# 7 The Iron Age Settlement: Excavation Results

## 7.1 Enclosing works

### *7.1.1 Outer enclosure (illus 3; illus 17; illus 18; illus 19)*

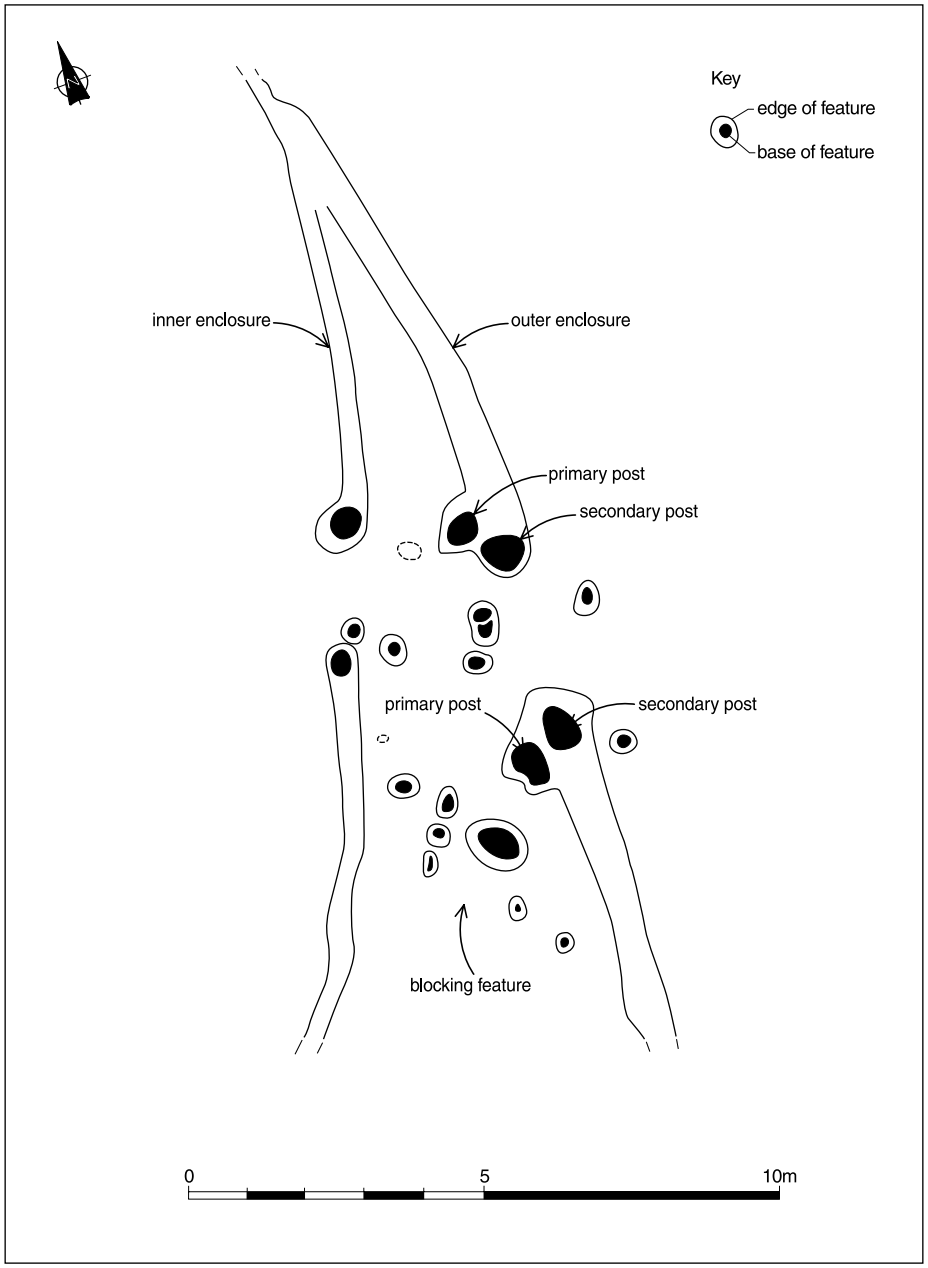
**Description** The enclosure visible on the aerial photographic coverage was fully exposed over the course of the two excavation seasons. The foundation for a palisade trench enclosed a sub-oval area measuring *c* 87m long (north/south) by up to 50m at its widest point (illus 3), with a total length in the order of *c* 260m. Where better preserved, generally to the south and east, this palisade trench was *c* 0.7–0.8m wide and 0.5–0.7m deep, whereas to the north it diminished in scale to less than 0.3m wide and deep. These varying dimensions probably reflect differential plough-truncation across the site as a whole rather than any differences in the scale of the features as originally constructed. Certain sections of the palisade trench were fully excavated, whereas others were only partly examined to reveal the stone packing. The packing was a continuous feature of the palisade trench, and in places individual post-sockets could be defined within it. Where fully excavated, the palisade trench possessed a roughly squared profile; and where determined, it appears that timber uprights had been set in the trench at 0.3–0.4m intervals. Apart from at the entrances, there was very little evidence for realignment or re-cutting of the palisade trench (although this does not rule out the replacement of posts or, at least, minimal adjustments to the pre-existing packing).

There were two entrances, and potentially the blocked remains of a third, all on the east side of the enclosure. The north-east entrance (illus 17; illus 18) was the most substantial and complex. On either side expanded palisade terminals defined a passage *c* 2m wide. Excavation demonstrated two structural phases to the substantial stone-packed terminal post-holes, with primary settings located just inside the boundary alignment and secondary sockets positioned along the palisade alignments.

These phased post-holes probably relate to two successive gateways. This entrance formed one component of a complex of features at this location, including the entrance to the inner enclosure (Section 7.1.3), and their interpretation as a group is returned to later (Section 7.1.4). The south-east entrance was also defined by a *c* 2m wide break in the palisade trench alignment (illus 19), with the likely presence of a gate defined by post-holes set in the palisade terminals. This entrance displayed no evidence of repair or rebuilding.

These two entrances lay just under 50m apart. The site records document the possible presence of a blocked middle entrance, based upon two pits or post-holes located *c* 2m apart exactly midway between the two confirmed entrances (indicated on illus 3). The southern feature abutted the palisade trench, but the stratigraphic relationship between the two could not be established. The presence of this third

*Illus 17 Looking east towards inner enclosure entrance in foreground and outer enclosure north-east entrance in background*




*Illus 18 Inner enclosure entrance and outer enclosure north-east entrance; plan*

entrance had been surmised by the excavators on the basis of abrupt changes in the width of the palisade trench (where a narrow section of trench was present between two wider sections), combined with variations in the character of the stone-packing. However, it is evident from the records that the excavators experienced considerable difficulty in providing any secure stratigraphic evidence to confirm the conjectured initial entrance here, such as by determining whether different sections of palisade were built by different teams to different specifications, or whether stretches were superimposed and cut each other. The possible existence of the middle entrance was at first proposed (Pollock & Triscott 1980), but was subsequently dismissed by the excavators (hence its absence from the site plan published in Triscott 1982). Despite this, there are good *a priori* reasons (discussed further in Section 7.2.1) for believing that an entrance may once have been present at this location, and the former existence of such a feature is here considered possible but unproven.

Finds recovered from the outer enclosure palisade trench included: coarse pottery, mainly from around the north-east and putative middle entrances (Cat nos 1, 12–26, 29; see illus 58 for Cat nos 1 and 18), and a range of animal bones. No coarse stone items were recovered, and the absence of items reused as packing in the palisade trench is worth noting, contrasting as it does with evidence from the roundhouses and inner enclosure boundary.

*Illus 19 Outer enclosure east side; with south-east entrance in foreground*

**Stratigraphic and spatial relationships** The palisade slot only intersected with a small number of features around its circuit. In the north-west it was truncated by two pit graves (Burials 1 and 14) and abutted by two more (Burials 7 and 13). To the west it was overlain by components of Houses 3 and 8. At the south-west corner its relationship with linear feature M69 had been obscured by the successive insertions of a dog burial (M43) and a modern field drain. These truncated both points of intersection between the palisade trench and M69, although the dog burial had clearly truncated the palisade trench. However, artefactual evidence from the linear feature (Section 7.8.1) suggests it too must have been cut through the palisade. The relationship between the inner and outer enclosure boundaries is considered separately in Section 7.1.4 and Section 7.2.2.

### *7.1.2 Possibly related external works (illus 3)*

Other linear features outside the outer enclosure appear to represent the foundations of fence lines that might have been associated with it, although neither stratigraphic nor dating evidence is available to confirm that hypothesis.

A *c* 14m length of a slight linear feature was located running *c* 3m outside and parallel to the southern boundary of the outer enclosure. Approximately midway along its length a *c* 2m long spur projected southwards. Approximately 14m further east, a *c* 3m length of a similar feature was present *c* 1.5m outside the outer enclosure boundary. These remains defy any convincing interpretation, although their alignments do suggest that they were in some way related to the outer enclosure, either as parts of a precursor boundary or as components of related external works – the former interpretation was proposed in the interim account (Triscott 1982, 119). There is no reason to believe that they represent the denuded remains of the formerly continuous outer element of a double palisade structure.

At the very northern end of the site a linear feature, *c* 0.3m wide and on a north-west/south-east alignment, projected into the trench for *c* 6 m, terminating *c* 10m from the outer enclosure. It had a silty fill and nowhere survived greater than 0.1m deep. A post-hole or pit close to its terminal may have been a related feature. The interpretation of this partially exposed feature is a matter of conjecture, although it might be related to a paddock or field associated with the outer enclosure.

*Illus 20 Inner enclosure; sample section of palisade trench*

### *7.1.3 Inner enclosure (illus 3; illus 20)*

Topsoil removal revealed the presence of a sub-rounded enclosure occupying the north-east interior of the outer enclosure. This inner enclosure measured *c* 32m north-west/south-east by *c* 30 m. To the north-east the boundary of the inner enclosure was congruent with that of the outer enclosure for a length of *c* 12m (illus 3). Elsewhere, the smaller enclosure was bounded by a foundation trench which was generally less well-preserved than that defining the larger enclosure. To the south and west the trench was *c* 0.2m wide by up to 0.25m deep, whereas to the north its discontinuous remains were very shallow or had been entirely truncated by ploughing. It contained noticeably less evidence of stone-packing than the palisade trench of the outer enclosure, suggesting a construction technique different to that implied by the surviving foundation of the larger enclosure. What stone-packing was present did not appear to remain *in situ* and post-sockets could not be readily established. Otherwise the fill was mostly featureless, containing few stones and pebbles (illus 20). There was no evidence to suggest repair or re-cutting of this foundation trench.

The inner enclosure had a single entrance *c* 1.7m wide on its east side, flanked on either side by a post-hole set within the palisade trench terminals (illus 17; illus 18). It lay *c* 2m inside the north-east entrance of the outer enclosure, and was offset slightly to the north of it.

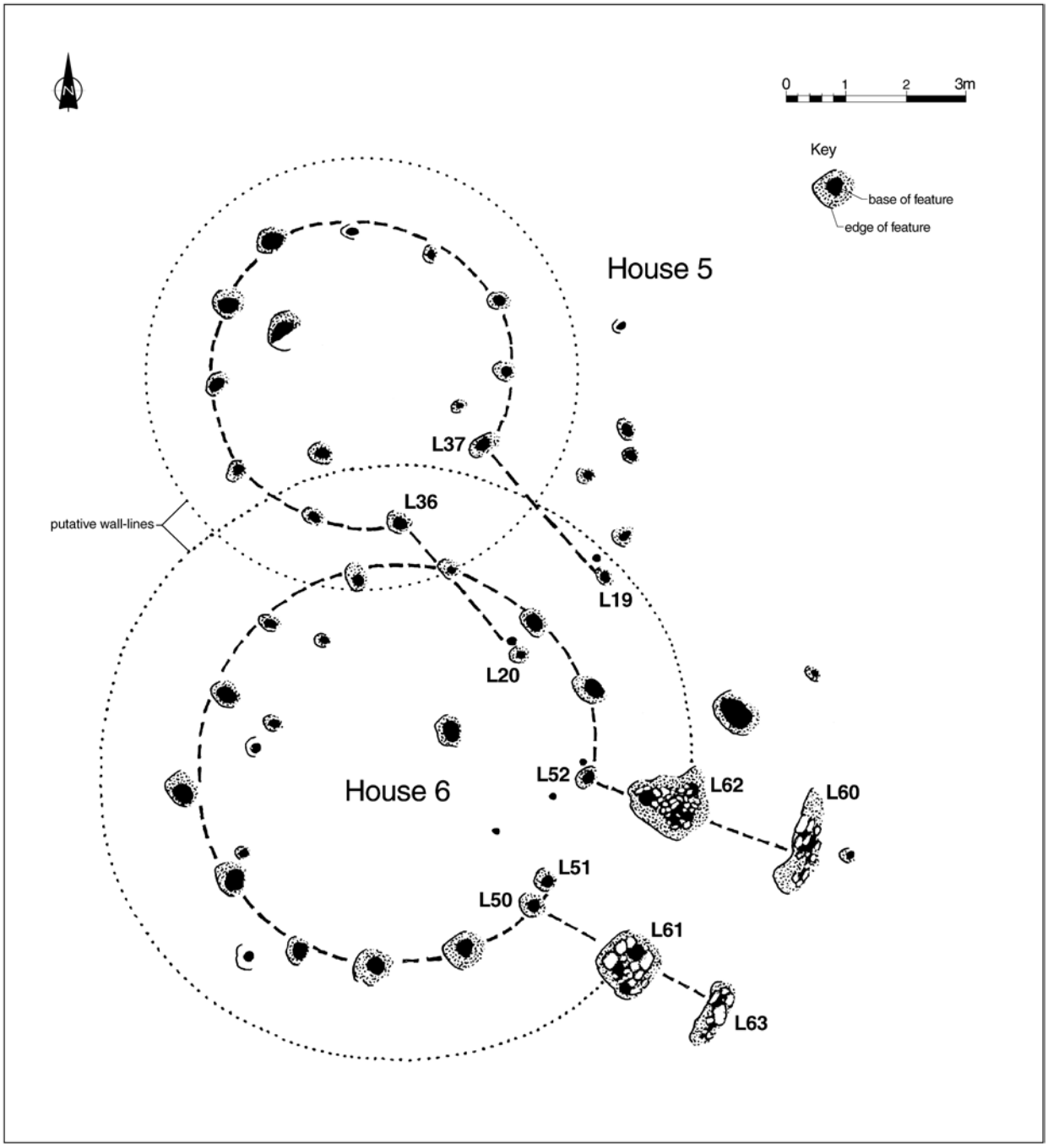
Fragments of cattle and sheep tooth fragments were recovered from the fill of the inner enclosure palisade trench, as well as a stone with a ground depression (Cat no 46), and two plain body sherds of pottery (Cat nos 27–28).

### *7.1.4 Relationship between the two enclosing works*

The chronological relationship between the two enclosures could not be resolved through establishing stratigraphic relationships at their points of intersection. The northern intersection point did not survive as the inner enclosure had been completely plough-truncated at this point, whereas the excavation at the eastern intersection revealed no meaningful information.

Despite this lack of evidence for sequence, it is apparent from plan evidence that the use of the two enclosures overlapped and at some stage both were standing. The coincidence of the two enclosure alignments strongly suggests this, but more conclusive information comes from the adjacent entrances (illus 17; illus 18). Here, the offset entrances created an entrance passage running obliquely to the alignments of the enclosure boundaries. A cluster of post-holes and pits was present along this passage area, from one of which a sherd of coarse later prehistoric pottery was recovered (Cat no 30). Some of these features may define the foundations of a passage or even gate structure passing between the two enclosure works, whereas others lay within the centre of the passage and may contrastingly be the foundations of blocking features. To the south of the entrance passage, and between the enclosing works, a linear group of pits can be interpreted as the foundations of a feature blocking access from the entrance passage to the main body of the outer enclosure (or vice versa). The very fact that this latter group of features runs between the two enclosures lines would appear to presuppose that they co-existed.

The chronological relationship between the two enclosures is discussed further in Section 7.2.2, as




*Illus 21 Plan of Houses 5 and 6*

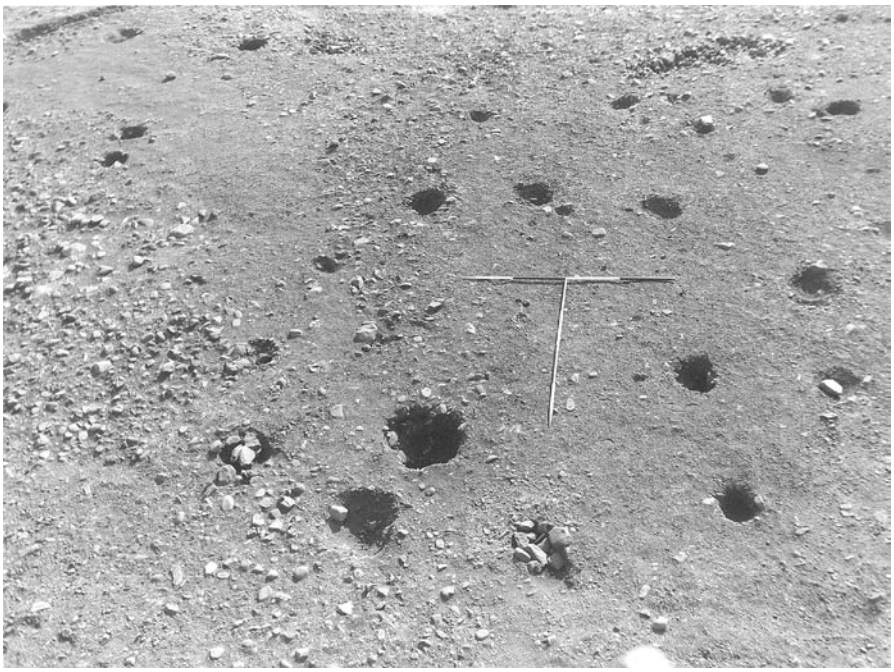
the relative alignments of the entrances to House 1 and the enclosures provide important circumstantial evidence in that regard.

## 7.2 Post-ring buildings

### *7.2.1 Houses 5 and 6 (illus 21; illus 22; illus 23)*

**Description** Two adjacent post-ring structures were present towards the centre of the outer enclosure. They are considered together as their juxtaposition requires explanation in terms of their structural, functional and chronological relationships, in as much as this is possible given the heavily denuded character of the surviving remains.

House 5 comprised a ring of 11 post-settings, spaced at 0.8- to 1.2-m intervals, and defining an internal space with a diameter of *c* 5.2m (illus 22). The post-pits varied in diameter between 0.2m and 0.6m and in depth between 0.05m and 0.3m (but mostly 0.1–0.15m). Some post-pits contained stone packing, in some cases largely intact and in others disturbed. While this evidence might indicate that the pits held posts of variable size, it is more likely that the observed pattern reflects



*Illus 22 House 5 photograph from the west*

primarily differential preservation. Three pits were identified towards the periphery of the floor space within the post-ring.

The entrance to House 5 is most probably defined by a *c* 1.6m wide gap between posts L36 and L37 on the SSE side of the building. The site records contain a suggestion that posts L19 and L20 may define the outer end of an entrance passage *c* 3m long. If accepted, this feature would have important implications for assessing the relationships between Houses 5 and 6 (see further below).

House 6 was slightly larger, comprising a ring of 13 posts, also spaced at 0.8–1.2m intervals, which defined an internal space of 6.8m diameter (illus 23). The character and dimensions of the post-pits were comparable to those of House 5. The floor space within the post-ring contained a few pits, which formed no discernible pattern and contained no indication as to their function.

