10.
------ & Quinnell, H. forthcoming 'The Neolithic' in Ravenhill, W. & Kain, R. (eds) *Historical Atlas of South West England.*
Longworth, I.H. 1971 'The Neolithic Pottery' in Wainwright, G.J. *Durrington Walls:Excavations 1966-1968*, 48-155.
------ 1979 'The Neolithic and Bronze Age Pottery' in Wainwright, G.J. *Mount Pleasant, Dorset: excavations 1970-1971*, 75-124.
Nowakowski, J. 1994 *Bypassing Indian Queens*, Cornwall Archaeological Unit/ Cornwall County Council.
Quinnell, H. 1986 'Cornwall during the Iron Age and the Roman period', *Cornish Archaeol.* **25**, 111-134.
Radford, C.A.R. 1952 'Prehistoric Settlements on Dartmoor and the Cornish Moors', *Proc. Prehist. Soc.* **18**, 55-84.
Smith, I.F. 1975 'Finds from Neolithic features' in Jarvis, K. & Maxfield, V. 'The Excavation of a First-Century Roman Farmstead and a Late Neolithic Settlement, Topsham', *Proc. Devon Archaeol. Soc.* **33**, 249-57.
Wainwright, G.J. & Smith, K. 1980 'The Shaugh Moor project: second report - the enclosure', *Proc. Prehist. Soc.* **46**, 65-122.

APPENDIX 3: ANALYSIS OF PLANT MACROFOSSIL REMAINS *By* K. Hunter

Introduction

Four samples were submitted for analysis from the site at Elburton, Plymouth. The site, located on Carboniferous limestone, was given a provisional late Iron Age date. All the samples are from pit fills. The aim of the analysis has been to identify, quantify and record the cereal, chaff and weed remains prior to AMS dating.

The initial processing was carried by EA staff using the flotation method. The flotant was collected on 300mm and 500mm meshes and the residue was collected on a 1mm mesh. The dry flots and residues were then sorted with the potentially identifiable material being extracted. More detailed analysis was then carried out.

The identification was carried out using a MBC-10 stereo microscope and a Wild M5 stereo microscope for a more detailed study of surface cell patterns. The larger fractions (>500mm) were sorted with the cereal grains, chaff and weeds being extracted, counted and recorded. Only the potentially diagnostic chaff and weeds were extracted from

the finer fractions (<500mm). This material was recorded along with the presence of cereal fragments, Avena (oat) awn fragments and charcoal which were not extracted.

The identification of the extracted material was carried out using standard identification criteria using a combination of modern and archaeological references material and reference texts including Jacomet (1978) for the identification of cereals. The nomenclature follows Stace (1995). The habitat preferences are taken from Stace (1995, Clapham *et al* (1962) and Jones (1978).

The preservation of the identifiable characteristics of the remains varied quite considerably even within individual samples. This has meant that though it has been possible to identify some of the material to species, some of the identification has only been taken to genus or family.

Results

The predominant cereal present in all the samples is *Hordeum vulgare* (barley). All of the grain identifiable to species appears to be of a hulled variety, exhibiting a distinct angular shape and evidence in many cases of attached lemma and palea.

Samples 303 and 305 contained a relatively large number of barley grains. The identification of possible barley lateral grains in 305 suggest the presence of a six-row variety. This does not however discount the presence of a two-row variety in the assemblage. The only barley chaff recovered was a rachis fragment from 305.

Relatively few barley grains were recovered from samples 306 and (context 604), fifteen and two grains respectively.

Triticum sp. (wheat) grains were recovered from samples 303 and 305. The morphology of the better-preserved examples suggests a free-threshing wheat rather than a hulled type. No wheat chaff was recovered.

There is evidence of oat remains in all the samples, as grains or awn fragments. As no diagnostic chaff was present it is not possible to say if the grains were of a domesticated or wild type.

The presence of a relatively large number of *Brassica/Sinapis* seeds in 303 and 305 may be evidence of a cultivated plant; both foliage and the oily seeds could possibly have been utilised. Alternatively they could simply be weed seeds as these genera can infest arable fields and waste ground.

The remaining seeds appear to be of plants from a range of environments. *Chenopodium album* (fat hen) , present in three of the samples, is a common weeds of arable/waste places (Clapham *et al* 1962), as is *Raphanus raphanistrum* (wild radish), represented mainly as pod segments, *Anthemis cotula* (stinking mayweed) and *Fallopia convulvulus* (black bindweed). *Valerianella dentata* (narrow fruited corn salad) is more specifically a weed of corn fields. *Galium verum* (lady's bedstraw) is a species associated with a dry grassland habitat. Grasses are also represented, two of which were identified as *Phleum sp.* (timothy) and *cf Poa sp.* *Ranunculus flammula* (lesser spearwort) is a common weed of wet places (Stace 1995) which may suggest a wetter environment such as a pond, ditch or stream close by.

The absence of all but a few examples of chaff associated with the cereal grains suggests that this assemblage represents the remains of a processed crop. The wild radish seedpod segments are relatively large in size (6 x 4mm) and could have been retained with the grain during the cleaning progress. The other seeds are of a much smaller size and would be expected to be separated out early in the cleaning process, but with the lack of significant chaff they could represent the separate dumping of fine cleaning waste.