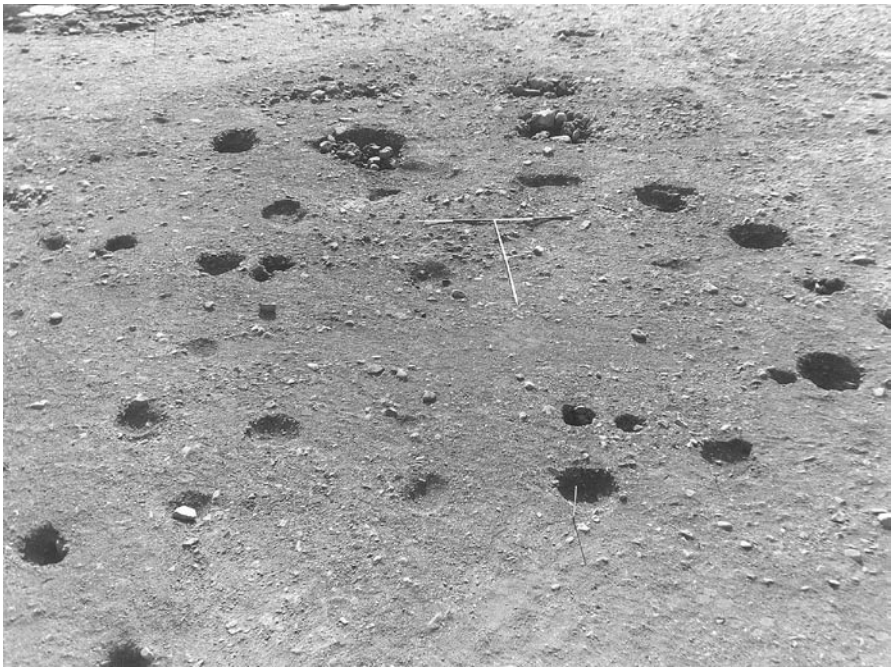
The entrance to this roundhouse was to the south-east. It was defined within the post-ring by a *c* 2m gap between posts L50 and L52. A post-setting present within the entrance area (L51) may have been a door-post foundation. These features formed the inner end of an elaborate entrance structure projecting south-east of the building, formed by two opposing pairs of complex post-pits. The inner pair (L61, L62) were each sub-rectangular pits over 1m across, containing three stone-packed post-settings. The posts appeared to have been substantial, for example the northernmost upright in L61 measured 0.4m by 0.3m in cross-section and survived to a depth of 0.4m (considerably deeper than were all the components of the post-ring). The outer pair (L60, L63) were more linear in form, the northern *c* 2m long and 0.6m wide, each containing a stone-packed post-setting.

No artefacts or ecofacts were recovered from either building, and no material suitable for radiocarbon dating was identified. Neither house contained any evidence of replacement or refurbishment.

**Reconstruction** While Houses 5 and 6 do not have any stratigraphic links with any other element of the site, their inter-relationship is of considerable importance. Given their broadly similar size and structural form (apart from at their entrances), and their juxtaposition, it is worth considering whether the two post-rings could represent elements of a single roofed figure-of-eight building. Buildings of this basic form are rare but not unknown within the later prehistoric settlement record in northern Britain, an example including the stone-walled structure at Ceann nan Clachan (Armit & Braby 2002). Conjoined but independently entered 'tangential' hut circles have also been recorded in upland Perthshire (Harris 1984).

The surviving evidence from Houses 5 and 6, however, argues strongly against such a reconstruction. Firstly, the lack of alignment between the post-rings where they are almost tangential demonstrates effectively that there was no connecting passage between the two floor spaces. Secondly, both structures were provided with independent entrances on differing alignments.

If it is accepted that House 5 possessed a projecting entrance structure defined by posts L19 and L20, then this feature would have projected through the post-ring alignment of House 6, effectively demonstrating the non-contemporaneity of



*Illus 23 House 6 photograph from the north-west looking along the entrance passage in the background*

the two structures. However, the evidence for this proposed entrance passage is less than conclusive. When compared to other post-ring roundhouses at Dryburn Bridge with more convincing evidence for entrance structures, the absence of intermediate foundation features between the four corner posts is noticeable. In addition, the slightness of the proposed foundations contrasts sharply with the scale of those surviving at House 6.

With the acceptance that Houses 5 and 6 form separate buildings, their reconstructed forms can be considered. The post-rings presumably formed roof support frameworks within the floor space of the building. The positions of the walls do not survive, and these may have been of turf or stone, all traces of which have been removed by ploughing. Using Hill's proposed ratio of 1:0.707 to determine the relative radii of post-rings and former walls within timber roundhouses (Hill 1984), diameters of *c* 7.4m and 9.6m can be estimated for Houses 5 and 6, respectively (the presumed wall lines based on this ratio are depicted on illus 21). The near-absence of other archaeological features within the zones between post-rings and presumed wall-lines of the buildings is noteworthy and may reflect variations in the spatial patterning of activities that took place within the buildings.

For House 6, the presumed wall alignment based on Hill's ratio coincides with the post-pits L61 and L62, suggesting that this building was provided with a projecting entrance structure *c* 1.5m long, its outer end defined by post-pits L60 and L63. The posts forming this structure were large in size, which tends to suggest that they were intended to bear the weight of a special feature, such as a porch. The three post-settings within each post-pit at the inner end of the porch could relate variously to the wall-ends, porch framework and a separate door-frame (cf Guilbert 1976, 308). As is routinely applied as a *caveat* to the interpretation of function of timber roundhouses, there is nothing in the excavated evidence of these structures to suggest directly whether they were used as domestic residences or otherwise (cf Dunwell 1999, 348–50) and the former interpretation is often accepted *faute de mieux*.

By contrast, there are no surviving archaeological remains to suggest that the predicted wall line of House 5, applying Hill's ratio, is accurate. Barclay has discussed how not all excavated building dimensions, where both post-ring and wall alignments are known, conform to this ratio (Barclay 1993, 265–6), and indeed some vary considerably from it – for example, House 1 at Dryburn Bridge (Section 7.2.2) has a ratio of 0.652. The possibility that posts L19 and L20 define the wall alignment is worth considering. This would indicate a ratio of 1:0.47 and an overall building diameter of *c* 11.4m. While structures displaying this sort of ratio are not unknown (Barclay 1993), they are uncommon, and to propose it for House 5 would be to stretch the evidence considerably. L19 and L20 may in fact not be part of an entrance structure at all; they could alternatively form part of a curving line of pits running to the east of House 5 (illus 3).

**Stratigraphic and spatial relationships** Given that the two buildings occupied the same space and thus could not have been contemporary, in which order were they constructed? There are no physical stratigraphic relationships to rely on, and thus the evidence is circumstantial and relates to

the significant spatial relationships of House 6. If the *c* 2m wide axis of the entrance to House 6 is projected south-east (illus 3), it is striking that the approach is lined on its south side by rectangular structures A–C and Burial 12 (Section 7.5; Section 7.6). Occasional pits are also present that might define the north side of this passage, although these lie within the outer wall-line of Structure 2 and could also relate to that building. The projected approach alignment intersects the outer enclosure at precisely that point on its east side where the excavators suspected, but could not conclusively demonstrate, the presence of a central entrance. Thus it is possible to envisage that the entrance to House 6 would have been visible directly ahead, to those entering the palisaded enclosure through any former (but unproven) entrance at that location. This arrangement is paralleled in the relationship between House 1 and the north-east entrance to the outer enclosure (Section 7.2.2). It is thus possible to extrapolate, on the basis of the weight of this circumstantial evidence, that House 6 was integral to the original design of the outer enclosure, as was House 1.

This observation says nothing directly about the chronological relationship between Houses 5 and 6. Whether one structure was a direct replacement of the other, as opposed to a significantly later construction, is not demonstrable. However, the lack of alignment between the entrances of Houses 5 and 6 is surely significant, reflecting different design considerations or changed site organization. These issues, which relate to overall site development, are further addressed in Section 11, as are the implications of the observation that the proposed approach to House 6 is cut by House 2. As there is no stratigraphic evidence for any other settlement features pre-dating the outer enclosure, it is the author's opinion that House 6 preceded House 5, although ultimately this conclusion is assertion rather than based upon empirical evidence.

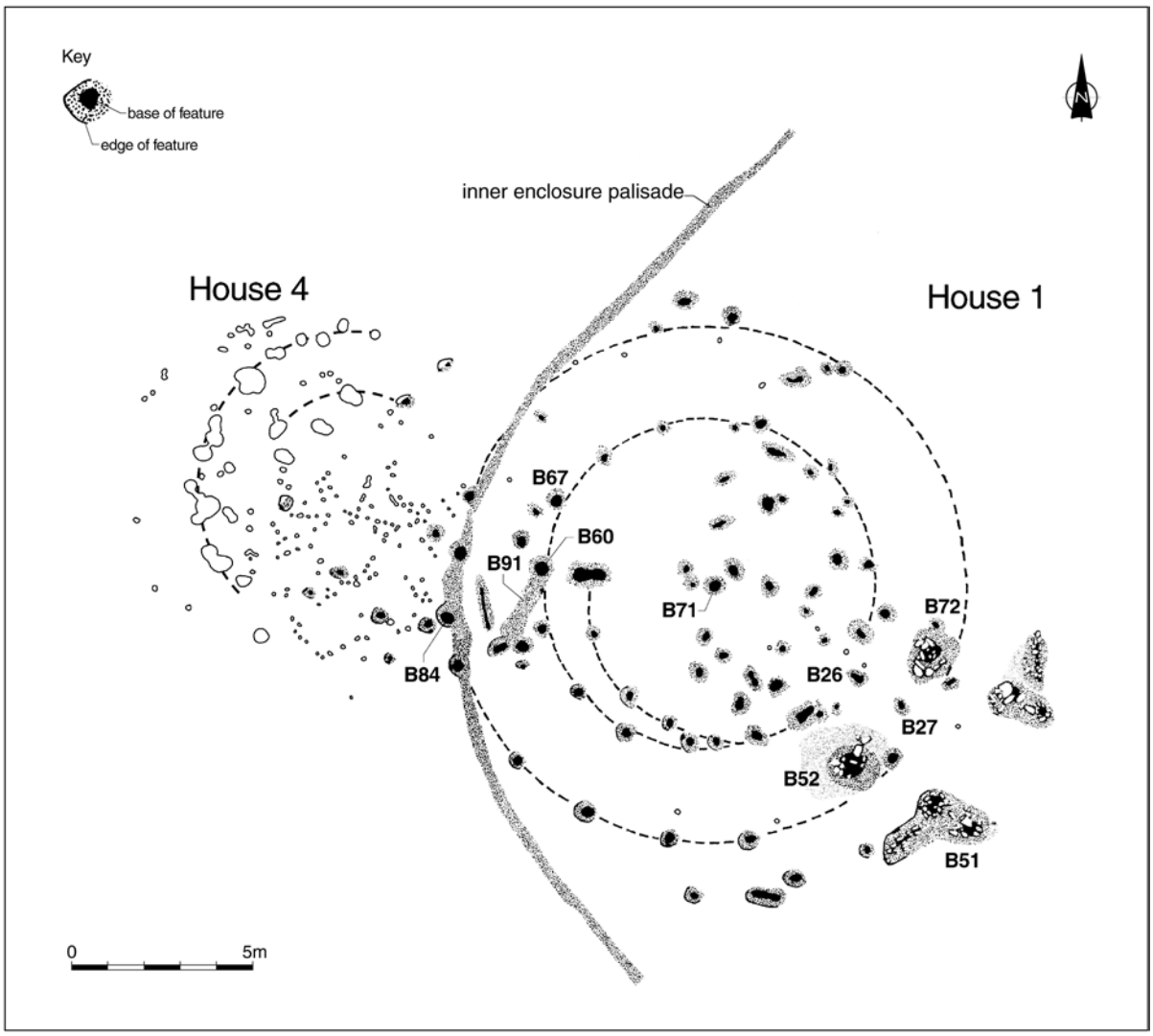
### *7.2.2 House 1 (illus 24; illus 25; illus 26)*

**Description** The surviving remains of House 1 can be grouped into four elements: an inner post-ring, which may demonstrate rebuilding; an outer post-ring; an elaborate entrance structure; and a scattering of internal features. Some of the features on the west side of the building may be components of House 4 (Section 7.2.3), although it is difficult to determine which ones. The northern side of the building survived less well than the southern, and appears to have been subject to greater plough-truncation. The western interior was largely devoid of archaeological features, in contrast to the dense scatter to the east. It is apparent that the area with few features corresponds to a band of fine gravel and sand subsoil, whereas the denser spread of features were cut into a coarser cobble and pebble subsoil (illus 25). While it is possible that the observed distribution of features represents real patterning of activity within House 1, it more likely reflects variable preservation of the remains, with the softer, sandy subsoil areas more susceptible to biting and disturbance from the plough.

The inner post-ring was defined by at least 15 post-settings, generally spaced around 1.2m apart, but with intervals decreasing to 0.8m and increasing to 1.6m. These generally survived in the order of 0.5m wide and 0.2m deep. The posts define a space 9.4m in diameter. A 2m wide gap on the south-east side of the post-ring defines the alignment of the entrance passage. There are reasonable grounds for proposing that at some stage during the life of the building the inner post-ring was replaced by a secondary, more ovate, post-ring bounding a smaller space. An arc of five post-holes set at 1–1.4m intervals was traced diverging from the southern side of the inner post-ring, suggesting that the original two post positions on the south-east side of the entrance passage may have been reused. To the north-east, at least three of the pits of the inner post-ring are accompanied on their south-west side by neighbouring post-settings that could also relate to the proposed replacement ring. This north-east arc may also have branched from the alignment of the original inner post-ring, reusing the two post positions on the north-east side of the entrance passage. The absence of connecting features between these two arcs is probably a facet of archaeological survival, as the intervening space is occupied by the softer subsoil. It is estimated that the refurbished inner post-ring defined an area of *c* 8.7m north-east/south-west by 7.3m north-west/south-east.

The outer post-ring was only apparent in a coherent manner on its southern side, although the much truncated remains of at least two post-holes are preserved to the north. Those that do survive are spaced at *c* 1.6–2.4m intervals, defining an internal space with a diameter of *c* 14.4m. They appear to have been paired approximately with settings of the inner post-ring, such that the post pairs for the most part lie approximately along alignments radiating from the centre of the building (defined on illus 25 by feature B71). Thus, for geometric reasons alone, it is reasonable to conclude that the inner and outer post-rings form part of a single design. It is perhaps significant that the posts of the outer ring and the replacement inner ring do not consistently form the same radial alignments. A 2m wide entrance passage was present to the south-east, in alignment with the gap in the inner post-ring.

The entrance passage to House 1 was of complex form, being *c* 5m long and 2m wide. Its inner end was defined by the inner post-ring, the terminal posts of which were no larger than other settings of that post-ring. The same is the case for the outer post-ring. However, between the two rings much more substantial post-pits were present, containing large stone-packed post-sockets preserved to 0.5m deep (over twice as deep as the surviving foundations of the post-rings). These substantial posts were

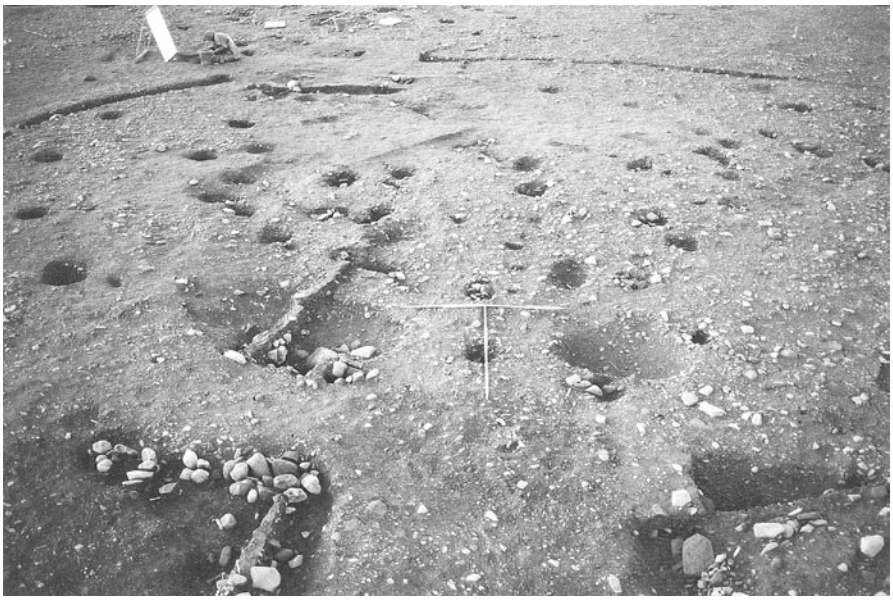



*Illus 24 Plan of Houses 1 and 4*

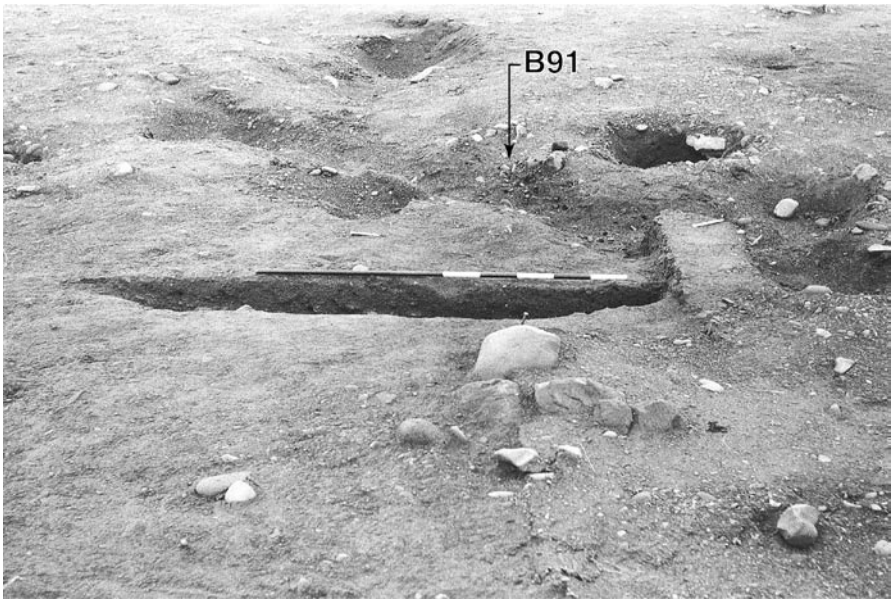
intended to bear a heavy load. Outside the outer post-ring were complex L-shaped post-pits to either side of the entrance passage, each containing two substantial stone-packed posts lining the entrance passage and stone-packed foundations slots running away perpendicularly from the entrance passage for *c* 1.5m. Posts B26 and B27 (illus 24; illus 25) are of particular interest in that they lay centrally within the entrance passage. They may have formed the foundations for a screen dividing the passage longitudinally into two separate corridors running between the two post-rings. They could have defined the positions of double doors running across the passage, although this explanation is not preferred as it seems more likely that any doors would have been hung off the terminals of the post-rings. The overall morphology of the entrance structure in ground plan is strikingly similar to that of House 6.

The majority of internal features clustered in the eastern half of the building, within the inner post-ring although, as noted above, this may be a survival bias. A number of these features were post-holes of character and dimensions comparable to those in the post-rings. A stone-packed post-pit (B71) was present at the very centre of House 1. While this feature could be interpreted as the foundation for a central roof support, the strength of the surrounding earthfast timber framework would certainly not have required an additional prop at this point. This central feature could alternatively be conceived as part of a support framework for an upper floor within House 1, along with other internal post-holes. It is perhaps significant that the foundations of the proposed dividing screen within the entrance passage align with the central post-pit.

The floor space between the two post-rings was largely devoid of archaeological features, apart from to the west where two shallow linear hollows and adjacent post-pits were clustered (illus 26). One of these linear hollows appeared to incorporate one of the inner post-ring settings (B60). The functions of these features are not known.



*Illus 25 House 1; from south-east looking along its entrance passage with the inner enclosure boundary in the background*




*Illus 26 Linear features on the west side of House 1; and post B84. Feature B91 is visible fully excavated behind the scale bar*

Finds recovered from House 1 were limited to an iron ring (Cat no 160, illus 61) and bone fragments found in dark loam above the packing of central post B71; pottery from one of the post-pits of the outer post-ring (B67, Cat no 41); and chipped stone and bone fragments from certain entrance post-pits (B51, B52). Nothing suitable for radiocarbon dating was recovered.

**Reconstruction** The interim report (Triscott 1982, 119–20) proposed a reconstruction of House 1 as a massive building 18m in overall diameter, with two internal roof support post-rings and an outer wall, which did not survive, running concentrically outside them, its alignment indicated by the posts and slots defining the outer end of the entrance passage. Under this reconstruction the building possessed an internal lobby or corridor rather than an external porch (for a similar interpretation see Avery & Close-Brooks 1969, on the Shearplace Hill roundhouse). Triscott drew parallels between House 1 and those at West Brandon (Jobey 1962), West Plean (Steer 1956) and Braidwood (Piggott 1958).

While such a reconstruction cannot be ruled out, not least because timber-framed roundhouses approaching 20m in diameter are not unknown

in south and east Scotland (reviewed by Hingley 1992, 27–9), there are good grounds for interpreting House 1 as a somewhat more modest, although still imposing, building. Comparison between House 1 and House 6 is instructive in this regard, as the two roundhouses have closely comparable entrance structure ground plans. Because House 6 has only a single post-ring, the outer two pairs of entrance foundations cannot both relate to wall-lines, and hence it has been posited that this building was provided with an elaborate projecting porch. The same logic can be applied to House 1, in which the outer post-ring represents the wall-line and the outermost entrance features are part of a similarly elaborate and substantial projecting porch. The linear slots present at the outer end of the entrance passage could have been the foundation for some form of elaborate façade visible to those approaching the building. In both cases, of course, depending upon the height of the wall and the pitch of the roof, the overall diameters of the buildings could have been more imposing.

Control of access arrangements appears to have formed an important consideration in the design of House 1. Once through the external porch, it appears that the passage between the two post-rings was divided into two. One can speculate almost endlessly as to potential explanations for this feature, ranging from functional explanations concerned with the control of circulating draughts; through structuralist-based social explanations such as the provision of a male and a female entrance; to cosmological explanations such as the provision of an entrance passage along the south passage, allowing for sunwise circulation around the building leading to an exit along the north passage (cf Fitzpatrick 1997; Parker Pearson 1999a). No additional evidence could be adduced in support of any of these propositions. It is hoped that the evidence from House 1 will contribute to wider studies of the organization of space and activities within later prehistoric roundhouses.

Within the building it is possible that the central area, within the inner post-ring, was used differently from the peripheral area between the inner post-ring and wall-line. The two could have been separated by screening or walling hung off the frame of the inner post-ring. There is good evidence for believing that the building was provided with an upper storey (as reconstructed by eg Reynolds 1982, 51–3; and see Armit 1997, 33 for a ring-ditch house).

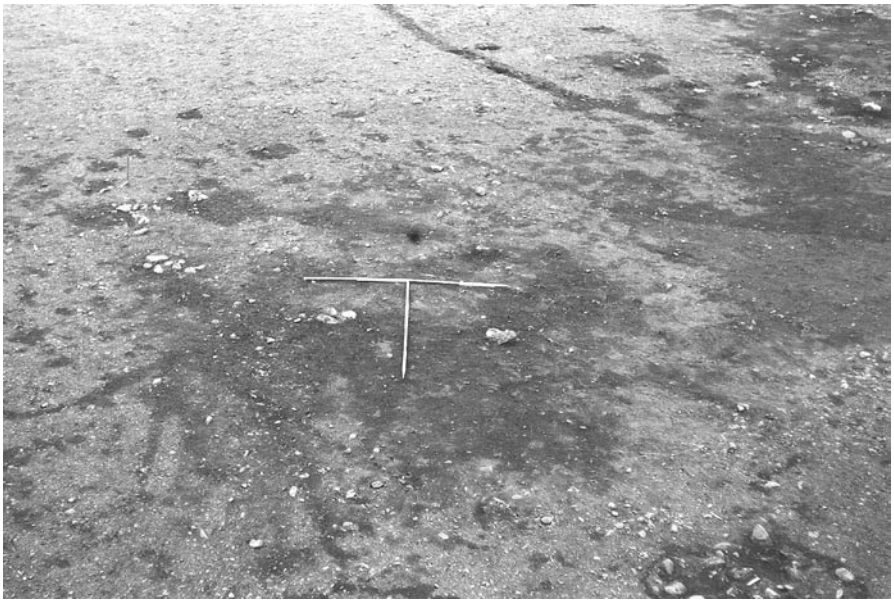
**Stratigraphic and spatial relationships** The reconstructed form of House 1 overlaps with the alignment of the inner enclosure boundary, and it is apparent (illus 24) that the two could not have formed contemporary elements of the settlement layout. The stratigraphic evidence is typically ambiguous in this regard, relying upon the relationship between three post-holes strung along the enclosure boundary line. Of these, B84 was inserted through the palisade, and therefore was secondary to it (it is shown prior to excavation in the foreground on illus 26). However, this feature does not appear to have formed part of the wall-line of House 1, as its position on the circuit of the outer post-ring was not matched by a corresponding post on the inner post-ring, and did not necessarily relate to that building at all. The excavated evidence from the other two post-holes, which probably did form components of the House 1 wall-line as they were in positions matched by post-settings on the inner post-ring, was not instructive as to sequence. This is inconvenient as it does not allow any conclusions to be based on stratigraphic evidence.

However, a good case can be made for the primacy of House 1, based upon evidence of spacing. The entrance to House 1 aligns with the north-east entrance of the outer enclosure, and it seems highly probable that the two were linked as part of a single deliberate scheme, forming part of the original design of the outer enclosure. A similar relationship has been posited above between House 6 and the suspected blocked middle entrance to the outer enclosure.

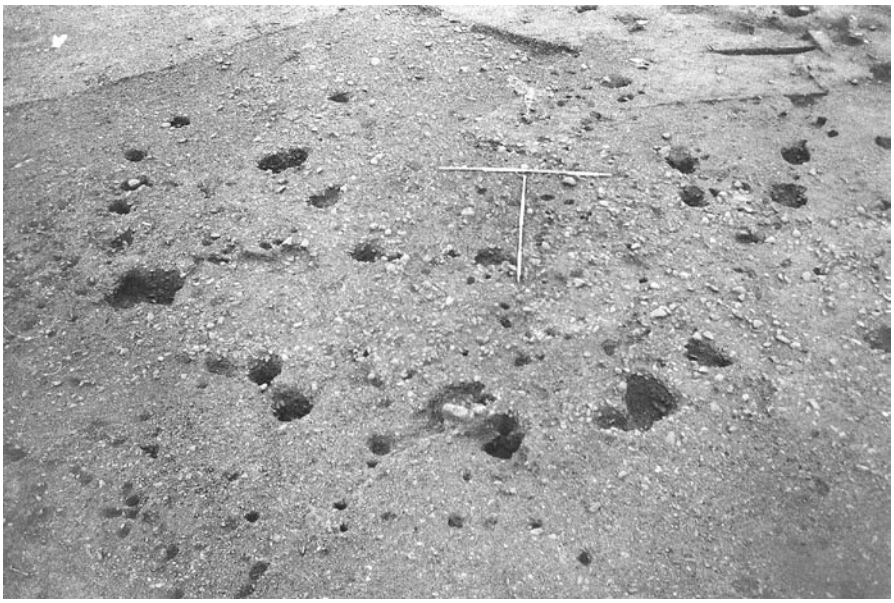
As discussed in Section 7.1.4, it is apparent from the excavated evidence of their adjacent entrances that the outer and inner enclosures must have co-existed. Because the inner enclosure boundary cut across the direct alignment between the outer enclosure entrance and the entrance to House 1 (illus 3), it is reasonable to propose that the inner enclosure was a secondary construction inserted into the outer enclosure following the demolition of House 1. It is not possible to construct a sustainable sequence in which the inner enclosure was primary and the clearly linked construction of House 1 and the outer enclosure were secondary, as the outer enclosure would require the continued presence of the inner enclosure (based upon the entrance morphology detailed in Section 7.1.4) and House 1 would require the inner enclosure to have been demolished (based upon the linked entrance alignments of House 1 and the outer enclosure)! This reconstructed sequence has important implications for understanding the phasing of the site as a whole. The proposal of a secondary origin for the inner enclosure revises the interpretation of this feature as a pre-settlement element proposed in the interim report (Triscott 1982, 119).

### *7.2.3 House 4 (illus 24; illus 27; illus 28)*

**Description** A cluster of post-holes to the west of House 1 appears to represent the remains of another building. The most coherent structural evidence is provided by an arc of at least 12 post-holes, for the most part spaced less than 0.6m apart and surviving to less than 0.2m deep (illus 24; illus 28). Extrapolation of this arc to form a circle would indicate a ring with a diameter of *c* 9m, overlapping with House 1 and the inner enclosure boundary to the east. Within the area defined by this arc are several other post-settings and pits, of which three can be linked



*Illus 27 House 4 as first revealed; from the south-west*



*Illus 28 House 4 as excavated; from the south-west*

to form an arc running parallel with the outer arc. A dense cluster of stake-holes was present in the same area, but these also extend west of the post-hole arc (in the foreground on illus 27 and illus 28). The only artefacts recovered were flint chips from the basal topsoil overlying the remains (shown on illus 27). Nothing suitable for radiocarbon dating was recovered.

**Reconstruction** While it is theoretically possible to extrapolate the identified post-hole arcs to propose a double-ring roundhouse with a diameter of 9m, such a reconstruction does not bear close scrutiny. The principal objection lies in the lack of surviving evidence for the eastern side of such a building, for which no particular taphonomic considerations can be brought to bear. Post-settings were recorded in that area, which did not relate to House 1, and which thus may have belonged to House 4, but these still do not allow a coherent structural plan to be reconstructed.

Moreover, the post-settings are much more closely spaced than those forming the post-rings of other roundhouses excavated at this site. This probably indicates that House 4 was a type of construction different from the timber-built roundhouses elsewhere on the site, and could have been of less substantial build. With this in mind, there is no

reason to believe that the construction represented by these remains was circular, or even of comparable date to the other structures. Perhaps the building was no more than a windbreak or temporary shelter. As noted previously, given the proximity of the Late Neolithic/Early Bronze Age burial cists, as well as a cluster of pits containing Late Neolithic pottery, the remains described as House 4 may have been of similar date.

The alignments of stake-holes surviving in sand in this area need not belong to the postulated structure. Stake-holes were not recorded in such densities anywhere else across the excavated area. Their relative isolation in the same part of the site as the Late Neolithic/Early Bronze Age burial cists may be significant, but any association is beyond proof.

**Stratigraphic and spatial relationships** Given the uncertainties regarding the reconstruction of this feature, it is not possible to make any meaningful statements in this regard. None of the components of the post-hole arcs have any stratigraphic relationships with any other surviving elements of the site. Given the significant differences in structural form there is no reason to regard Houses 1 and 4 as components of a single conjoined structure, and they may indeed have been very different in date.

### *7.2.4 House 10? (illus 3; illus 29)*

**Description** The excavators identified nine roundhouses during the excavations at Dryburn Bridge (Houses 1–9). However, examination of the site records by the author revealed what may be the remains of a tenth structure, a post-ring roundhouse, occupying the central southern interior of the outer enclosure (illus 3; illus 29). The presence of such a structure cannot be regarded as certain, because it was not recognized during the excavations and has been distinguished from the site records by a third party. However, what evidence has been garnered in support of the interpretation suggests to the author that a building is likely to have been present.

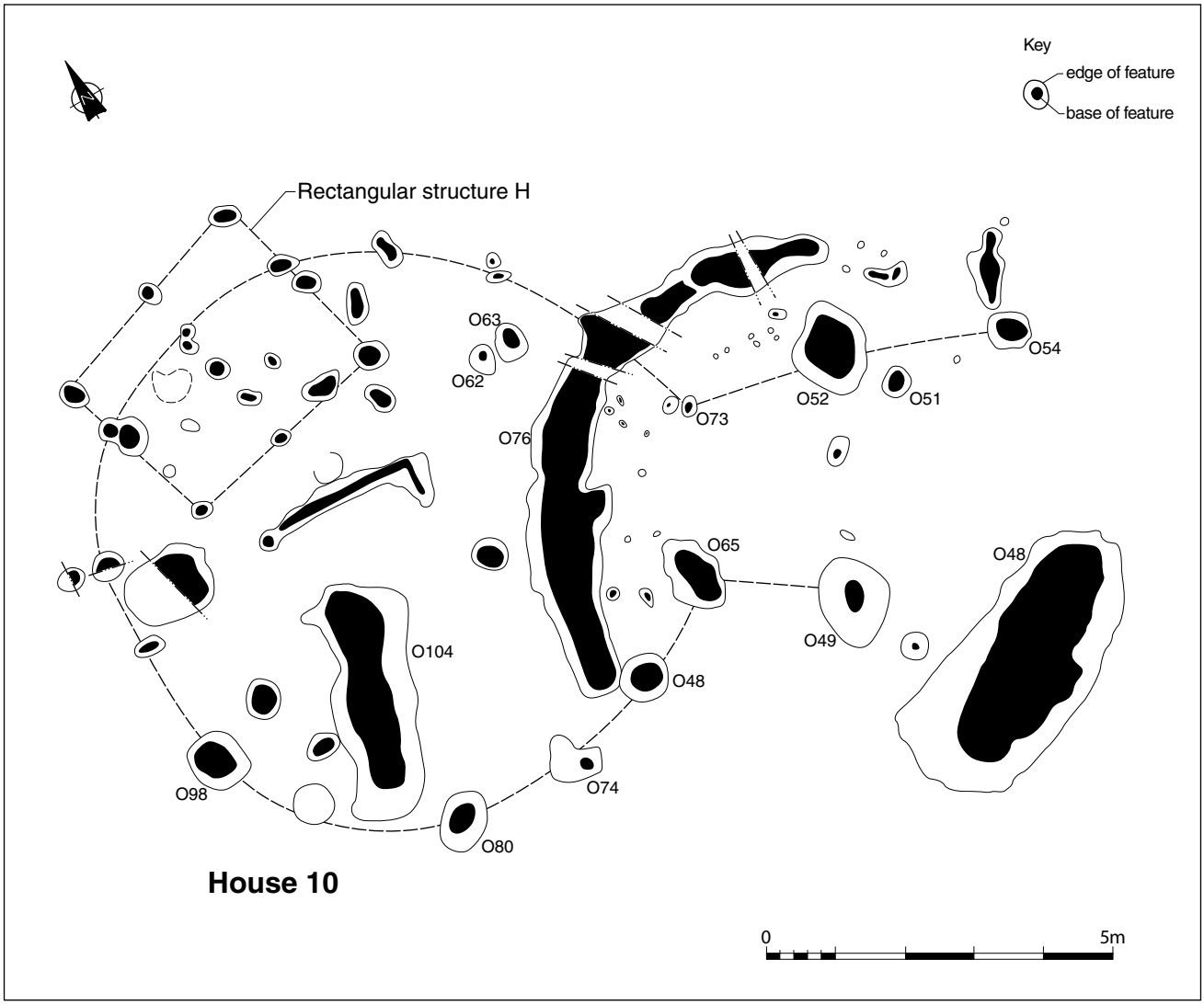
The putative structure is defined by a single post-ring of what appears to be at least 14 post-settings that define an area of *c* 8.2m in diameter. The southern side of the post-ring is more readily detectable, being defined by an arc of six large features (between O65 and O98), equally-spaced *c* 1.5m apart, most of which are described in the site records as packed post-holes 0.25–0.3m deep (the packing disturbed). The north side of the building may be defined by smaller post-settings, also spaced at *c* 1.5-m intervals, although with one exception (O73), which was 0.25m deep, it was not possible to establish the depths of these features from the site records. Based upon these intervals, a post position would have been expected in the area of the post-ring occupied by curvilinear ditch O76 (Section 7.8.4). Two of the northern posts lay adjacent to or abutted posts forming part of rectangular structure H (Section 7.5). At least two of the posts on the north side of the putative structure consisted of two adjacent post-holes, possibly suggesting at least localized refurbishment of the putative structure.

The entrance to the putative structure is defined by a *c* 2m wide gap on the south-east side of the building, between post-settings O73 and O65. Post-pit O52, which survived 0.6m deep, and post-hole 054 may define the northern side of a porch structure comparable to those identified for Houses 1 and 6. Certainly the plan view morphologies of the two pits are comparable respective features forming components of the entrances to those other structures, including what appears to have been a linear slot extending from the outermost post. Post-pit O49 may have formed part of the southern side of the entrance structure, although the outermost post-setting on that side is not evident, its likely position occupied by a large pit (O48).

**Reconstruction** Based upon what can be gleaned from the excavation records, it is possible to propose that the central southern interior was occupied by a post-ring roundhouse of similar character to Houses 1 and 6, although with a floor area intermediate in size between those others. The putative structure had a diameter within its single post-ring of *c* 8m. Application of Hill's ratio (Hill 1984) suggests that the wall-line, of which no archaeological trace can be distinguished, may have been on an alignment that defined an area *c* 11.3m in diameter. However, if the wall had aligned on the putative entrance post-pits (O49, O52), as was probably the case for House 6, then a larger diameter in the order of *c* 12.5m could be anticipated.

The putative structure had a south-east-facing entrance provided with an external porch comparable in terms of ground plan morphology to those that characterize Houses 1 and 6. The axis of the entrance is aligned closely on the south-east entrance to the outer enclosure (illus 3).

**Stratigraphic and spatial relationships** There are several archaeological features present within the floor area of putative House 10. Some of these could have been internal features of the building, although this is beyond proof, whereas others could not have co-existed with the putative roundhouse (illus 29). Feature O76 (Section 7.8.4) runs across the interior of the putative roundhouse, and if open during the lifetime of the roundhouse would have blocked direct access between its entrance and the rear of the building. It also runs across the north side of the post-ring alignment at the point where a post-hole could be expected to survive on grounds of spacing, but did not. It is suspected, therefore, that feature O76 was secondary to the putative House 10, and was excavated following the removal of the roundhouse. The floor areas of putative House 10 and rectangular structure H (Section 7.5) overlapped, although examination of the site records provided no




*Illus 29 Plan of putative House 10 and rectangular structure H*

confirmation of stratigraphic sequence at the point where posts belonging to both structures appeared to abut or intersect. Pit O104 appears too large and incongruous to have been an internal feature of the building, but it is admitted that this interpretation is an assertion without stratigraphic proof.

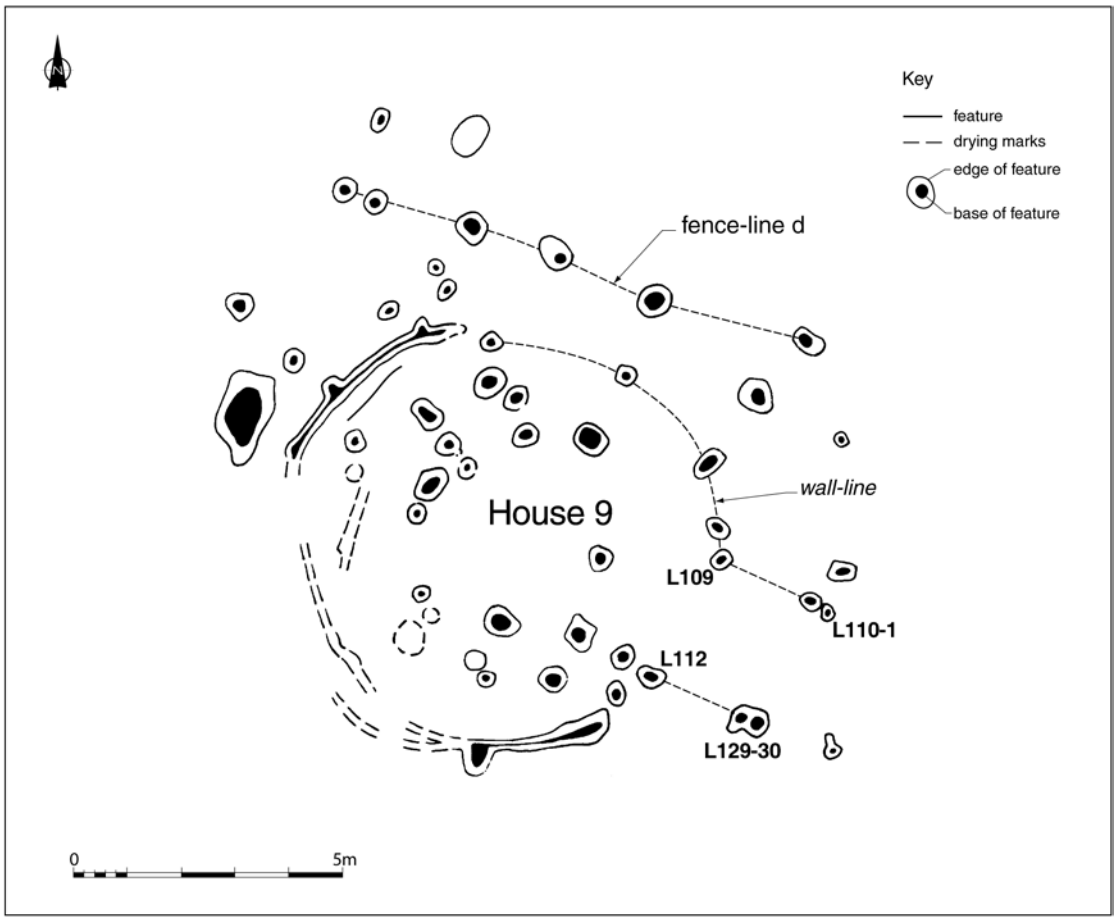
## 7.3 Ring-groove building

### *7.3.1 House 9 (illus 30; illus 31)*

**Description** The poorly preserved remains of what appear to be a ring-groove building were located in the south-east quadrant of the outer enclosure, *c* 10m south-west of House 2. House 9 measured *c* 8m in diameter, and most of its surviving structural and internal features were only 0.2–0.3m deep.