Bibliography

Clapham, A.R., Tutin, T.G & Warburg, E.F. 1962 *Flora of the British Isles.*

Jacomet, S. 1987 *Prahistorische Getreidefunde.*

Jones, M. 1987 The plant remains in Parrington, M. *The excavations of an Iron Age settlement, Bronze Age ring ditches and Roman features at Ashville Trading Estate, Abingdon 1974--1976,* CBA Research Report **28.**

Stace, C. 1995 *New flora of the British Isles.*

Taxon		Common name	607	608	610	604
			303	305	306	
Cereals						
Hordeum vulgare L	hulled grain	Barley	99	74	9	1
Hordeum vulgare L	grain		99	165	6	1
Hordeum vulgare L	lateral grains			3		
Triticum sp.free threshing	grain	Wheat	2	3		
cf.*Triticum* sp.	grain			9		
Avena sp	grain	Oat	19	70	6	
cf. *Avena* sp.	grain		11	30	8	1
Hordeum sp	rachis fragment			1		
Avena sp.	awn		+	+		
Cereal NFI			+	+	+	+
Weeds						
Ranunculus flammula L	achene	lesser spearwort	1			
Chenopodium album L		fat hen	3	6		1
Chenopodiaceae			4	3		
Stellaria sp			1			
Caryophyllaceae			3	1		
Fallopia convolvulus (L) A. Love	nutlets	black bindweed		1		
Rumex sp	nutlets	sorrel		6		
Polygonaceae	nutlets			1		
Raphanus raphanistrum ssp. *raphanistrum* L	seed	wild radish	1			
Raphanus raphanistrum ssp. *raphanistrum* L	pod segment		+	+		
Brassica/Sinapis sp	seeds	cabbage etc /mustard	32	71		
Lathyrus/Vicia	seed	vetch/tare		1		
Lamiaceae	nutlets			1		
cf. *Galium verum* L	mericarp	lady`s bedstraw	1			
Valerianella dentata L Pollich	nut	narrow fruited cornsalad	1			
Anthemis cotula L	achenes	stinking mayweed	8			
Asteraceae	achenes	daisy family	1	2		
Phleum sp	caryopses	timothy grass	1			
cf .*Poa*	caryopses	cf. poa	1			
Poaceae	caryopses	grasses	1			
unidentified			2	7		
Total			291	455	29	4
Sample size (litres)						

Table 1 Charred plant macrofossils from Elburton, Plymouth.

APPENDIX 4: FINDS CATALOGUE *by* G.Langman

The following site code was used to mark artefacts and ecofacts: PEB 95. All weights are given in grams (to the nearest 5 grams).

Bone-faunal/Shell

context	*qty*	*comments-*
621	4	frags of 1 oyster shell
635	433	burial: 1 incomplete foal
-	2	2 small unidentified frags, SF411

Burnt clay

context	*weight*
605	390
607	680
608	660
610	60

Glass

context	*qty*	*comments-*
unstrat	1	Post-medieval bottle glass, after 1650 AD

Stone

context	*qty*	*comments*
627	2	2 frags granite, appear affected by heat

Slag

605	2	slag

Small finds

SF	*context*	*qty*	*comments*
400	-	1	flint
401	-	1	flint
402	-	1	flint
403	623	1	flint
404	-	1	flint
405	-	1	flint
406	-	1	flint
407	-	1	flint
408	-	1	burnt flint
409	-	1	burnt flint
410	-	1	flint
411	-	2	bone-faunal: 2 frags
412	-	1	flint
413	-	1	flint
414	-	1	flint
415	-	1	flint
416	-	1	flint
417	-	1	flint
418	-	1	flint
419	-	1	flint
420	-	1	flint
421	-	1	flint

Context 635 Faunal burial

bag	*description*	*qty*
1	Nearside fore limb & scapula	36
2	Offside fore limb & scapula	3
3	Offside scapula	23
4	Rear offside leg	4
5	Vertebrae & ribs	15
6	Ribs	81
7	Pelvic area	9
8	Miscellaneous	24
9	Skull	52
10	Vertebrae	5
11	Lower jaw	1
12	Rear nearside leg	7
13	Vertebrae	173

Lithics

context	*SF*	*qty*	*comments*
607	-	1	flint
621	-	2	flint, 1 burnt flint
623	-	7	flint, 1 fabricator
623	403	1	flint
623	413	1	flint
623	415	1	flint
623	416	1	flint
-	400	1	flint
-	401	1	flint
-	102	1	flint
-	404	1	microlith
-	405	1	flint
-	406	1	flint
-	407	1	scraper
-	408	1	flint
-	409	1	burnt flint
-	410	1	flint
-	412	1	flint
-	414	1	flint
-	417	1	flint
-	418	1	flint
-	419	1	flint
-	420	1	flint
-	421	1	flint
unstrat	-	13	lithics
fieldwalking (unstrat)	-	7	lithics