Its wall line was defined by the partial remains of a ring-groove and a curvilinear arrangement of post-holes, some of which were incorporated into the ring-groove. Two sections of ring-groove were preserved as definite archaeological features. Curving drying marks were visible during the excavation on the subsoil surface between these, and appeared also to define the wall alignment (shown on illus 30 but not visible on illus 31). Some drying marks indicated to the excavators the possibility of diverging wall-lines, with the implication of structural phasing, but the vestigial nature of this evidence urges caution in drawing any firm conclusions. The entrance to the building was on its south-east side, between posts L109 and L112. Two post-pits containing two separate sockets (L110–11; L129–30) may represent the foundations of the outer end of a projecting roofed porch or unroofed passage *c* 1.7m wide and long.

A scatter of pits, post-holes and scoops was present within the internal floor space. These formed no particular pattern, although the very centre of the floor space appears to have been clear of them. It was




*Illus 30 House 9 plan*

*Illus 31 House 9 during excavation; from south-west; the sections of ring-groove detected only as drying marks are not visible on this shot*

not possible to identify an inner post-ring, although given the small size of the building it is doubtful that such arrangements would have been necessary, practical or desirable. There was no evidence for a central roof support post-hole.

An oval boulder with a patch of polish on its surface

was recovered from internal pit L118 (coarse stone, Cat no 59).

**Reconstruction** House 9 was relatively small by comparison to the other buildings identified at Dryburn Bridge. Its wall appears to have been timber-framed but, given the lack of evidence for any internal or external post-rings, this must have been strong enough to have been the primary support for the roof of the building (presuming that it had a roof). Possible evidence for structural phasing has been mentioned above, but cannot be substantiated given the inconsequential nature of the evidence encountered in excavation.

**Stratigraphic and spatial relationships** House 9 had no stratigraphic links with other elements of the site, although it is possible that a contemporary fence-line (illus 3, d; illus 30) was present on the north side of the building (see Section 7.7.4).

**Radiocarbon date** One of the inner entrance posts (L112) contained the burnt stump of an oak post. A sample was submitted to Glasgow University for radiocarbon dating *c* 1980. Re-dating was undertaken in 2003 owing to concerns over the precision of the original date (see Section 2.2.3). The results of the two dates are shown in Table 8, with calibrated ranges in both cases calculated using OxCal v 3.5 (Bronk Ramsay 2000).

The date returned falls within the well-known plateau in the calibration curve that spans the Early Iron Age and prevents close dating. Timber roundhouses with ring-groove foundations were built from the mid second millennium cal BC until the early first millennium cal AD, but concentrated in the first millennium cal BC (discussed in eg Cook 2000; Strachan & Dunwell 2003), and thus the radiocarbon date for House 9 at Dryburn Bridge is uncontroversial.

## 7.4 Ring-ditch buildings

### *7.4.1 House 3 (illus 32; illus 33; illus 34)*

**Description** The surviving remains of House 3 measured *c* 9.8m in external diameter. The preserved features of the building can be divided into four elements: the foundations of an internal post-ring; entrance foundations; the ring-ditch forming the peripheral internal floor space; pits within the central floor space. Ploughing appears to have removed any traces of deposits and features above the level of the subsoil surface, and archaeological survival was restricted to negative features.

The post-ring ran around the inner edge of the ring-ditch, with a diameter of 6.8m. It appears to have comprised 13 uprights set at *c* 1m intervals around its circumference. At some post positions, pairs of adjacent sockets were present, which may indicate the replacement of posts during the use-life of the building (for example E17/E18; E38/E39; E28/E49). However, at the majority of positions there was no evidence for post replacement. The post-pits generally survived to 0.2–0.3m deep, and frequently contained evidence of disturbed stone packing.

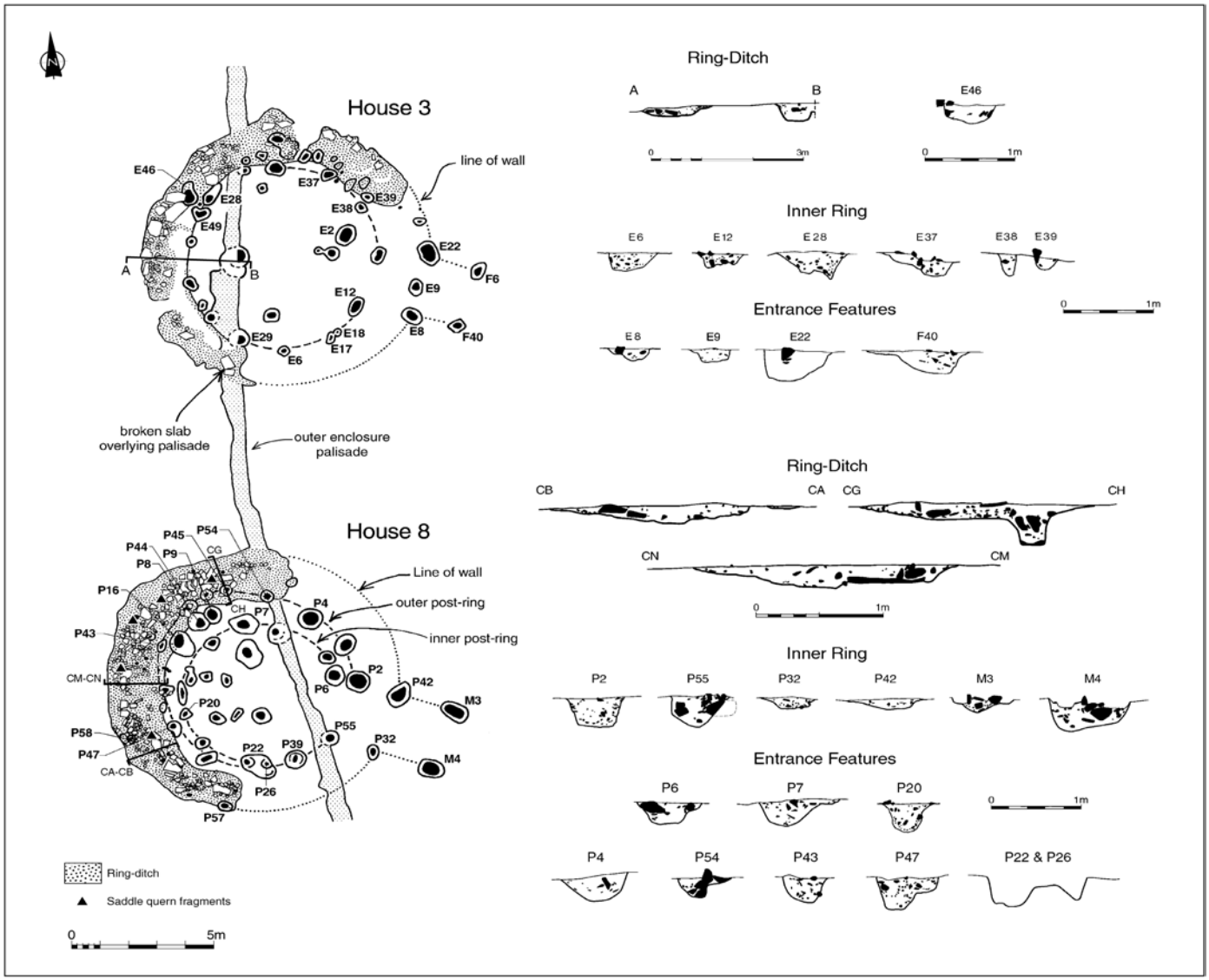
The entrance to House 3 was located on the south-east side of the building. Its position was defined on the interior by two large post-pits set *c* 2m apart (E22/E8), with a third located centrally between them (E9). Two further post-pits (F6, F40) appear on grounds of spacing to form the external face of the entrance structure, which was thus *c* 1.5m long and *c* 2m wide.

The ring-ditch defined the peripheral floor space of the building from its south to north-east sides, and approximately two-thirds of its circumference. This feature was *c* 1.5m wide, with a shallow and irregular profile up to 0.2m deep (illus 34). The ring-ditch was filled by stones, sand and gravel, and there was no evidence for accumulations of occupation debris either within or beneath the filling material. A small number of pits were identified within the ring-ditch, particularly to the north, most of which were visible within the exposed surface of the ring-ditch fill. Flat slabs lay on the surface of the fill at various locations, but particularly to the west, and appear to represent deliberately laid paving. To the west, paving slabs were demonstrated to overlie infilled pit E46. There is thus sufficient stratigraphic evidence to be confident that the remains associated with the ring-ditch comprise at least two phases of use. In its first phase the ditch was an open, sunken feature. Its second was defined by the filling in and partial paving over of the ring-ditch. Interpretation of the stratigraphic relationship between the ring-ditch fill and the pits within the ring-ditch is not straightforward (see the description of House 8 in Section 7.4.2 for an elaboration of this point).

Six pits were present within the central floor space of the building, and seem likely to relate to the occupation of House 3. None of these features revealed

**Table 8 Radiocarbon dates from House 9**

| Lab no | Sample context | Material | Lab age | Lab error ± 1 sigma | 2-sigma range using lab error (cal BC) | Adjusted error ± 1 sigma | 2-sigma range using adjusted error (cal BC) | $\delta^{13}C$ (‰) |
|---|---|---|---|---|---|---|---|---|
| GU-1286 | House 9, post L112 | Quercus | 2400 | 55 | 770–380 | 110 | 800–200 | –25.0 |
| AA-53704 (GU-10812) | House 9, post L112 | Quercus | 2475 | 40 | 770–410 | | | –24.2 |

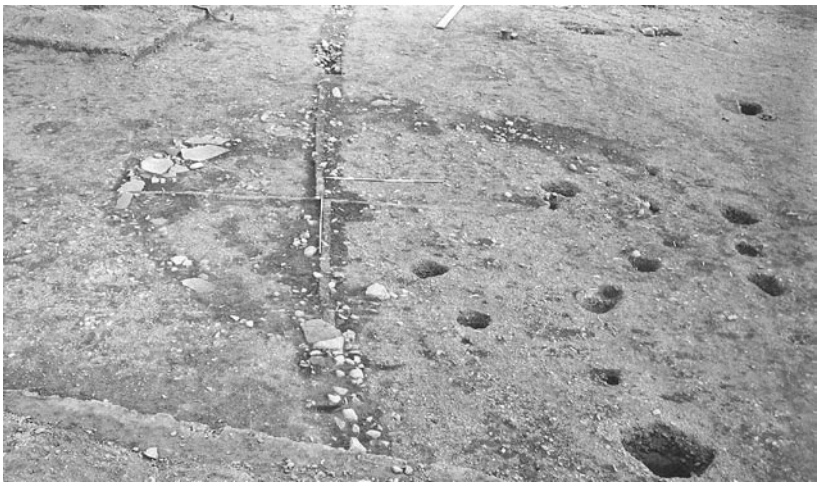



*Illus 32 Houses 3 and 8; plans and selected sections*

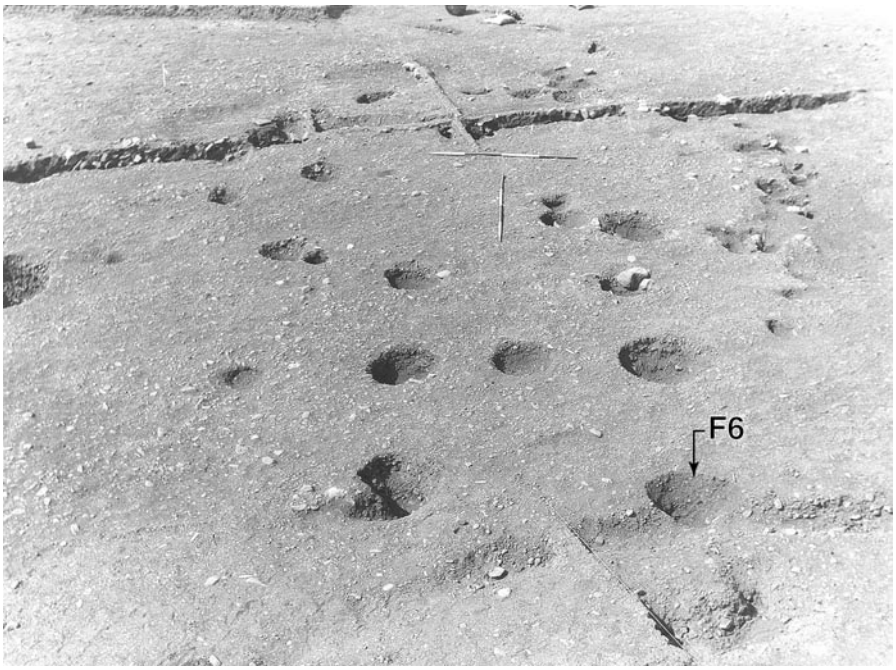
any evidence of function. There were no surviving remains of a hearth, and no evidence of scorching to suggest where it might have been located (in common with all other buildings excavated at the site).

A small assemblage of artefacts was recovered from the features of House 3. Coarse pottery came from the ring-ditch fill (Cat no 44) and from door-posts E22 and E8 (Cat nos 42–43; illus 58 for Cat no 42). A complete saddle-quern was contained within the upper fill of Pit E2 (coarse stone, Cat no 5), but was not placed in a useable position. A worked rectangular stone with a shallow cup on its upper face formed part of the ring-ditch paving on the west side of the building (coarse stone, Cat no 33), and another dished stone was also found in the ring-ditch fill (coarse stone, Cat no 47, illus 60). Modern glass from pit E2, along with modern glass, pottery and a clay pipe stem from the ring-ditch fill, must represent intrusive material introduced through plough disturbance. Animal bone comprised only a few fragments of unburnt bone, as well as calcined fragments from a range of contexts. No material suitable for isotopic dating was recovered.

**Reconstruction** House 3 comprises the remains of a roundhouse incorporating a peripheral ring-ditch. The roof of the building was probably supported both by the post-ring and the external house wall, of which no archaeological trace survived. The inside end of the entrance likely defines the wall alignment of House 3, which presumably ran around the outer edge of the ring-ditch for most of its circuit (as discussed by eg Reynolds 1982). Triscott had suggested that the wall lay between the outer edge of the ring-ditch and the paving within it (Triscott 1982, 119) but, in the absence of foundation slots or post-sockets within the ring-ditch, such an interpretation is not preferred. Given the absence of any foundation slot/ring-groove running externally to and concentrically with the ring-ditch (for example as identified at High Knowes, Alnham, House 1,



*Illus 33 House 3 from south; with outer enclosure palisade overlain by ring-ditch slab (see illus 32)*




*Illus 34 House 3; as excavated; showing slightness of ring-ditch and porch post F6 truncating linear feature F2 (illus 3; f) in foreground*

Jobey & Tait 1966; and Dryburn Bridge House 2, Section 7.4.4), a turf or stone wall construction can be countenanced (cf Kendrick's reconstruction of a Douglasmuir ring-ditch house; Kendrick 1995, 62). The lack of archaeological evidence for either a foundation slot or a turf wall can be explained as an artefact of plough-truncation.

As the width of the house wall is not known, it cannot be determined whether the entrance foundations relate to an entrance passage set within the overall thickness of the house wall or to a porch structure projecting outside it, or indeed to a combination of both. The inner end of the entrance appears to have been provided with a double door, possibly with each door hung from the outside of the entrance passage and closing to the centre. A further door could have been present at the outer end of the entrance, thus providing a vestibule or porch.

Refurbishment is evidenced by the replacement of certain uprights of the post-ring and by the alterations to the ring-ditch, which must reflect a change in its principal function. It is tempting to conflate the stratigraphic evidence into two discrete structural phases, with the secondary phase defined by a replacement of some of the inner roof support uprights (and potentially the roof itself) and a change of function to the peripheral ring-ditch. However, better evidence from House 8 suggests a contrary sequence, although there is no reason to

*Illus 35 House 8; detail of paving within ring-ditch; from south*

pre-suppose that the two buildings had identical structural histories.

**Stratigraphic and spatial relationships** Certain important stratigraphic relationships were established. The foundation trench of the outer enclosure was cut through by both the ring-ditch and post-pit E29 of House 3. The stratigraphic relationship between the outer enclosure palisade trench and ring-ditch is particularly clear in illus 33, where a paving slab within the ring-ditch directly overlies the palisade trench alignment. Also of significance was the demonstration by the excavators that the outer porch post F6 truncated linear feature F2 (illus 34; illus 3, f). The linear feature itself partly truncated Burial 8 (see Section 7.7.6), providing good stratigraphic evidence that this burial predated the construction of House 3.

### *7.4.2 House 8 (illus 32; illus 35)*

**Description** House 8 was of comparable size and character to House 3, and had been truncated by ploughing to a similar degree. Its surviving remains measured *c* 10m in external diameter, with an entrance to the south-east. Its preserved features can be divided into the same elements as noted for House 3, although in this case two non-concentric post-rings are demonstrable and relate to two successive building phases.

The outer post-ring described a slightly oval area of *c* 7m north-west/south-east by 6.5m. It comprised at least 13 post-pits set *c* 1m apart, with a 2m spacing across the axis of the entrance passage (between P2 and P55). Two additional features were present between the more regularly spaced post-pits, one occurring to the north and the other to the west. The post-pits generally measured 0.4–0.7m wide by 0.2–0.4m deep (illus 32), some containing evidence of disturbed stone packing. The four northernmost posts, in an arc from P43 to P54, were set along the inner edge of the ring-ditch.

The inner post-ring defined a circular space *c* 5.5m in diameter. This ring comprised either 11 or 12 post-settings comparable in character to those of the outer ring. Indeed, both rings appear to have shared settings P55 and P39, although neither displayed clear evidence of post replacement. Adjacent to these, however, a large post-pit at the point of divergence between the two rings appears to have contained a setting relating to both the inner (P22) and outer (P26) post-rings. The inner ring also had a 2m wide spacing across the alignment of the entrance passage. In this case the alignment of the posts (P55, P6) was not perpendicular to the axis of the entrance passage, as was the case for the comparable posts of the outer ring (P55, P2). This irregularity provides circumstantial evidence that the outer post-ring was the earlier feature.

The entrance position was defined by two 0.15m deep post-pits set 2m apart (P32, P42). Two further post-pits (M3, M4) appear to define the outer end of an entrance structure comparable to that identified at House 3. As for House 3, the positions of the inner entrance posts (P32, P42) probably defined the alignment of the outer wall of House 8, which presumably ran around the outer edge of the ring-ditch. Two post-settings identified along the outer rim of the ring-ditch may relate to the

external wall (P57, P58) although, as for House 3, this wall was probably primarily a turf or stone construction.

The ring-ditch formed the peripheral floor space of the west half of House 8. It was 1.5–2m wide, with a shallow and irregular profile 0.15–0.2m deep which deepened to the north. It contained a brown sandy fill, within and upon which was laid a *c* 1m wide band of paving, comprised of flat slabs of various sizes forming a roughly level surface (illus 35). As identified at House 3, the paving thus does not appear to have formed a primary component of the ring-ditch feature. Of those post-pits of the outer post-ring that lay within the ring-ditch, at least one (eg P45, illus 32) was visible within the ring-ditch fill. While this evidence could be used to argue the post-pit as cut through, and thus secondary to, the ring-ditch fill, it also possible that the ring-ditch fill was deposited around a pre-existing post. This latter explanation implies that the post-pit was earlier than the ring-ditch fill, although not necessarily pre-dating the cutting of the ring-ditch; it is supported by the evidence from P44, where paving stones partly overlie the pit fill but appear to have been fitted around the post itself. In summary, the stratigraphic evidence tends to argue against the replacement of the outer post-ring by the inner as necessarily having been contemporary with the filling in and paving over of the ring-ditch, as the outer post-ring and paving in the ring-ditch appear to have co-existed.

Several pits were identified in the central floor space. These were of various sizes, but generally survived to no more than 0.2m deep. None revealed any evidence as to their function. No trace of a hearth was identified.

The finds from House 8 were restricted mostly to a series of saddle-querns, both whole pieces and broken fragments. Five items had been incorporated into the paving within the ring-ditch (coarse stone, Cat nos 10, 17, 23, 26 & 28), including one broken lower stone, two upper stones (one complete) and fragmented broken stones; the site records do not indicate whether or not the lower stone had been placed in a usable position (cf House 2, Section 7.4.4). Broken saddle-quern fragments had also been re-deposited within the packing of porch post M3 (coarse stone, Cat no 27). A copper alloy rod fragment was also recovered from the ring-ditch fill. Very little animal bone was found, burnt or otherwise.

**Reconstruction** The character of House 8 is closely comparable to that of House 3, in as far as it can be reconstructed from its surviving remains, and is not discussed further to avoid repetition. However, the remains of House 8 revealed more stratigraphic complexity than those of House 3, demonstrating at least two construction phases. The two post-rings could not have co-existed rationally within a single building, and there are two phases of use of the ring-ditch. It is proposed that the building plan of the earlier house incorporated the outer post-ring and the ring-ditch as an open feature. The inner post-ring and the peripheral paving thus belong to a secondary construction phase. As noted above, however, the limited stratigraphic evidence suggests that both changes did not occur simultaneously, as there is some evidence to suggest that the paving within the ring-ditch was fitted around the outer post-ring. The secondary building thus appears to represent a substantial refurbishment of the primary roundhouse, rather than a *de novo* construction.

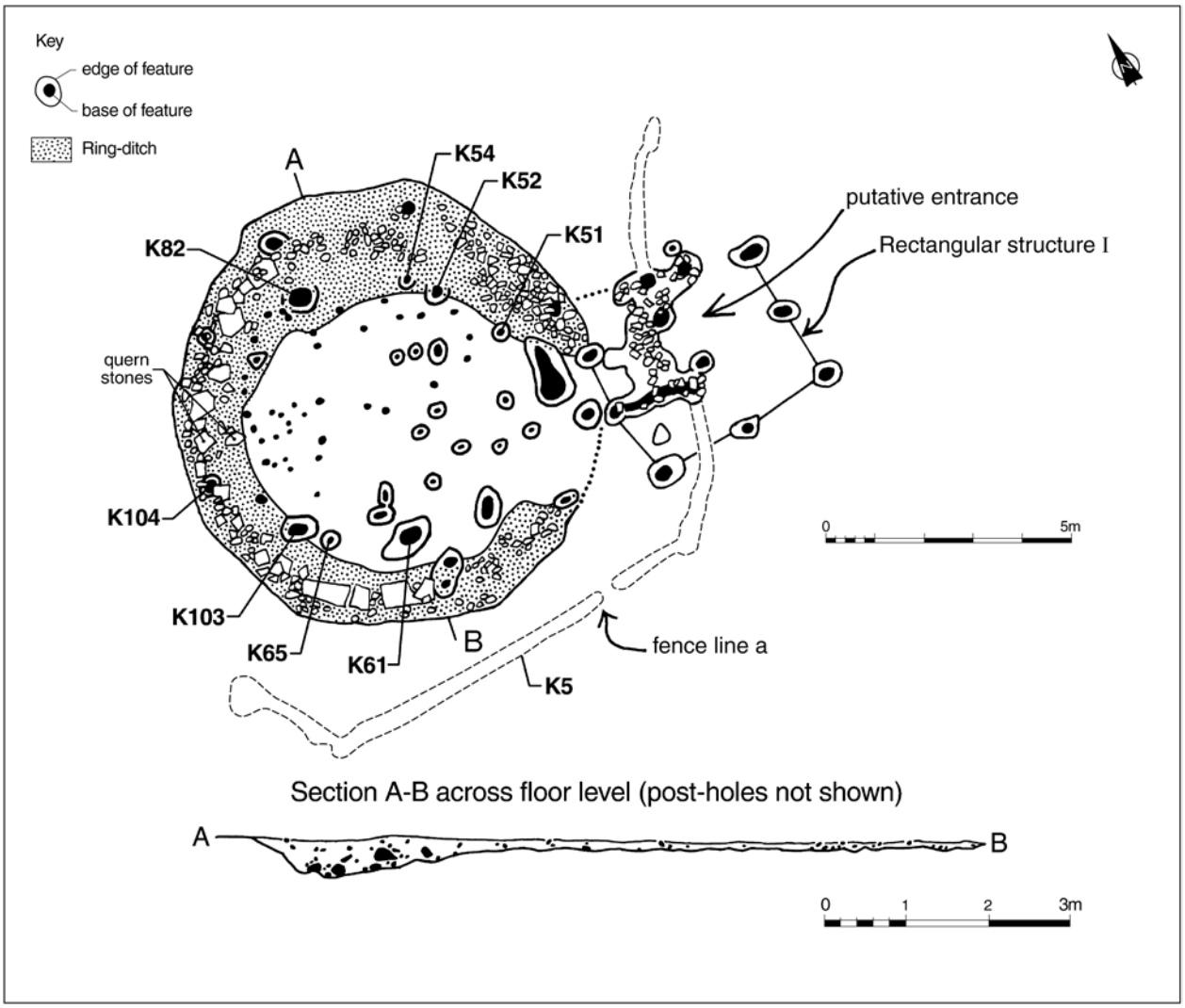
**Stratigraphic and spatial relationships** Excavation demonstrated that the ring-ditch and elements of the two post-rings of House 8 were cut through the foundation trench of the outer enclosure. This evidence of sequence concurs with that obtained for House 3.

### *7.4.3 House 7 (illus 36; illus 37; illus 38)*

**Description** House 7 was slightly smaller than the neighbouring ring-ditch structures, its surviving remains, within the presumed wall line, measuring *c* 8.5m in diameter. It was poorly-preserved, with most features surviving less than 0.2m deep. Moreover, the scatter of internal features was denser and less readily interpretable than for Houses 3 and 8.

The ring-ditch formed the most distinctive element of House 7. It continued around most of the circuit of the building, apart from a *c* 3m gap to the south-east. The ring-ditch measured up to 2.5m wide, surviving up to 0.5m deep to the north but of negligible depth to the south (illus 36, section). This variable preservation reflects the fact that House 7 was terraced slightly into a south-facing slope. The ring-ditch contained paving slabs around the west side of the building (illus 37), with cobbles present within the remaining areas. In contrast to Houses 3 and 8, these stone features appear to have been set directly on the base of the scoop.

While the presence of a post-ring could be anticipated by comparison with Houses 3 and 8, it is not readily detectable. Four post-holes were identified around the inner edge of the ring-ditch on the north side of the building, in an arc from K82 to K51, and may have formed components of a post-ring. However, these features survived only to 0.15–0.2m deep, in that part of the site where quality of preservation was better. To the south only K65 and K61 could be reasonably interpreted as part of a post-ring, but K65 survived less than 0.1m deep, emphasizing how much information may have been lost. Excavation revealed several features cut into the base of the ring-ditch, towards its outer edge on the north and west. Some were stone-packed post-holes and others were simply depressions (possibly post impressions) in the subsoil. These features occurred at 2–3m intervals, and might be related to the wall

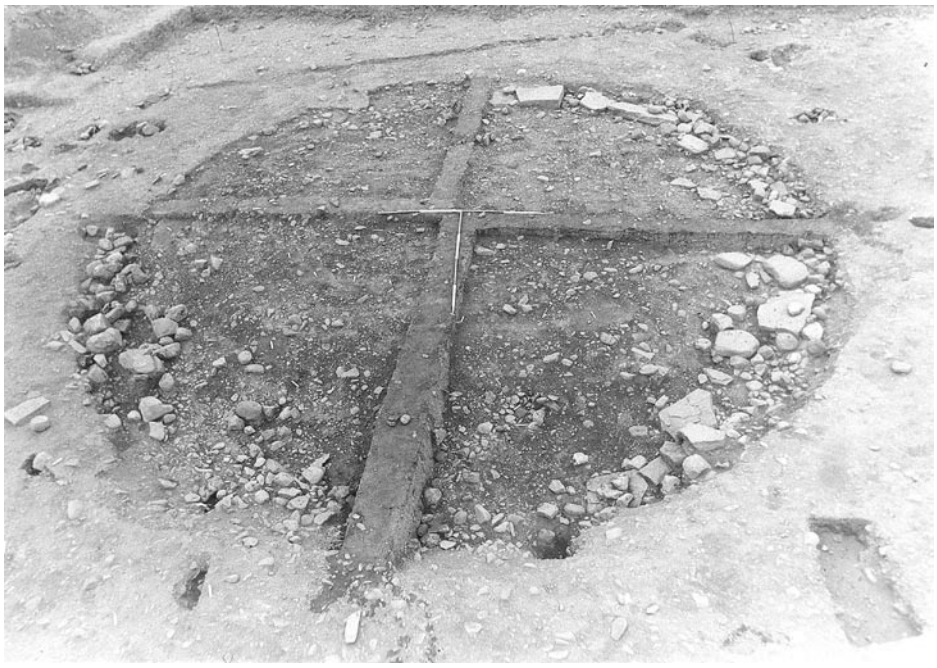



*Illus 36 House 7; plan*

of House 7, possibly representing the foundations for the timber framing of a wattle and daub wall. However, some of the features (eg K104) were sealed directly beneath paving within the ring-ditch, and thus cannot relate to the later use of the building.

The central floor space, within the ring-ditch, measured *c* 5.5m across. Excavation detected a density of post-holes, stake-holes, pits and stone-filled hollows in this area (illus 38). The stake-holes tended to be concentrated in the rear half of the building and the post-holes in the front half. It is possible to pick out alignments within the stake-holes that might be used to extrapolate the presence of stake-built structures, such as internal partitions. However, it would be unwise to extrapolate too far on the basis of these heavily truncated remains.

While it is clear that the entrance to House 7 lay on the south-east side of the building, reconstruction of its precise form is problematic, not least because of the complex series of features which coincide in the entrance area, including rectangular structure I (Section 7.5). The entrance arrangement suggested on illus 36 was proposed by the excavators, and comprises four posts defining a passage *c* 2.5m wide and 2m long, with the south-west side of the passage appearing defined by a foundation slot that lay within the south-west end of an irregular stone-filled hollow. The hollow was probably not a deliberately excavated feature, but rather the archaeological manifestation of a series of closely-spaced and inter-cutting post-pits (although the sequence of pit cutting was not determined stratigraphically during the excavation). The outer posts of the entrance structure may have also formed the terminal posts of a fence-line (K5) forming a partial enclosure around the south and east sides of House 7 (described in Section 7.7.1). This reconstruction of the entrance morphology is not without significant drawbacks, however, as the north-west entrance post lies within the ring-ditch, which thus projects into the proposed entrance passage. An alternative, and less elaborate, entrance could have been defined



*Illus 37 House 7; showing variable depth of soil overlying foundations; from north-east*

*Illus 38 House 7; showing excavated foundations and entrance structure; and feature K2. The sheep burial in the foreground is considered to be a modern, intrusive feature*

by the two post-holes present along the presumed wall line within the gap in the ring-ditch.

Finds recovered from House 7 included two complete saddle-quern lower stones (coarse stone, Cat nos 1, 4; illus 59) and a broken upper stone (coarse stone, Cat no 24) from the paving within the ring-ditch. Of these, the two saddle-quern lower stones were positioned side by side to the rear of the building (illus 36). Broken saddle-quern uppers had also been incorporated into the packing of internal post-holes (coarse stone, Cat nos 19 and 21, the latter from K61). Chert and flint flakes were found in the ring-ditch fill, and plain pottery was recovered from the irregular hollow within the proposed entrance structure (Cat nos 9–11, illus 58 for Cat nos 9–10). A very small assemblage of animal bone was present.

**Reconstruction** House 7 is comparable to Houses 3 and 8 in broad terms, comprising a peripheral shallow ring-ditch surrounding a central area containing pits and scoops. The paving is very

similar to that recorded at House 8 and, as at both neighbouring houses, does not appear to have been a primary feature of the building. However, it is possible that the superstructure of House 7 varied from those of its neighbours. The lack of coherent evidence for a post-ring might suggest that the roof was supported by a different mechanism, although the absence of such a ring may simply be a facet of differential preservation. The posts beneath the peripheral paving suggest that, at least initially, the building may have possessed a timber-framed wall. Assuming this, then the building must have been rebuilt at some stage since the putative wall foundation posts were sealed beneath the paving. Such evidence of rebuilding would be consistent with the evidence from Houses 3 and 8.

**Stratigraphic and spatial relationships** The spatial relationships between House 7 and certain adjacent features are instructive. A squared curvilinear slot (K2, illus 3), 6m long, 0.4m wide and 0.3–0.5m deep, runs adjacent to the north-west of the ring-ditch and is interpreted as the foundation for a fence-line or windbreak (illus 3; cf the U-shaped gullies identified at Port Seton East; Haselgrove & McCullagh 2000). This feature could not have been contemporary with House 7, had the latter incorporated a wall of any thickness running outside the ring-ditch. A second fence-line (K5) probably formed part of a contemporary enclosure around House 7 and potentially linking with its entrance passage although, as discussed above, definitive stratigraphic proof was lacking. What appears to be a rectangular structure founded on a grid of nine post-pits was identified immediately to the east of House 7 (illus 36; see also illus 47, I). While no definitive stratigraphic relationships were determined between the rectilinear structure and roundhouse, the two cannot have been contemporary as the rectangular structure would have blocked access to the roundhouse.

A pit containing a sheep burial was recovered on the south-west edge of House 7, cutting into the ring-ditch (illus 38). The sheep had been decapitated prior to burial and the head placed beneath the torso. This burial, however, appears to have been relatively modern, given the good quality of bone preservation (compared to the human bone preserved within the Iron Age pit graves, Section 7.6), and the skeletal remains were not retained for analysis.

### *7.4.4 House 2 (illus 39; illus 40; illus 41; illus 42; illus 43; illus 44; illus 45; illus 46)*

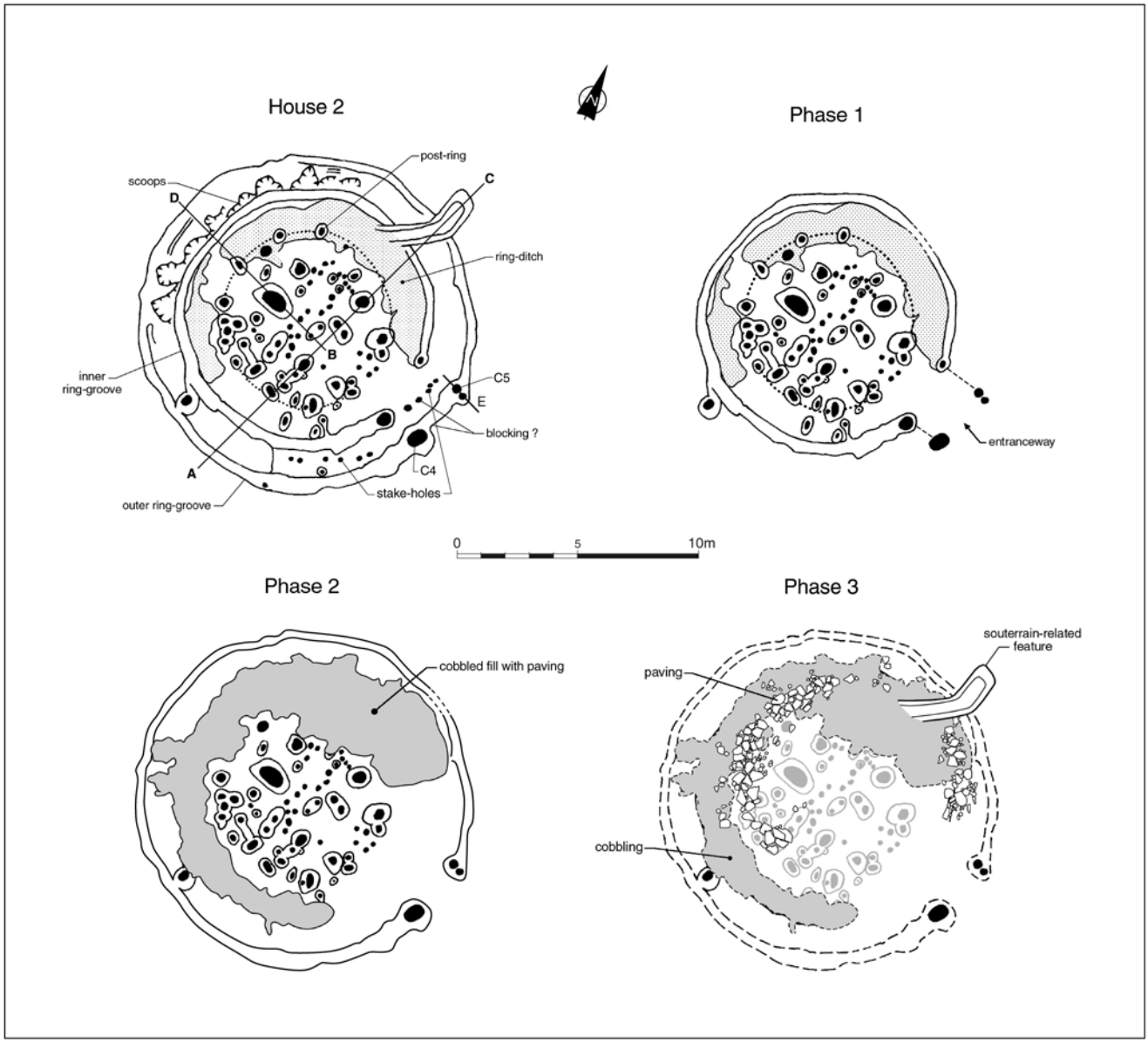
**Description** The remains of House 2 were located within the east central portion of the outer enclosure, *c* 2m within the outer enclosure boundary and a similar distance south of the inner enclosure boundary. This structure had the greatest amount of internal stratification of any present on site. The better level of preservation than elsewhere is owed to the scooping of the floor of the building into the slight south-facing slope. Features within the building had been preserved beneath a deeper accumulation of topsoil-derived material that filled the scoop after the abandonment of the building (visible on illus 41 and above paving on illus 45).

The foundation features of House 2 can be divided into the following principal elements: two ring-grooves representing wall-lines; scooped features between the ring-grooves; a ring-ditch and its fills; a post-ring representing the foundation for a roof support framework; and other internal features (illus 39). It was demonstrated that these related to more than one occupation phase.

The outer ring-groove measured 0.3–0.5m wide, increasing in depth from 0.2m to the south to *c* 0.4m to the north (illus 42). It had steeply sloping sides and a flat base (for example illus 40, A–B and B–D) and contained stone packing. Regularly spaced post impressions were detected on its base, particularly on the west side of the building. The ring-groove defined a circular space with a diameter of *c* 13.2m. An entrance break was identified on its south-east side, adjacent to the outer enclosure palisade trench. It measured *c* 2m wide and was defined to either side by terminal post-settings C4 and C5. However, it was demonstrated that C5 had been cut through an earlier post-hole on the outer edge of the outer ring-groove at the same location (illus 40, E). The earlier post-setting projected out from, and appeared to pre-date, the construction of the outer ring-groove. A similar protuberance from the outer ring-groove was evident beside post C4, although in this case excavation did not confirm the presence of an earlier post. Within both C4 and C5 were the charred remains of radially split oak timbers, which presumably represent the burnt stumps of posts that formally flanked the entrance gap. An ill-defined trench ran across the entrance gap between the two terminal posts, and may be interpreted either as the foundation of a secondary blocking feature or potentially a drop-trench for a portcullis-style gate. Apart from at the entrance no evidence was detected for either replacement or refurbishment of the structure founded in the outer ring-groove.

The inner ring-groove was comparable in character to the outer, typically with a squared profile 0.4m wide and 0.4m deep (illus 40, A–B). It ran concentrically to the outer ring-groove, and defined an area *c* 10m in diameter. It incorporated a *c* 2.2m wide entrance to the south-east, defined to either side by terminal posts, which was aligned with that in the outer ring-groove. The terminal post to the south-west contained the charred remains of an oak timber. The north-east terminal post also appeared to have charred *in situ*, although in this case the timber had decayed more completely into an organic black soil. The remains indicated only a single phase of use for this feature.