Pottery

context	*date/comments*	*sherds*	*vessels*
601	Mid-Late Iron Age. Wt: 10	2	1
unstrat	4 sherds Mid-Late Iron Age (?all 1 vessel). Wt: 15 1 sherd SW micaceous jug sherd (1200-1500 AD). Wt: 70 1 sherd SW micaceous rim (?16th Century). Wt: 30	6	3

Pottery statistics

Total number of sherds: 8; minimum number of vessels: 4. Total weight: 125

Elburton 1994 (PEB 94): Revised finds report

context	*comments*
Trench 1 (topsoil)	1 sherd medieval pot (SF1)
Trench 1	4 sherds prehistoric pot from 1 vessel (SF2)
Trench 1 (cleaning)	2 struck flint flakes (SF4)
516 (Tr. 9)	2 sherds ?Late Neolithic pot (SF5)
Trench 9 (surface)	4 sherds prehistoric pot from 1 vessel (SF6)
Trench 9 (cleaning)	1 struck flint flake (SF7)
Trench 9 (machining)	1 sherd prehistoric pot (SF8)
Unstratified (fieldwalking)	1 sherd post-medieval pot 1 copper alloy buckle, post-medieval (SF 9)? 1 fragment slag 41 struck flints (including 3 scrapers)
Unstratified	1 sherd post-medieval pot ?1 fragment slag 1 struck flint

NB. 22 pieces of suspected iron slag from the evaluation excavation.have subsequently been identified as fragments of natural mineral formation.

APPENDIX 5: CONTEXT DESCRIPTIONS

600 Slightly truncated, parallel-sided linear running NNW-SSE across the site; round-ended terminals at either end. Rounded base cut by at least three stakeholes. Le = 2.30m; Wth = 0.50m; D = 0.28m.

601 Orange/brown, silty clay; upper fill of linear 600. The slightly compacted but friable fill contained abundant pea-grit and occ charcoal. D = 0.16m.

602 Shallow, sub-rectangular stone-lined pit located on south side of site. Slightly sloping sides, bottomed onto a flat level base. Le = 1.60m; Wth = 1.10m; D = 0.20m.

603 Sub-rectangular pit aligned NNW-SSE on south side of exposed area. Slack sides lead to a rounded base. Slight raised lip at north end. Le = 1.90m; Wth = 0.70m; D = 0.95m.

604 Mid-brown silty clay upper fill of Pit 602. Compacted but friable material contained abundant pea-grit, occ limestone, charcoal and small ww stones. D = 0.12m.

605 Orange/brown, silty clay, upper fill of Pit 603. The firm material contained abundant pea-grit and charcoal and occ fired clay, iron slag. D = 0.18m.

606 Very dark grey/brown, very soft, clay staining surrounding a single sandstone within fill 604.

607 Dark grey/brown, silty clay fill of Pit 603. The friable material contained abundant pea-grit, charcoal, manganese, occ yellow sand pockets. Strong indications of burning. D = 0.10m.

608 Orange/brown silty clay fill of Pit 603. The soft fill contained abundant pea-grit and occ charcoal. D = 0.05m.

609 Pale brown, silty/sandy clay, lower fill of Pit 602. The very compacted material contained abundant pea-grit and occ charcoal, manganese staining. D = 0.05m.

610 Dark grey, silty clay, lower fill of Pit 603. The soft material contained occ ?charcoal and heavy umber staining. D = 0.2m.

611 Soft, very dark grey clay natural, fill of ?periglacial channel.

612 Undressed limestone slabs set almost vertically around the inner edge of Pit 602.

613 Sub-circular post-hole dug between pits 602 and 603. Le = 0.30m; Wth = 0.20m; D = 0.20m.

614 Partially truncated roughly parallel side linear running ENE-WSW across the southern half of the site. Terminates or is truncated completely at E end. Rounded base. Wth = 1.00m; D = 0.22m.

615 Orange/brown, silty clay, upper fill of linear 614. The compacted material contains abundant pea-grit, occ small ww stones and manganese staining.

616 Truncated parallel-sided linear running E-W across the east end of the site. Appears to have been completely truncated at west end. Rounded base. Wth = 0.4m; D = 0.06m.

617 Orange/brown, silty clay, fill of linear 616. The compact but friable fill contains abundant pea-grit and occ limestone shale.

618 Stakehole to middle of linear 600. Either cuts or is abutted by lower fill 632. Diam: 0.05m; D = 0.08m (truncated).

619 Fill of stakehole 618. As 601 but softer.

620 Shallow linear running E-W across the western side of the site. Truncated to east and along its south length to the west; base much disturbed by small animal action. Wth = 1.00m; D = 0.1m.

621 Mottled orange/brown, silty clay fill of linear 620. The firm fill contained freq manganese and limestone shale, occ small ww pebbles and shell. D = 0.10m.

622 Linear running N-S across west end of site. Wth = 0.9m; D = 0.20m.

623 Orange/brown, silty clay upper fill of linear 622. The compact but friable material contained abundant pea-grit and occ quartz. D = 0.10m.

624 Clay-lined circular pit with rounded base to west of linear 600. Diam: 0.60m; D = 0.18m.

625 Orange/brown silty clay fill of Pit 624. The compacted material contained abundant pea-grit and charcoal. D = 0.12m.

626 Sub-circular pit at western end of site, lying to east of sewer-pipe trench 628. Diam: 0.80m; D = 0.30m.

627 Mid orange/brown silty clay fill of Pit 626. The compacted but friable material contained abundant pea-grit and occ quartz, granite and freq small ww stones. D = 0.30m.

628 Modern cut for sewer-pipe to west of site. Wth = 0.90m.

629 Modern fill of cut 628.

630 Mid brown post-pipe fill within post-hole 613. Only differentiated from 631 by softer consistency. Wth = 0.06m; D = 0.20m.

631 Mid brown, silty clay fill of post-hole 613. The firm material contained abundant pea-grit. D = 0.18m.

632 Mid brown, silty clay, lower fill of linear 600. The friable material contained occ charcoal and abundant pea-grit. D = 0.10m.

633 Orange, silty clay lining of Pit 624. The very compacted material contained abundant pea-grit and appeared to have been affected by heat. D = 0.04m.

634 Sub-rectangular pit containing burial of ?young horse. Flat base with gently-sloping sides. Le = 1.05m; Wth = 0.50m; D = 0.19m.

635 Orange/brown silty clay fill of Pit 634. The friable and occasionally loose fill contained abundant pea-grit, manganese and occ limestone shale, charcoal and the tightly interred skeleton of a young horse: head to north and slightly to east side of pit; the neck twisted to place the nose in the region of the chest; forelegs flexed to west of head, hoofs uppermost; chest area on its side with sternum to west; the pelvis pressed flat on its dorsal face; both hind legs flexed above it symmetrically; hind, fore-limbs, all hoofs and many tail vertebrae lost to machine.

636 Stakehole cutting the base of linear 600 at its northern end. Either cuts or is abutted by fill 632. Diam: 0.06m; D = 0.08m (truncated).

637 Orange/brown, silty clay fill of stakehole 636. The loose fill contained abundant pea-grit.

638 Stakehole cutting the base of linear 600 at the south end. Either cuts or is abutted by fill 632. Diam: 0.06m; D = 0.10m (truncated).

639 Orange/brown, silty clay fill of stakehole 638. The loose fill contained abundant pea-grit.

640 Truncated square stakehole on the western edge of linear 622. Le = 0.20m; Wth = 0.20m; D = 0.16m.

641 Orange/brown, silty clay fill of stakehole 640. The firm material contained freq charcoal. D = 0.16m.

642 Reddish natural surrounding cut of Pit 602. Taken to be the result of heat.

643 Orange/brown, silty clay fill of linear 614. The compacted material was stained with umber and contained abundant pea-grit and occ small ww stones.

644 Orange/brown, silty clay, lower fill of linear 622. The compacted but friable material contained abundant pea-grit and occ quartz.

645 Ploughsoil. D = 0.20m.

646 Mixed brown colluvium, topsoil. D = 0.50m.

Fig. 1 Location map. Scale 1:10,000.