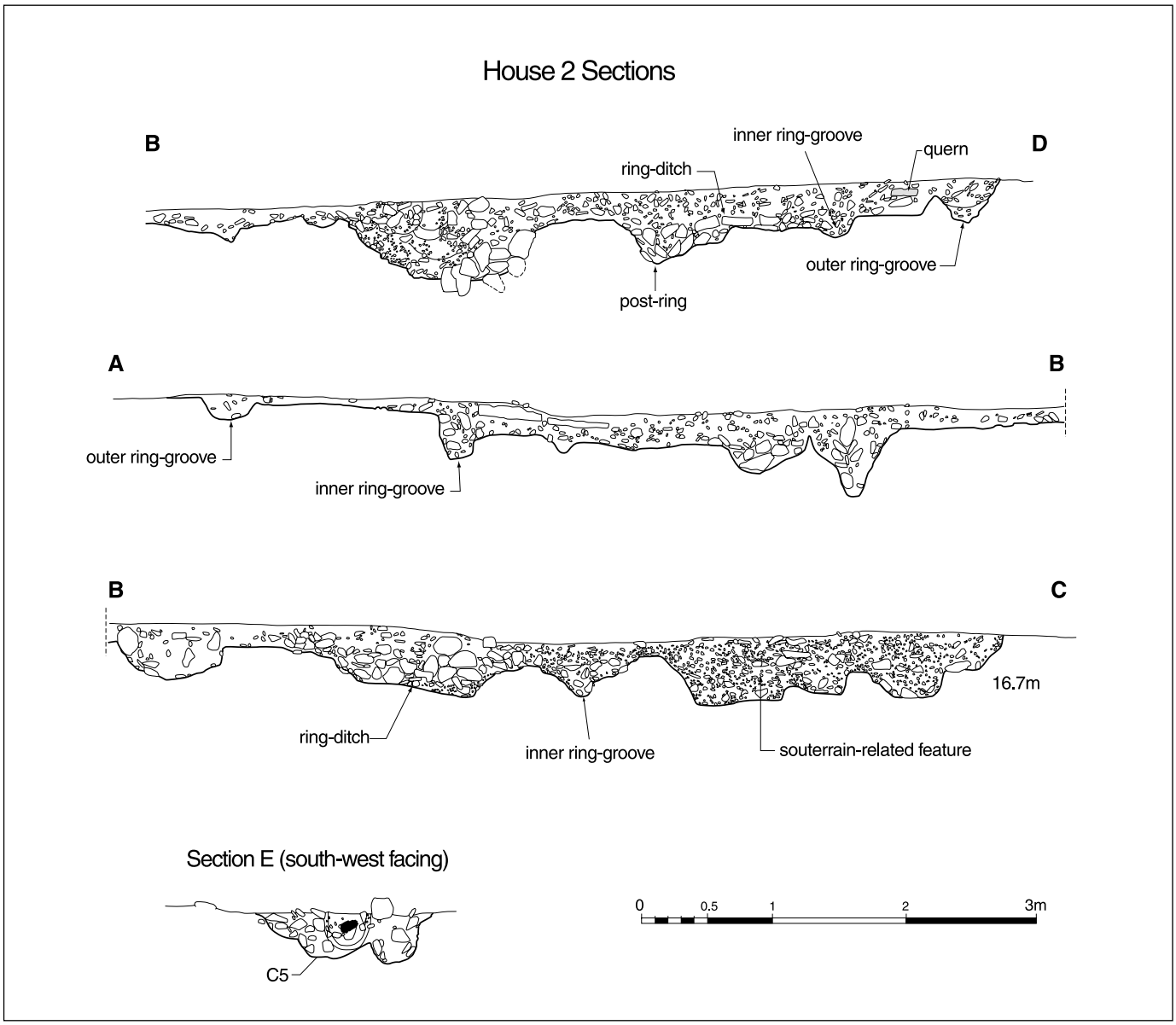
A number of features were present in the zone between the two ring-grooves. In the north-west quadrant were several conjoined and irregular shallow scoops (illus 39). These features are




*Illus 39 House 2; plans showing foundation features; and phase plans*

described as a ring-ditch in the interim account (Triscott 1982, 120), and are comparable to features described as ring-ditches at other excavated sites (for example House 1 at High Knowes, Alnham: Jobey & Tait 1966), although the scale and presumably also the function of these features differed from the more substantial ring-ditch referred to below. A row of stake-holes was present to the south-west of the entrance. A second row of five stake-holes ran across the entrance, and may be interpreted as the foundation for either a blocking feature or a screen designed to prevent direct access from the entrance to the centre of the structure. The remaining areas between the ring-grooves were devoid of archaeological features (for example on the right of illus 42, where this zone appears as a raised area of subsoil between the cut foundation features).

Immediately within the inner ring-groove was a penannular ring-ditch comparable to those characterizing Houses 3, 7 and 8, although somewhat more substantial. It ran in an arc from the north side of the entrance around to the south-west side of the building, covering approximately two-thirds of its circumference. It was wider and deeper around the northern, up-slope side of the building, where it measured up to *c* 1.5m wide and 0.5m deep, with sloping sides and a flat base (illus 43; illus 40, B–C). To the west the ring-ditch narrowed to less than 1m wide. Its absence from the south side of House 2 is demonstrated graphically on illus 40, A–B. The ring-ditch had not been excavated with the intention of creating a level floor space, as to the north its base lay below that of the central floor space bounded by it.

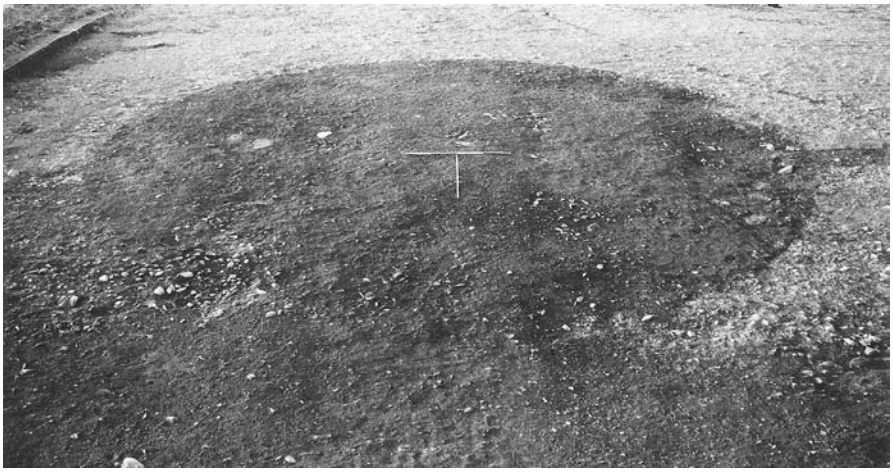



*Illus 40 House 2; selected sections*

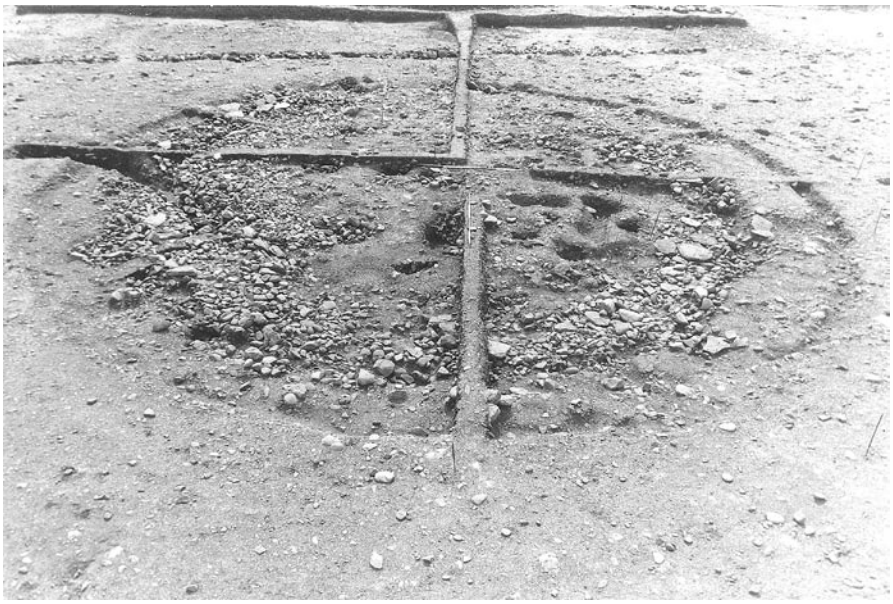
The ring-ditch therefore appears to have been designed initially to function as a sunken floor space. However, this configuration was altered markedly at some stage by the infilling of the ring-ditch with a substantial deposit of cobbles and boulders to level up the floor surface across House 2 (illus 42; illus 43). The spread of cobbles sealed the inner ring-groove and the post-ring elements on the north side of the building (eg illus 40, B–C and B–D; illus 43). Both these structural elements must therefore have fallen out of use with this redesign of the internal floor space. To the south-west the cobble deposit appeared to incorporate flat stones on its surface, incorporating two saddle-quern lower stones, which may have acted as rudimentary paving (illus 42). For the most part this cobbling had a surface width of *c* 1.5–2m and did not extend outside the circuit of the inner ring-groove, but to the north-east it widened to over 3m and encroached almost to the outer ring-groove.

Set on the upper surface of the cobble deposit was a carefully laid band of paving (illus 44; illus 45). This was generally 1–1.5m wide and was composed of limestone and sandstone slabs. It occurred in two arcs, the larger around the west half of the building and the smaller to the east, where it formed a less regular surface, perhaps due to the greater depth of unconsolidated cobble fill beneath it in that sector (illus 44).

On the northern side of the building excavation identified a distinctive curvilinear feature that had been cut obliquely through the ring-grooves and the cobble fill of the ring-ditch (illus 46). It measured *c* 5m long, and was *c* 0.8m wide and deepened to the north where it cut into the slope, reaching a depth of 0.5m at its northern terminus. It had an earth and stone fill (illus 40, B–C; visible within the cobble fill



*Illus 41 House 2; as initially uncovered; from east showing scoop filled with post-abandonment infill and band of hillwash CAC in foreground*



*Illus 42 House 2; showing cobble fill of ring-ditch and associated paving; from north-west*

of the ring-ditch on illus 46). There was no direct evidence for the function of this enigmatic feature. However, its morphology bears some similarity to that of a Dalladies-type souterrain (Watkins 1980), albeit in miniature, and perhaps it was a sunken storage feature relating to the latest stages of occupation of House 2. However, given its position within the sequence of excavated features, it could also have been created after the abandonment of House 2 (although before the scoop became infilled).

A post-ring was identified running for the most part around the inside of the ring-ditch (illus 39), although to the north three posts had been cut through the base of the ring-ditch beside its inner edge (one such is visible, filled with stones, in the right foreground on illus 43) and were sealed beneath its cobble fill. Ten stone-packed post-pits were identified, at intervals of *c* 1.2m. No evidence for the post-ring was identified in the north-east quadrant of House 2, and its absence from this area must be regarded as puzzling and not readily explicable. The post-pits were typically 0.5m wide and 0.3m deep. The post-ring defined a central space *c* 6.1m in diameter. The presence of additional post-settings adjacent to certain elements of the post-ring in the south half of the building might indicate that this feature had been subject to repair.

The central floor space of House 2 contained a dense spread of stone-filled pits, post-holes and stake-holes. In several cases inter-cutting features were identified. Overlying the subsoil surface in the north-west quadrant was a near-rectangular spread of stones incorporating what the excavators described as a burnt soil matrix (visible on illus 44 to the right of the measuring scales). A rectangular stone-lined hollow, *c* 0.5m across internally and

*Illus 43 House 2; showing section of cobble deposit filling the ring-ditch and sealing the inner ring-groove (with packing stones still in situ) in north-west quad; from south-west*

*Illus 44 House 2; showing paving overlying cobble infill of ring-ditch; from south-east*

0.3m deep, was present towards the very centre of the floor space: its function is unknown.

In terms of Dryburn Bridge, the finds assemblage from House 2 was substantial. Principal amongst these was an astonishing number of saddle-querns, both complete and broken. Most of these had clearly been reused, including a broken upper stone incorporated within the packing of the outer ring-groove (coarse stone, Cat no 18); broken lower stones from the inner ring-groove (coarse stone, Cat nos 12 and 15; illus 59 for Cat no 12); and one complete lower stone (coarse stone, Cat no 11) and other fragments (coarse stone, Cat nos 8–9 & 30) from post-holes within the central floor space. Several querns were recovered from the cobble fill of the ring-ditch (coarse stone, Cat nos 2, 6, 13, 22 & 31), including two complete lower stones incorporated in its surface paving on the south-west (coarse stone, Cat nos 2 and 6) and a complete upper stone from the cobbles below (Cat no 22). Other examples came from the rubble deposit overlying the north-west central floor space (Cat no 14) and from the post-abandonment deposit filling the house scoop. A considerable range of polished stones and enigmatic pebbles and cobbles with pecked depressions (Cool, Section 8.2) was recovered from the same range of

*Illus 45 House 2; detail of paving sealed beneath abandonment deposits*

*Illus 46 House 2; the late curving ditched feature cutting through the cobble fill of the ring-ditch; from north-west*

contexts. A cannel coal bangle roughout was found in the fill of a post-hole in the central floor space (SF 842; Hunter, Section 8.6).

Other types of artefact were less well represented. A few sherds of pottery were recovered, all from the post-abandonment soil infilling the scoop (Cat nos 36–40) or hillwash overlying the outer enclosure palisade immediately to the east of House 2 (this deposit is visible in the foreground on illus 41). Two pieces of iron slag were recovered from the cobble fill of the ring-ditch, and a third was recovered from the central floor area (Section 8.7). A copper alloy rod fragment was derived from the post-abandonment infill of the scoop, and a penannular hoop was found in the hillwash (SF 96 & 97, Section 8.3; illus 61 for SF 97). Almost 20 chipped stone items from the post-abandonment infill of the scoop appear to be residual, as no items were found stratified within the House 2 floor and foundation deposits. Conversely, modern glass and pottery recovered from the same context must have been contaminants introduced by ploughing.

**Reconstruction** The remains of House 2 were presented in the interim account (Triscott 1982, 120) as a structural form which was transitional between the early post-ring and later ring-ditch forms represented at Dryburn Bridge. The stratigraphic evidence allows for a more complex sequence to be proposed, incorporating at least three structural phases (illus 39). It is not possible to link all features conclusively to particular phases and the phase plans summarized on illus 39 thus provide the author's suggested interpretation.

House 2 as first built appears to have been a timber roundhouse with an internal diameter of *c* 10m (Phase I). Its wall-line was defined by the inner ring-groove, with an internal post-ring forming the principal roof support (see Hill 1982b and Reynolds 1982 for comparanda). Its floor space included a sunken peripheral zone (the ring-ditch), with a level central area to which some of the many negative features relate. Its entrance was *c* 2m wide and, assuming that the post-hole cut by the outer ring-groove entrance terminal relates to this primary structure, was provided with a projecting porch *c* 2m long. The outer ring-groove could have formed an element of this primary structure although, if so, only if the idea of a projecting porch is rejected. In any case it is not an easy matter to propose a structural function for it. Therefore the basic form and size of this structure bears comparison to Houses 3 and 8, apart from the different external wall construction and the greater scale of the ring-ditch.

House 2 appears at some stage to have been substantially remodelled (Phase II). The building was increased in diameter to *c* 13.2m, its outer wall-line defined by the outer ring-groove. The scooped features between the two ring-grooves may have been excavated as part of the creation of a level house floor, although it has been suggested (Reynolds 1982, 51) that such features at comparable sites may have been formed through wear rather than by design. The primary ring-ditch was filled in with cobbles up to the level of the central floor space, and partly paved over, partly sealing beneath it the post-ring, which must have been removed by that time. Saddle-querns set within this paved surface to the west may indicate that grain- or food-processing activities took place around the periphery of the structure. However, it could not be established from the site records that the stones had their grinding faces uppermost. In any case, while saddle-querns incorporated into a roughly paved are potentially useable, such a position would have made them uncomfortable to use and it would have been hard to collect any processed material that fell from the stone, suggesting that operation of a quern in this position would have been wasteful and inefficient. This is in contrast to a quern set in an elevated position, where usage would have been less onerous to the operator and falling material could have been collected by receptacles or blankets placed on the floor around the quern (A Jackson, pers comm). As a result of these technical drawbacks the complete lower stones set within the paving are better interpreted as reused material rather than *in situ* fixtures.

It is not certain if or how this refurbished structure was roofed. The outer wall is unlikely to have provided the only support for what would have been a large roof. It is possible that the remains of a post-ring have remained undetected within the mass of negative features set within the central floor space, although if this were the case then the ratio between post-ring and wall diameters would have been considerably different from Hill's proposed golden ratio (Hill 1984). It seems possible that the roof may have had supports that are not archaeologically detectable, such as posts resting on stone pads. This structure was not provided with a projecting porch.

The enlarged building continued to be modified (Phase III), through the laying of a secondary band of paving over the infilled ring-ditch. Probably during the final stages of the use of the building, but also potentially after its abandonment, a ditched feature reminiscent of a Dalladies-type souterrain was cut through the periphery and wall of the building, into the slight hillslope. The stone features surviving above the subsoil surface in the centre of the building are also likely to belong to the terminal use of the House 2.

The pre-enclosure Period II, Phase III Building 2 at Broxmouth appears to have been a roundhouse very similar in character and date to Dryburn Bridge House 2, displaying many of the same foundation components (Hill 1982b, 13, figure 2a), including concentric ring-grooves, inner post-ring and ring-ditch. Full details of the character and phasing of that structure have yet to be published, although the published interim report (Hill 1982a, 153) indicates that it was larger than the Dryburn Bridge structure, its outer ring-groove defining an area 17m in diameter, and that it had been refurbished several times with at least three structural phases.

**Stratigraphic and spatial relationships** The remains of House 2 did not have any physical relationships with other elements of the settlement, although its juxtaposition with neighbouring features requires scrutiny. Firstly, it is apparent that the wall-line of the building respected the projected approach to House 6 from the south-east, but only in its primary (Phase I) form. It may have been that when House 2 was first built House 6 was standing. By the time House 2 was extended across the approach alignment, House 6 could have been abandoned, although it could alternatively reflect the declining importance of the approach alignment (potentially as a result of the blocking of the putative middle entrance?) and altered access routes through the settlement.

The spatial relationship between House 2 and the adjacent outer enclosure boundary is an interesting one. In its first phase House 2 stood sufficiently

far from the alignment of the outer enclosure that the two structures could have co-existed. With the enlargement of the building this becomes less clear. The absence of a projecting porch could be explained by the lack of available space between the building and the enclosure boundary. Conversely, the excavators recorded that the palisade packing adjacent to the entrance of the enlarged structure had been worn down, as if by trampling (Triscott 1982, 120), which was taken to imply that the enclosure ceased to function during the lifetime of House 2. Using the additional evidence presented here, it is possible to propose that in its first phase House 2 lay within the outer enclosure, but that its enlargement coincided with or followed the dismantling of the outer enclosure, at least in this sector. However, there is no convincing evidence either way in this regard.

**Radiocarbon dates** Four samples of wood charcoal from House 2 contexts were submitted *c* 1980 for radiocarbon dating. All samples derived from the charred *in situ* remains of structural posts. Owing to subsequent concerns over the precision of those dates, additional samples of two surviving posts were submitted to SUERC in 2003 and were dated at the University of Arizona AMS Facility. The results are shown in Table 9.

Both recently obtained dates encompass the Early Iron Age plateau on the calibration curve (*c* 800–400 cal BC), and confirm that the original results from the same posts had been broadly accurate. The original dates encompass this period when adjusted errors are taken into account (Ashmore *et al* 2001), although most have extremely long dates ranges at 2-sigma, which cover most of the first millennium cal BC.

This renders close dating of the two structural phases of House 2 impossible. Three of the posts appear to pre-date *c* 400 cal BC. However, it is not known from where within the oak timbers the sample material was obtained, which could be significant in terms of dating as oak is a long-lived species. The possibility cannot be ruled out that old wood from the Phase I structure was reused in the Phase II building and that the radiocarbon dates AA-53705 and GU-1284 do not accurately date the Phase II construction. GU-1283, from one of the secondary entrance posts, appears statistically more likely to date to an event occurring after 400 cal BC than before, but the evidence is not strong, especially as the other two dates from the same ring-groove date to before 400 cal BC. The dates reveal nothing as to how long House 2 remained in use.