Area shown in Fig. 2

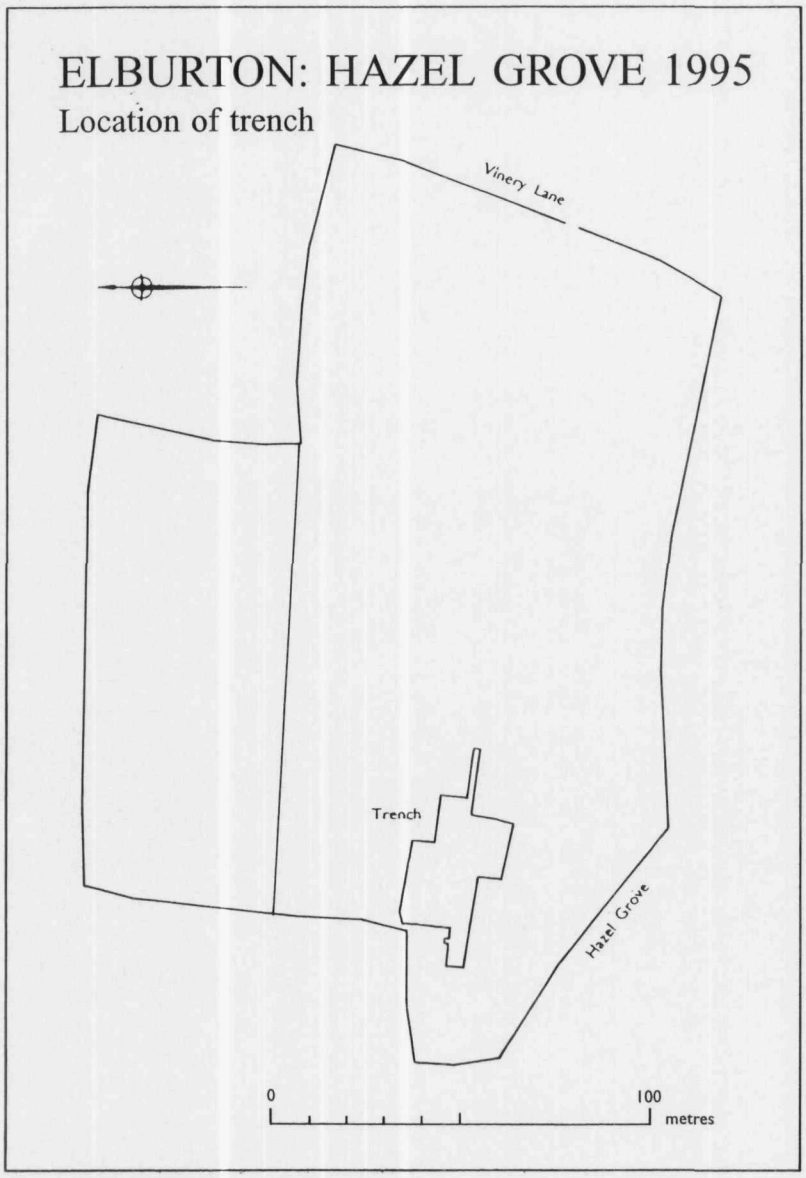

Fig. 2 Location of trench within field.

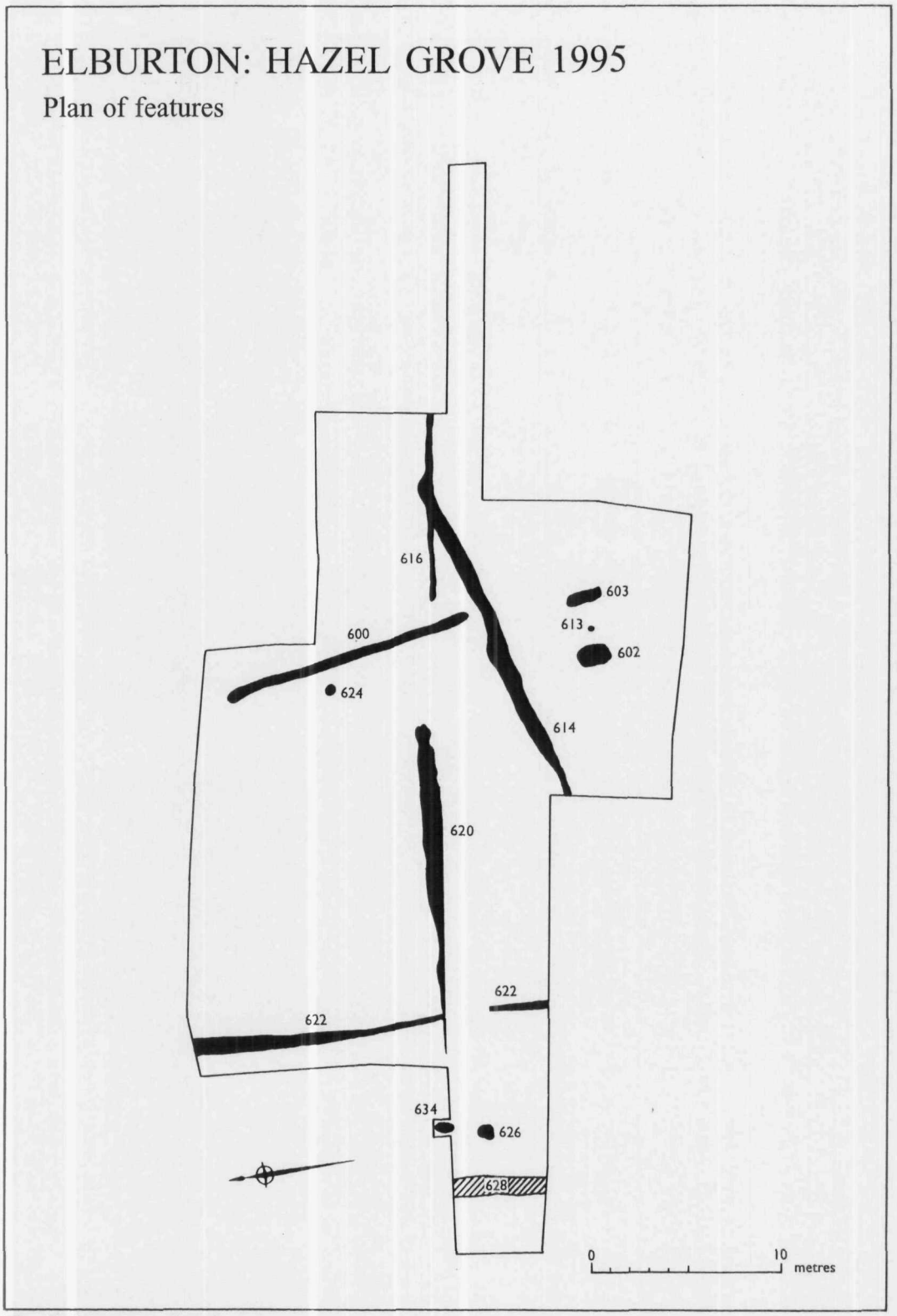

Fig. 3 Summary site plan.

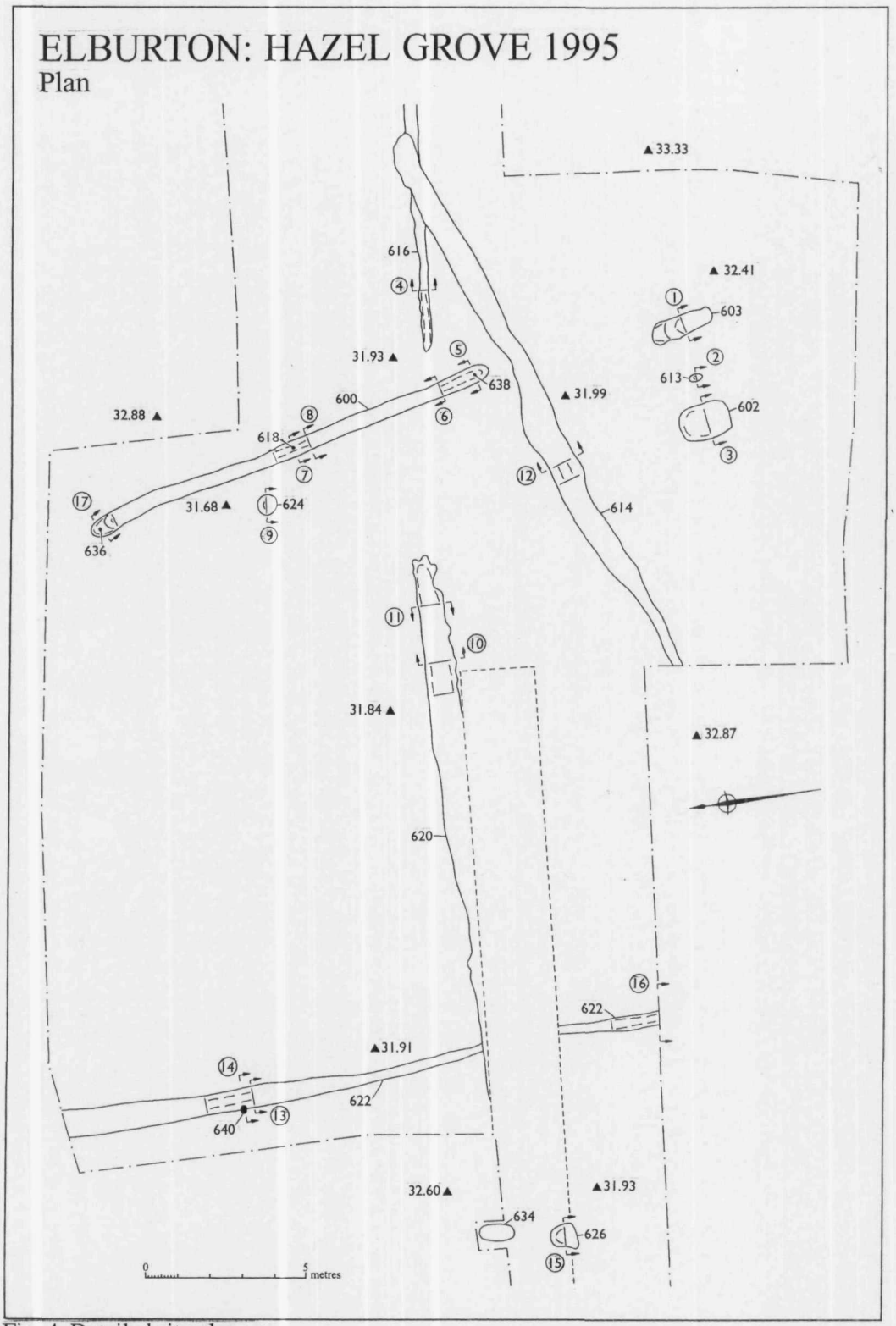

Fig. 4 Detailed site plan.