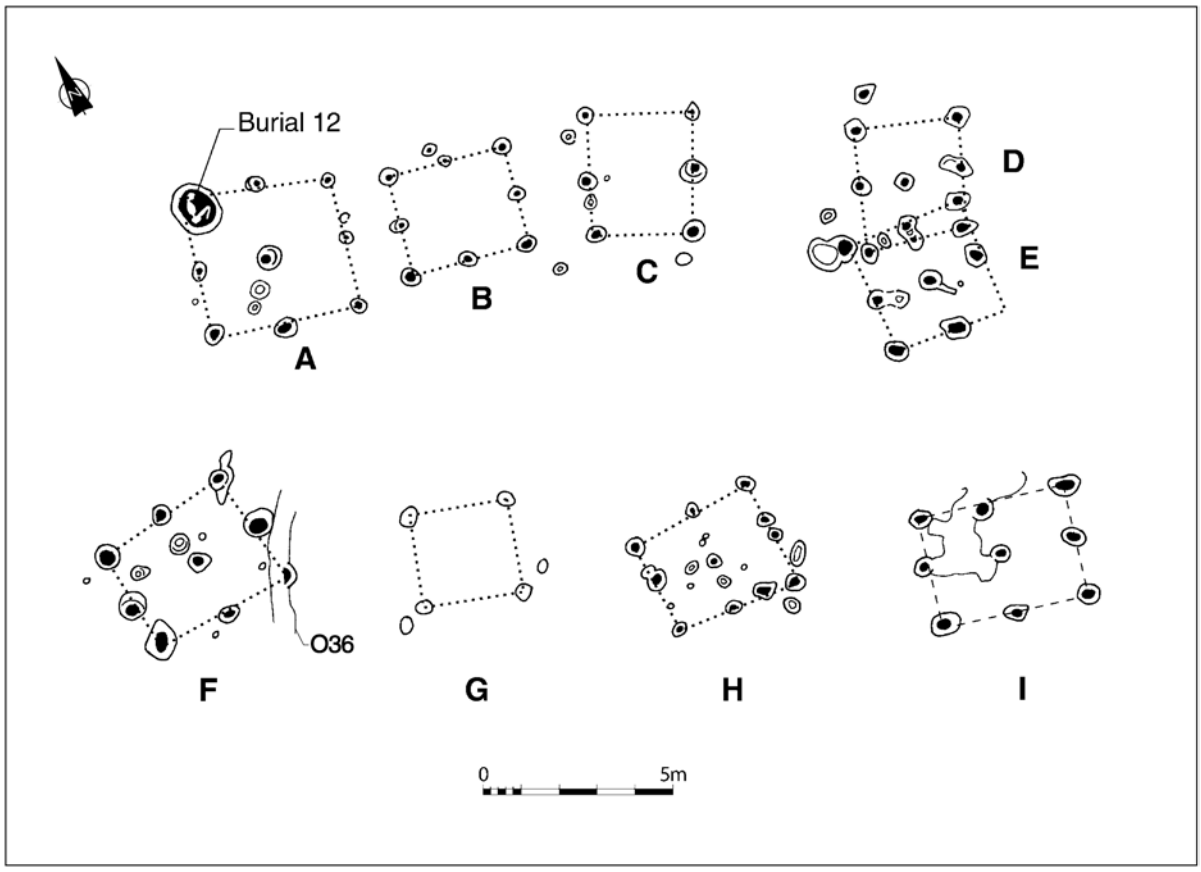
### 7.5 Rectangular structures (illus 47)

**Description** Several post-defined rectangular structures were identified during the excavation (illus 3, A–I). These occurred mostly within the southern portion of the outer enclosure, although one example (illus 3, G) occurred further north between Houses 1 and 5, and another (illus 3, I) occurred outside the outer enclosure and adjacent to House 7.

Three examples comprised an arrangement of nine post-holes (illus 3, F, H, I), based on a grid of three rows of three post-settings. These were of similar size, measuring between 3.4m by 3m (illus 3, H), and 4m by 3.2m (illus 3, I). Four examples were based on foundations of eight posts (illus 3, A, B, D, E). These were of similar dimensions to the nine-post arrangements, ranging from 3.2m by 2.7m (illus 3, B, D, E) to 4m by 3.6m (illus 3, A), and were also based on three rows of posts. In one case (illus 3, B) the central post was absent, in two (illus 3, A, E) a corner post was missing, and in the last (illus 3, D) a central side post was not present. It is not known whether these absences are deliberate structural characteristics or the result of differential survival. For structure A, the position of the missing post is occupied by a pit grave (Burial 12). The six-post structure (illus 3, C) was formed of two rows of three posts, although its size was the same as eight-post structures (illus 3,

**Table 9 Radiocarbon dates from House 2. Duplicate sample marked thus * and ****

| Lab no | Sample context | Material | Lab age | Lab error ± 1-sigma | 2-sigma range using lab error (cal BC) | Adjusted error ± 1-sigma | 2-sigma range using adjusted error (cal BC) | $\delta^{13}C$ (‰) |
|---|---|---|---|---|---|---|---|---|
| GU-1257* | Outer ring-groove | Quercus | 2450 | 50 | 770–400 | 110 | 850–200 | –25.0 |
| AA-53705 GU-10813* | Outer ring-groove | Quercus | 2500 | 40 | 800–410 | | | –25.8 |
| GU-1283 | Outer ring-groove terminal | Quercus | 2280 | 55 | 420–210 | 110 | 800–50 | –25.0 |
| GU-1284 | Outer ring-groove terminal | Quercus | 2615 | 55 | 910–540 | 110 | 1000–400 | –26.3 |
| GU-1287** | Inner ring-groove terminal | Quercus | 2550 | 55 | 830–410 | 110 | 900–400 | –25.0 |
| AA-53703** GU-10811 | Inner ring-groove terminal | Quercus | 2455 | 40 | 770–400 | | | –25.1 |




*Illus 47 Rectangular structures*

B, D and E). The four-post structure (illus 3, G) was smaller than the rest, measuring *c* 2.6m square.

The post-holes defining the structures were generally preserved 0.3–0.5m in surface width and 0.1–0.25m deep. The long axes of the structures tended to be orientated broadly east/west, although two examples were aligned north-east/south-west (illus 3, C, D).

It is possible that sub-rectangular arrangements of post-holes elsewhere across the site may have been the remains of comparable four and six post structures, but in areas where scatters of unstratified pits and post-holes exist there is a danger of 'joining the dots' to create structures where none existed. Only the more convincing structures have been presented here, but this may underestimate the number of rectangular structures that have occupied the site.

Artefacts were restricted to pottery recovered from two of the eastern posts of Structure C (L69 and L70, Cat nos 1–8 and 69; illus 58 for Cat nos 1–3) and the north-west corner post of Structure D (F4; Cat no 60). Pottery from vessel Cat no 1 was found in both posts L69 and L70, as well as from the fill of the outer enclosure palisade trench nearby. There were no deposits associated with the structures, and no material suitable for radiocarbon dating was recovered.

**Reconstruction** Little can be said of the form of the rectangular structures, and any reconstruction is largely determined by the perceived function of the building. Similar rectangular structures, predominantly founded on four or six posts, occurring in Iron Age settlement contexts, have generally been interpreted as raised granaries, based largely upon interpretation (Bersu 1940) of such structures at Little Woodbury (Ellison & Drewett 1971, 185), but without any positive archaeological evidence in support. Alternative interpretations advanced at various times have included buildings and workshops, animal pens, watchtowers or fighting platforms, raised granaries, shrines, scaffold burials or exposure platforms, and also the porches of roundhouses of which no other archaeological trace survives (Ellison & Drewett 1971; Guilbert 1975; Guilbert 1981; Kendrick 1995, 64). These options could entail the presence of raised buildings, raised platforms or ground-level structures. At Dryburn Bridge the more complex features, particularly those nine-post examples with a central post, tend to suggest heavy load-bearing structures, which supports their reconstruction as erections with raised floors.

**Stratigraphic and spatial relationships** A small number of stratigraphic relationships were observed between rectangular structures and other

features. Most strikingly, structures D and E overlapped on slightly different alignments. They could not have stood simultaneously, and although it is not certainly known in which order the two were erected, structure E lies on the same alignment as A–C and might have formed part of a contemporary group. Structure F was truncated by linear palisade trench O36 (illus 3, g), although as this latter feature is ill-understood (Section 7.7.7), the meaning of the stratigraphic relationship is difficult to interpret. Conversely, Structure I and House 7 cannot have co-existed, and while determination of the stratigraphic relationship would have been important, it could not be established during excavation. The putative House 10 and Structure H could not have coexisted.

The distribution of the rectangular structures across the area for the most part does not form any coherent pattern. The structures do not cluster in any particular sector of the site, and are not spatially discrete from the roundhouses (unlike the Phase II layout of Moel y Gaer, Wales; Guilbert 1975). The exception is the rough alignment followed by structures A, B and C (and possibly also E), which form a row but lay on slightly different alignments from each other. As A–C form an asymmetrical ground plan they have been interpreted as the remains of three separate buildings as opposed to one composite structure (cf Guilbert 1976, 310), although this reasoning is far from incontrovertible. The north-east frontage of structures A–C roughly respects the alignment of the projected approach to House 6, although structure C does project a little across the projected alignment between the southern side of the House 6 entrance and the south side of the putative blocked entrance of the outer enclosure. Nevertheless, this juxtaposition tends to suggest co-existence between the two elements, but in itself does not indicate any chronological relationship (such as which was built first or whether both were contemporary foundations).

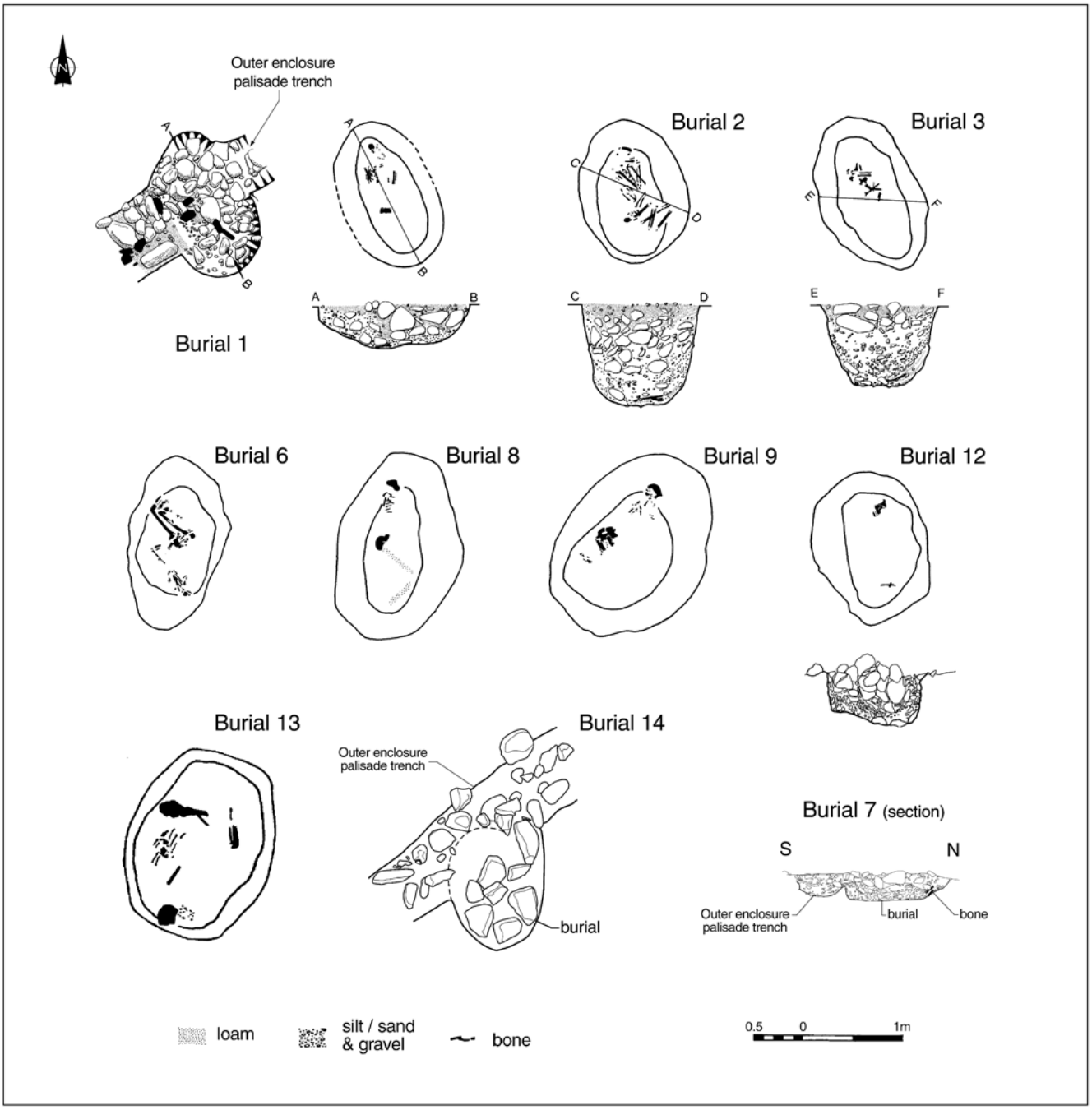
The presence of Structure I outside the outer palisade boundary is noteworthy, but this cannot be used to demonstrate a chronological relationship between the two. The stratigraphic relationship between Burial 12 and structure A is similarly indemonstrable (cf Triscott 1982, 122, who postulated Burial 12 as secondary), as it is not known whether the burial had truncated an earlier corner-post of structure A or whether the corner-post had been inserted into the earlier burial but all traces had been removed by subsequent plough-truncation. It seems unlikely that the two were contemporary (which would require that Structure A had never possessed a north-west corner post). Whatever the true relationship the positioning of the grave at this location appears a highly significant one.

### 7.6 Pit graves (illus 48; illus 49; illus 50; illus 51; illus 52)

**Description** Ten inhumations in pits were located, forming a distinctive spatial pattern (for a summary of key characteristics see Table 10). From the west central interior of the enclosure, a line of four graves was traced running north (B6, B8, B9, B2), with a fifth example (B3) located adjacent to B2 possibly forming part of this arrangement. Further to the north, four graves were identified along the outer palisade alignment around the north-west corner of the enclosure (B13, B14, B1, B7). An isolated example (B12) was discovered in the east central portion of the enclosure, to the east of the entrance to House 6. The graves were relatively widely spaced, being separated by at least 3m except for B2 and B3 which lay only 1m apart.

**Table 10 Principal characteristics of the pit burials**

| No | Surface extent (m) | Pit depth (m) | Orientation | Burial details | Relationships |
|---|---|---|---|---|---|
| 1 | 1.5 × 1.0 | 0.5 | N/S | Left side, flexed, head N, face E | Pit cuts across outer enclosure palisade trench |
| 2 | 1.5 × 1.1 | 1.0 | N/S | Left side, flexed, head N, face E | – |
| 3 | 1.6 × 1.0 | 0.8 | N/S | Left side, flexed, head N, face E | – |
| 6 | 1.7 × 1.0 | *c* 1.0 | N/S | Right side, flexed, head S, face E | – |
| 7 | 1.2 × 1.1 | 0.3 | N/S | ? | Lies perpendicular to, and immediately outside, outer enclosure palisade trench |
| 8 | 1.9 × 1.3 | 0.7 | N/S | Left side, flexed, head N, face E | Cut by linear feature F2 (illus 3, f) |
| 9 | 1.9 × 1.5 | *c* 1.0 | NE/SW | Left side, flexed, head NE, face SE | – |
| 12 | 1.5 × 1.2 | 0.5 | NW/SE | Right side, head NW, face SW | Occupies position of corner post of rectangular structure A |
| 13 | 1.9 × 1.5 | 0.5 | N/S | Right side, flexed, head S, face E | Immediately outside outer enclosure palisade trench |
| 14 | 1.2 × 1.0 | 0.4 | N/S | Head S | Cuts into outer enclosure palisade trench |




*Illus 48 Iron Age pit burials; plans and sections*

The grave pits were oval on plan, the smallest (B14) measuring 1.2m by 1m and the largest (B9, B13) 1.9m by 1.5 m. In profile they were steep-sided with a level base, and varied in surviving depth from as little as 0.3m (B7) to 1m (B2).

However, the linear group within the enclosure was noticeably more deeply cut (0.7–1m) than those strung along the outer palisade (0.3–0.5m; illus 49–52). The pits were generally orientated close to north/south.

Each pit contained a single inhumation laid on its base. The condition of the skeletal remains ranged from partial and fragmentary (eg B8, B12, B14) to moderate although incomplete (B2). The individuals in the graves comprised a group of adults (Roberts, Section 9.2). The fragmentary nature of the remains meant that only three could be confidently identified to gender, one female (B2) and two male (B6, B9), although one possible male (B12) and two possible females (B13, B14) were also present. Where bone preservation was sufficient for orientation and posture to be distinguished, the bodies had been laid in a flexed position, the majority resting on their left side (five out of eight) and mainly (five out of eight) with the head placed at the northern end of the grave. In all cases where the body was laid on the

**Table 11 Radiocarbon dates from the pit burials**

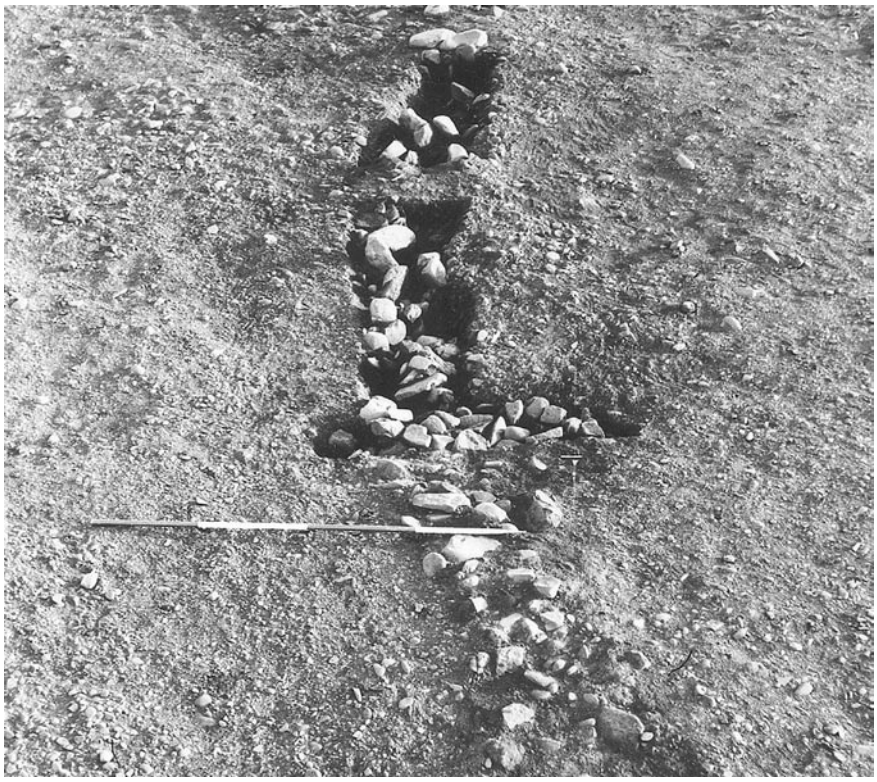
| Lab no | Burial | Material | Lab age | Lab error±1-sigma | 2-sigma range using lab error (cal BC/AD) | Adjusted error±1-sigma | 2-sigma range using adjusted error (cal BC/AD) | δ13C (‰) |
|---|---|---|---|---|---|---|---|---|
| GU-1149 | 1 | Human bone fragments | 2210 | 70 | 400–110 cal BC | 110 | 550 cal BC–cal AD 100 | –21.5 |
| SUERC-4068 (GU-12237) | 1 | Cranium, rib, long bone | 2485 | 35 | 790–410 cal BC | | | –20.4 |
| GU-1404 | 2 | Tibiae | 2400 | 100 | 850–200 cal BC | 140 | 850–150 cal BC | –21.8 |
| SUERC-4069 (GU-12238) | 2 | Fragments of R Humerus, L Radius | 2435 | 35 | 770–400 cal BC | | | –21.1 |
| GU-1405 | 3 | Assorted | 2665 | 165 | 1300–350 cal BC | 230 | 1500–200 cal BC | –20.4 |
| SUERC-4070 (GU-12239) | 3 | Ulna, long bone, vertebra | 2455 | 35 | 770–400 cal BC | | | –20.6 |
| GU-1410 | 6 | Femur | 2415 | 80 | 790–390 cal BC | 110 | 800–200 cal BC | –20.9 |
| SUERC-4073 (GU-12242) | 6 | Femur | 2380 | 35 | 760–380 cal BC | | | –21.7 |
| SUERC-4084 (GU-12253) | 6 | R Femur | 2400 | 35 | 760–390 cal BC | | | –21.2 |
| SUERC-4412 (GU-12244) | 8 | Long bone and cranial fragments | 1705 | 40 | cal AD 240–420 | | | –23.6 |
| GU-1412 | 9 | Femoral head | 2300 | 125 | 800–100 cal BC | 175 | 800 cal BC–cal AD 50 | –21.6 |
| SUERC-4074 (GU-12245) | 9 | Pubis | 2435 | 35 | 770–400 cal BC | | | –21.0 |
| GU-1414 | 13 | Leg frags | 2040 | 180 | 550–450 cal AD | 250 | 800 cal BC–cal AD 600 | –20.8 |
| SUERC-4088 (GU-12254) | 13 | Petrous temporal | 2450 | 35 | 770–400 cal BC | | | –20.8 |

left side the head was placed to the north, whereas in two of the three cases where the body was laid on its right the head was to the south, the exception being the outlying B12. All the bodies in the west half of the site had thus been interred facing east, and this consideration would seem to have formed an important part of the burial rite.