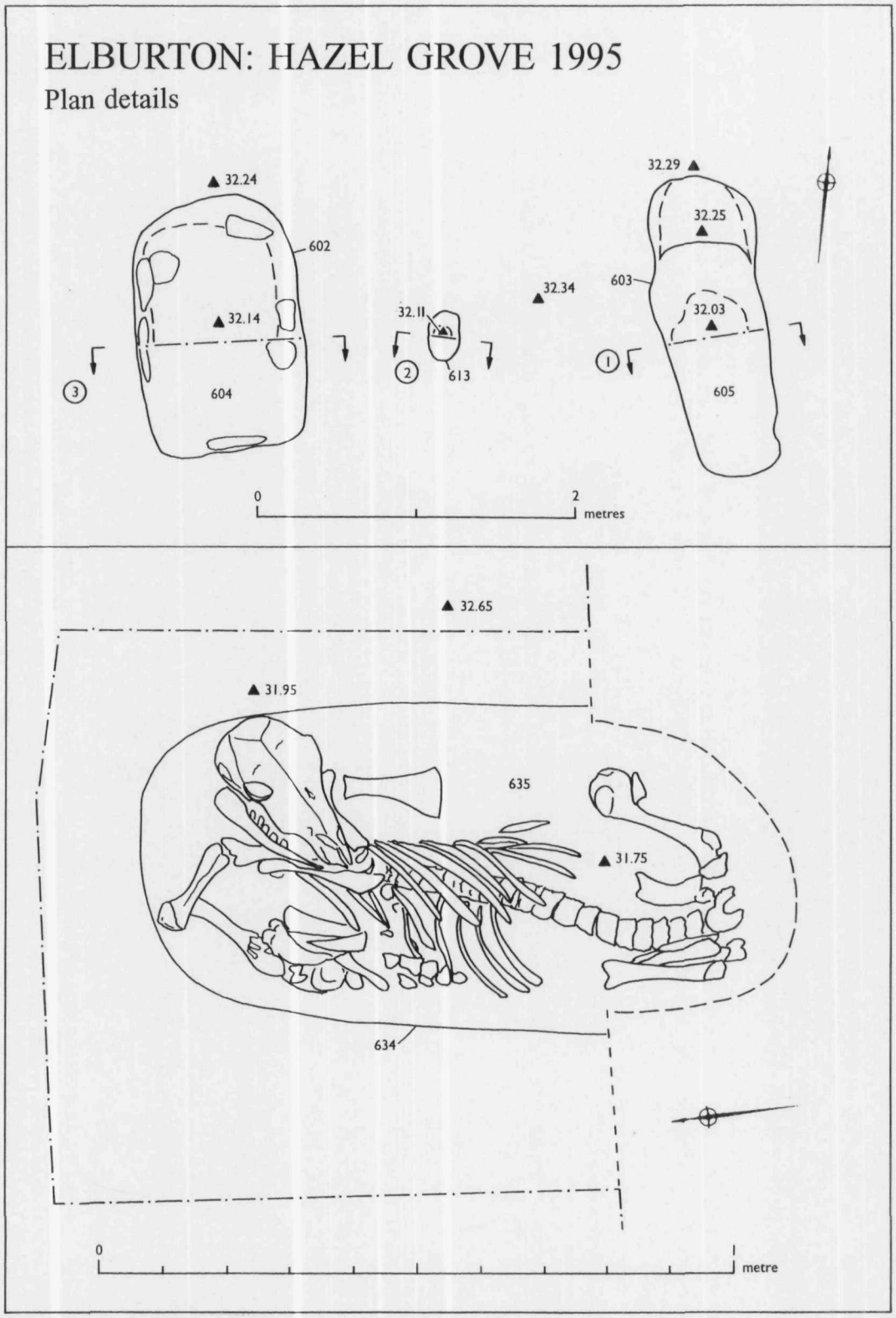

Fig. 5 Plan of pits 602, 603, posthole 613 and horse burial 634.

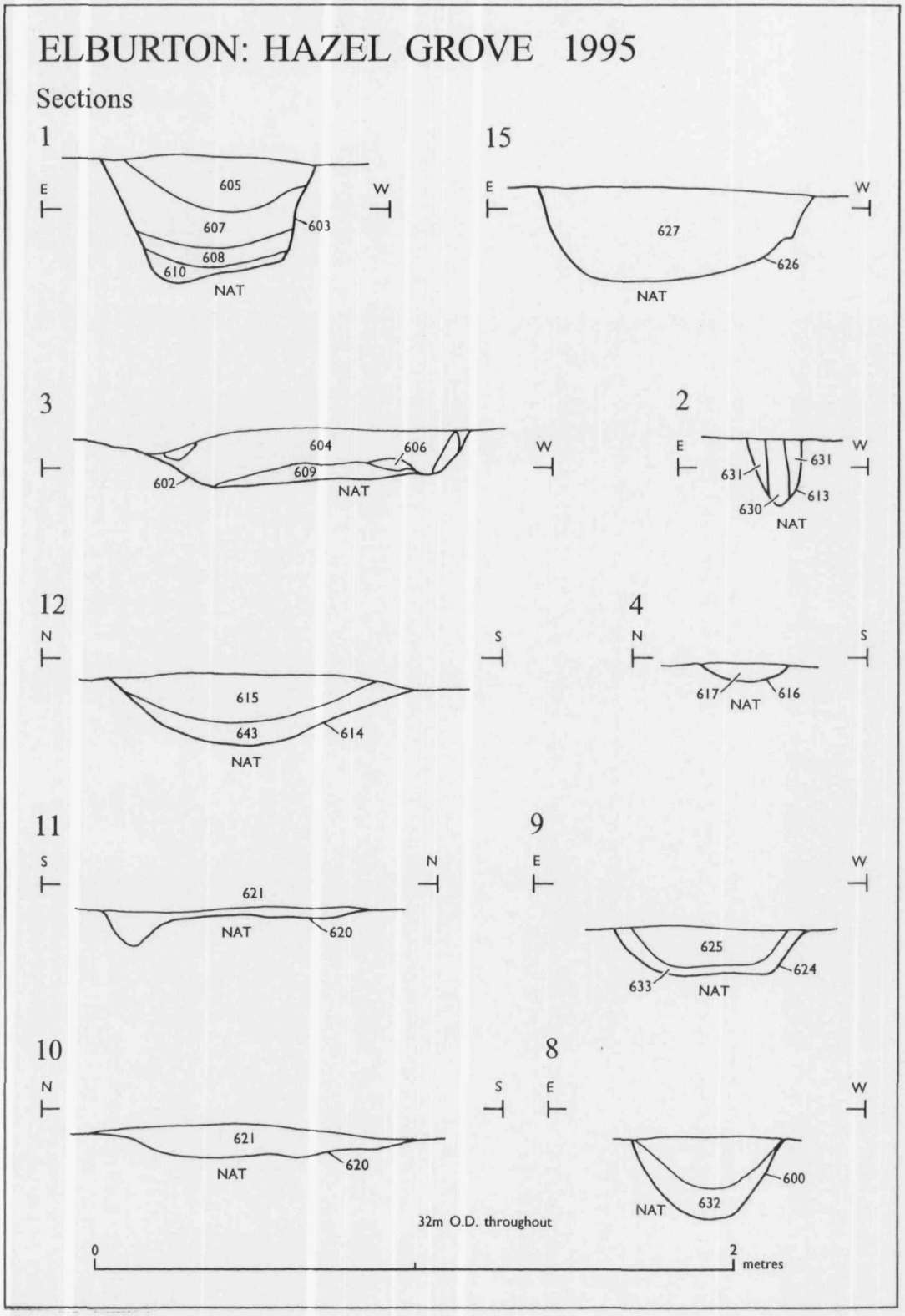

Fig. 6 Sections.

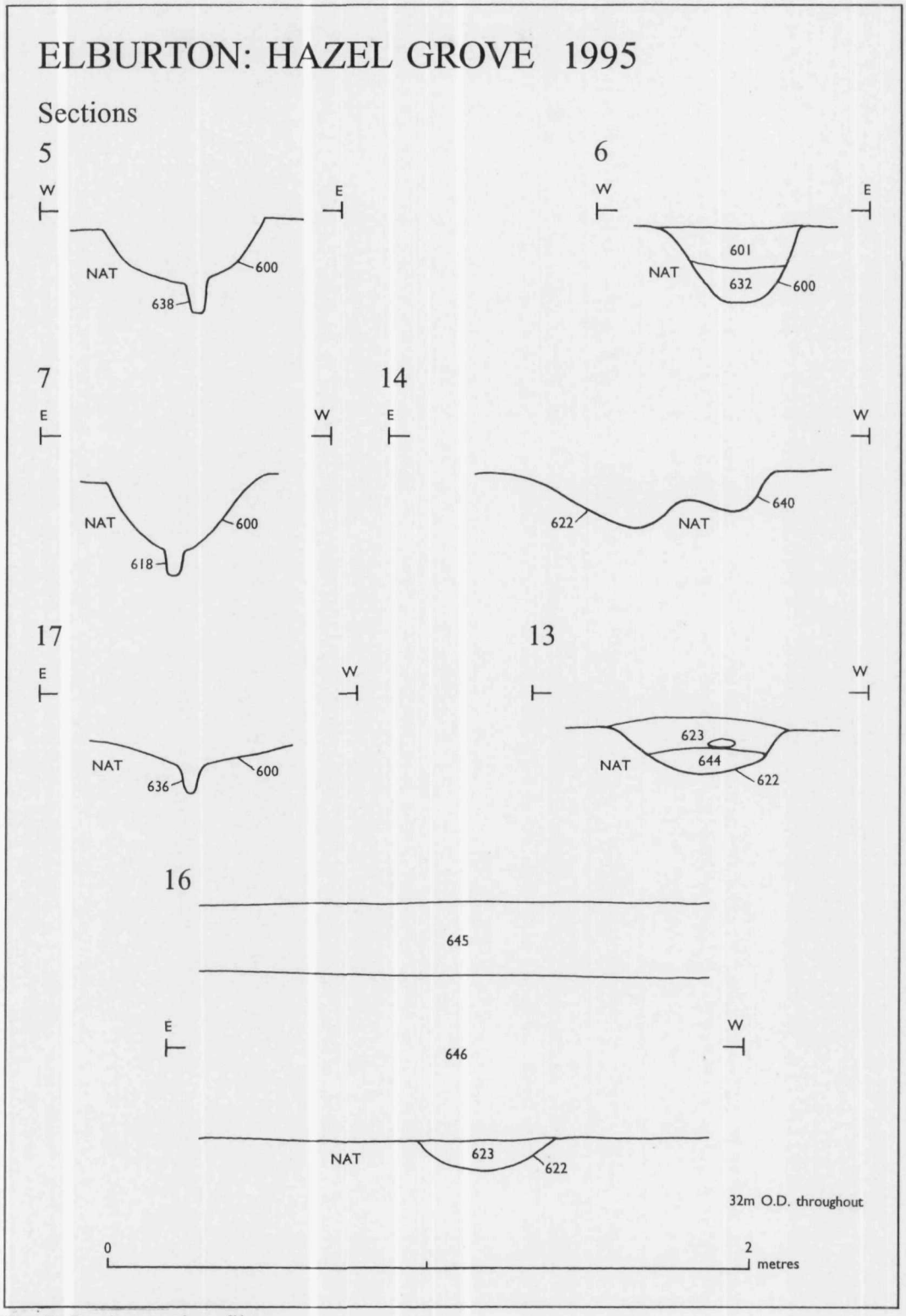

Fig. 7 Sections and profiles.