The burials were sealed beneath stone backfill, apparently placed directly over the bodies (illus 49; illus 50). Because these fills did not represent quarry spoil from the digging of the pits they must have been brought from elsewhere. There was no evidence to suggest how, if at all, the graves had been marked above ground. Plough-truncation would have removed any traces of surface features, particularly unobtrusive features such as low mounds of soil or stones.

The lower molar of a sheep was found in Burial 3, and indeterminate fragments of bone derived from the fills of Burials 2 and 12. A worn fragment of cannel coal working debris was recovered from Burial 2 (Section 8.6, SF 220), and a worked stone was found in Burial 12 (Section 8.2, Cat no 37). The cannel coal debris derived from an upper fill and is unlikely to have been a deliberate introduction to the grave. It has not been possible to establish the precise contexts of recovery of the molar and worked stone, and it is therefore not known whether they represent deliberate or accidental introductions.

**Stratigraphic relationships** In several cases the graves had important relationships with other structural elements. All four graves identified along the outer enclosure boundary appear to have been dug after the palisade was constructed. Two (B7, B13) had been excavated immediately outside the alignment of the palisade trench (illus 50; illus 51), their positions surely guided by its presence. B1 had been cut directly across the line of the palisade trench (illus 49), an event that probably occurred after the removal of the palisade. B14 clipped the edge of the palisade trench (illus 52), and could have been excavated either when the stockade was upstanding or after its removal. The latter interpretation seems more likely due to the destabilizing effect the cutting of the grave pit would have had on the palisade through the disturbance of its foundation packing. Elsewhere, B8 was clipped on its north side by a curvilinear ditch (F2, illus 3, f), and this latter feature was in turn cut by the porch of House 3. Thus, in most cases the interments post-dated the



*Illus 49 Burial 1; cut across partly excavated outer enclosure palisade; from south-west*

*Illus 50 Burial 7 and palisade trench; half-section; with partly excavated outer enclosure palisade trench to left (south)*

outer palisade trench but B8, uniquely, pre-dated at least two constructional phases.

**Radiocarbon dates** Samples of human bone from six pit graves were submitted to Glasgow University for radiocarbon dating in 1980. Owing to concerns over the precision of these dates, and through a desire to date as many elements of the site as possible, additional samples from seven graves were submitted for dating to SUERC (see Section 2.2.3 for discussion of the rejection of an intermediate set of dates). All results returned are collated in Table 11, with calibrations obtained by SUERC using OxCal v 3.5 (Bronk Ramsey 2000).

Due to the substantial errors attached, most of the original determinations are largely unrewarding,

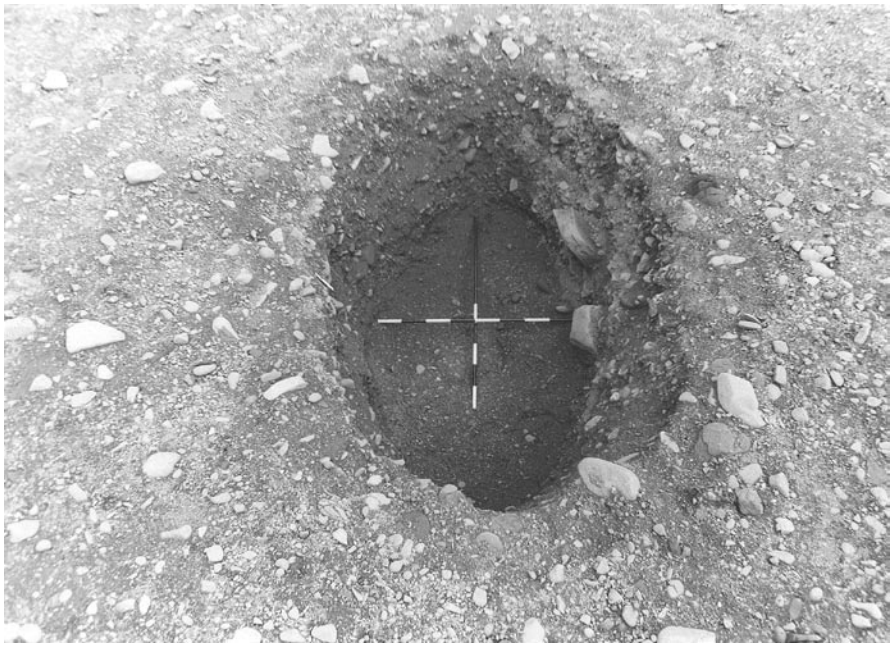
*Illus 51 Burial 13; showing preserved human remains; with outer enclosure palisade packing partially visible top right*

*Illus 52 Burial 14; truncating outer enclosure palisade (with packing left in situ); from north-west*

using the adjusted ranges the best being a wide range of 550 cal BC to cal AD 100 for Burial 1 (GU-1149). The recent dates have provided narrower ranges that in most case fall within the wide ranges provided by the initial dates.

With one exception the recent set of dates are consistent, and indicate that the individuals buried within Burials 1, 2, 3, 6, 9 and 13 lie within the period 800–400 cal BC. This wide range reflects the flattening of the radiocarbon calibration at this period, and is not capable of tightening. As a result it is not possible to use the radiocarbon dates to estimate the length of time that the cemetery was in use, or to attempt to chart where the origins of the cemetery lay and how it expanded spatially over time.

The date obtained from Burial 8 (SUERC-4412) is radically different from the others, with a calibrated age range spanning the early third to early fifth centuries cal AD and a $\delta^{13}C$ value at variance with other dated samples (and also a $\delta^{13}C$ value obtained from a different bone from the same burial, Section 9.3, Table 18). However, the grave is of very similar character to the others, and had been cut by later phases of Iron Age settlement



*Illus 53 One of the large pits to west of Houses 7 and 8*

activity. For these reasons, and because there are no other features or artefactual evidence of comparable date found anywhere else at Dryburn Bridge, it is the author's view that this date is likely unreliable, although the subjectivity of that statement is accepted.

## 7.7 Boundary lines (illus 3)

As discussed in relation to the rectangular structures (Section 7.5), there is a danger in reconstructing boundary lines from scatters of pits and post-holes that the interpretative task of joining the dots will create boundary features that never existed. The opportunities for such excesses at Dryburn Bridge are manifest. Nevertheless, there are certain features that stand out as representing boundary lines of varying character. Other possible alignments do catch the eye, but are considered less credible, although of course their significance may become apparent to future researchers reconsidering the excavation results.

### *7.7.1 Fence-line associated with House 7 (illus 3, a; illus 36)*

The foundation slot of a fence-line (K5) runs around the south and east sides of House 7. The slot was preserved to 0.5m wide by 0.2m deep to the south-west, decreasing towards the north-east to 0.3m wide by 0.1m deep. This feature was interpreted in the interim report (Triscott 1982, 123) as skirting the collapsed remains of House 7. There is, however, no stratigraphic evidence to support such an interpretation, and it is also possible that the feature represents part of an enclosure around the roundhouse during its occupation. Indeed, the fence-line may well have articulated with the entrance passage to House 7 (illus 36). Lumps of iron slag and a hone (coarse stone, Cat No 70, illus 60) were recovered from the fill of the foundation slot.

A mixed sample of charcoal (hazel, birch, willow, alder) from the slot was submitted for radiocarbon dating. Using the adjusted errors proposed previosly (Ashmore *et al* 2001) a date calibrated at 2-sigma to cal AD 0–600 was returned (GU-1285; 1730 ± 55, adjusted to ± 110). Reservations must be attached to the meaning of this date given the taphonomy of the sample, which raises the possibility that the determination represents an average of material of different dates (cf Ashmore 1999).

### *7.7.2 Pitted boundaries articulating with House 8 porch (illus 3, b)*

Alignments of closely-spaced pits extended north-east and south-west from the outer end of the entrance to House 8, and may be interpreted as a pitted boundary line associated with this roundhouse. To the north-east it is possible that the pitted boundary turned north-west to abut the south side of House 3 (at pit E1), whereas to the south-west it may have articulated with feature M69 or have turned more sharply to the west (to pit M5). The pits were up to 1.5m across in surface dimensions.

Finds from the features of this pitted boundary include pottery from pit E1 (Cat Nos 56–58; see illus

58 for Cat No 56), and animal bone and an oil shale bead from M1 (SF657, Section 8.6, illus 62).

#### *7.7.3 Pitted boundary north-west of House 7? (illus 3, c; illus 53)*

At least six large oval pits, attaining over 2m in length, 1m wide and over 1m deep, formed a curvilinear alignment running to the north-west of House 7. They contained sterile sand and gravel fills, possibly deliberate backfill, although the excavator noted that pea grits in their bases suggested that they had been left open for at least a short while. It is possible to interpret these features as components of a pitted boundary comparable to that associated with House 8, and they may even have defined a garden plot around House 7, articulating to the south with fence-line K5. The size and steep-sided profiles of the pits might commend them as grave-pits. However, their lack of burial remains, combined with their lack of a common alignment, argues against this.

#### *7.7.4 Fence-line north of House 9 (illus 3, d; illus 30)*

A *c* 11m long line of seven pits on a WNW/ESE orientation to the north of House 9 may represent the foundations of a fence-line. Its alignment ran parallel to that of rectangular structures A–C, which lie *c* 4m away. There were no finds from these pits.

#### *7.7.5 Fence-line east of House 9 (illus 3, e)*

A sinuous line of shallow post-holes was detected on a north/south alignment. These extended over a length of *c* 15 m, terminating at their north end beside rectangular structure C. The alignment trended across the palisade trench of the outer enclosure, in its centre apparently incorporating two lines which ran to either side of the palisade slot and apparently respecting its alignment. There were no stratigraphic links between the post-holes and the palisade slot. Therefore the phasing and structural associations of this fence-line remain uncertain, although it does not appear to have been contemporary with the outer enclosure. There were no finds from the component features of this fence-line.

#### *7.7.6 Feature F2/F3 (illus 3, f)*

A *c* 8m long stretch of shallow ditch (F2), *c* 0.4m deep, was located running in a distinct curve north-east/south-west to the south-east of House 3. It had truncated Burial 8, and was itself cut through by the porch of House 3. An adjacent section of slot (F3) may be related to it. This structure may be no more than the foundation of a windbreak or shelter, as opposed to a fence-line. There were no finds from these features.

#### *7.7.7 Feature O36 (illus 3, g; illus 47)*

A stone-packed slot, *c* 10m long by 0.4–0.6m wide, ran roughly north/south within the southern interior of the outer enclosure. It appeared to represent the foundation for a length of fence or palisade, although its structural associations are unknown. It intersected the corner of rectangular structure F, and was secondary to it. Pottery (Cat Nos 14–15 & 68) was recovered from this feature.

### 7.8 Miscellaneous features of interest

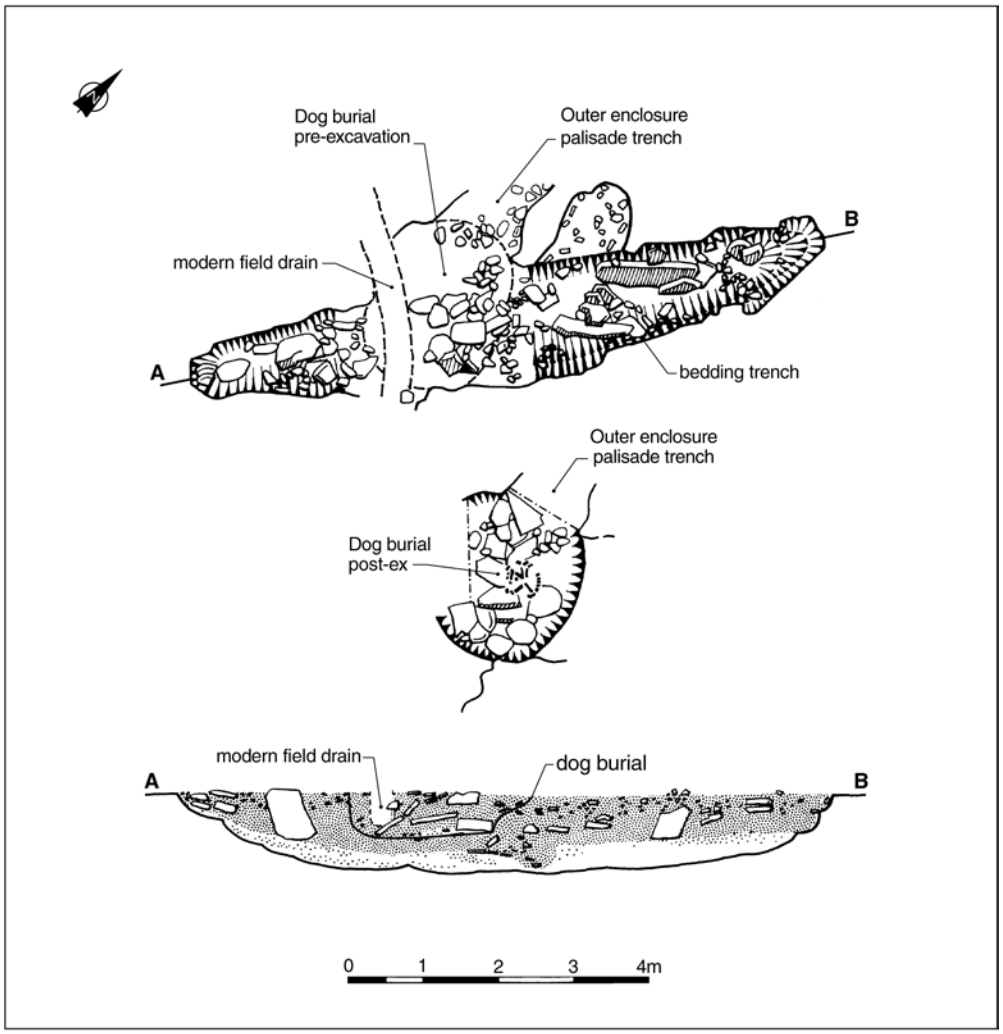
The southern half of the excavated area contained in places a dense scatter of pits and post-holes, many of which did not have clear structural associations or provide any evidence as to their date or function. Full details of these are lodged with the site archive. However, within this group are a small number of features of notable interest.

#### *7.8.1 Feature M69 and intercutting remains (illus 54; illus 55)*

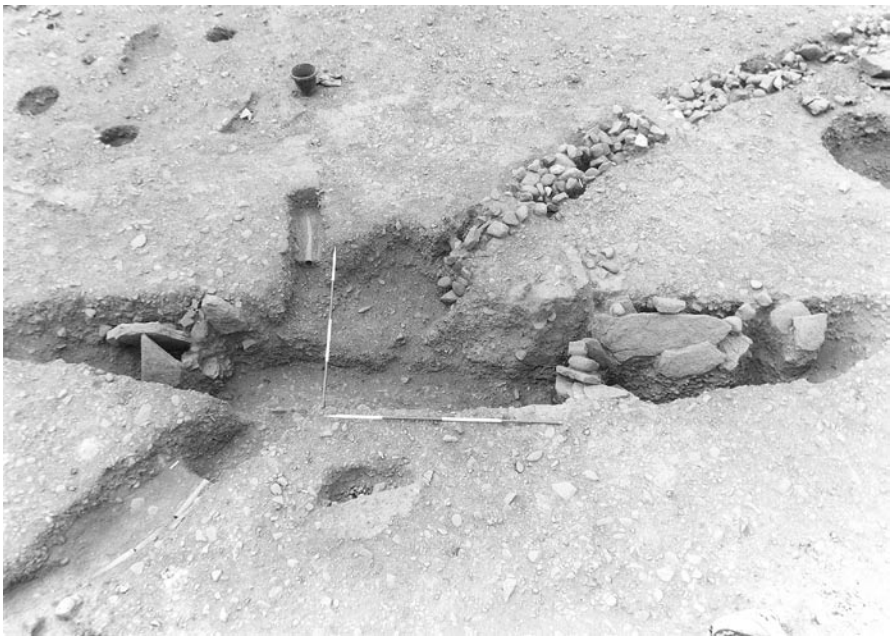
Feature M69 represents one of the most complex stratigraphic sequences identified at Dryburn Bridge. It was an elongate pit *c* 8m long on a north-east/south-west alignment. It measured 1.5m wide in the centre, narrowing to 0.8m at each end. It had very steep side-walls, shallower ends, particularly at the south-west, and a narrow rounded base, *c* 1m deep. Its fill comprised a series of cobbles, upright stone slabs and soil fills. The former could have related to internal fitting or partitions, but were not clearly interpretable. Although there was no artefactual or ecofactual evidence to support an interpretation of the function of this feature, it was comparable in terms of its size and profile to the small Dalladies-type souterrains excavated recently at Dubton Farm, Brechin (Cameron 2002).

This feature intersected the boundary of the outer enclosure. Unfortunately the stratigraphic relationships between the two had been obscured, at the north intersection point by the later insertion of a dog burial and at the south by the course of a modern field drain. However, in the latter case, it appears likely that pit M69 had truncated the palisade trench (illus 55). The position of M69 between the fence-line associated with House 7 to the south-west and the pitted boundary associated with House 8 to the north-east raises the possibility that the structure was incorporated into a boundary line associated with those ring-ditch structures.

The dog burial (M43) had been cut into feature




*Illus 54 Feature M69 and later dog burial M43; plans and section*



*Illus 55 Feature M69; showing excavated profile; from east*

*Illus 56 Stone-lined pit M5*

M69 after it had been fully filled in. A sub-rectangular pit measuring 2m by 1.8m, and 0.5m deep, had been excavated, and the remains of a dog had been placed in the base of the pit on a carefully laid floor of stone slabs. The burial pit had been cut through the palisade slot of the outer enclosure, and was demonstrated to be secondary to it. The dog burial had itself been cut through by the modern land drain.


*Illus 57 Pit O48 showing partly exposed antler*

A significant assemblage of artefacts was recovered from the fill of feature M69 including coarse pottery (Cat Nos 31–35), an iron sickle (SF658, Section 8.4, illus 62), a sherd of Roman glass (Section 8.5, illus 62), an oil shale bangle fragment (SF681, Section 8.6, illus 62), and a collection of chipped stone pieces including five microliths. A sherd of pottery was also recovered from the filling of the dog burial (Cat No 62).

A vertebra from the inhumed dog was submitted for radiocarbon dating. This produced a result with a 2-sigma calibrated range of cal AD 80–320 (SUERC-4939/GU-12564; 1830±40). This indicates a Roman Iron Age date for the dog burial. This is consistent with the recovery of Roman glass from feature M69.

### *7.8.2 Pit M5 (illus 3; illus 56)*

A little to the north of pit M69 was a distinctive deep pit measuring 1.6m by 1.2m. Above basal sandy fills, the pit had been lined with a neat arrangement of slabs. In the absence of any evidence of burning, this slab-lined feature may best be interpreted as a small working hollow (cf Russell-White 1995, 14 for a larger such feature at Wardend of Durris, Aberdeenshire).

While the feature itself was not particularly noteworthy, it contained several bronze sheet fragments, iron tool fragments and bronze artefacts, within the fills sealed beneath the paving. Very few metal items were found at Dryburn Bridge (Sections 8.3 & 8.4), and thus the concentration from this feature is striking. However, there was nothing to suggest that the pit was in any way associated with the manufacture of metal items.

### *7.8.3 Pit O48 (illus 3; illus 57)*

This large pit measured 4.5m by 2m in surface extent, and was 0.6–0.7m deep. It contained a sequence of earth and stone fills, but not evidence of *in situ* structural remains. A considerable range of artefacts came from the pit. These included pottery (Cat No 59), saddle-quern uppers (Cat Nos 16, 20, 25; see illus 59 for Cat No 20), polished stones (Cat Nos 54, 66–67), fuel ash slag, and antler items (the larger piece partly exposed on illus 57), animal bone, and chipped stone including a microlith. This feature was interpreted during the excavation as a rubbish pit and it is admittedly difficult to find a better explanation. This pit appears to have been too steep-sided and deep to have been used as a working hollow.

A sample of the larger antler was submitted for radiocarbon dating. The result returned (SUERC-4938/GU-12562; 2320 ± 40) has a 2-sigma calibrated range of 490–200 cal BC, but an approximately 80% likelihood of falling within the range 490–350 cal BC.

### *7.8.4 Curvilinear feature O76 (illus 3; illus 29)*

This curvilinear section of shallow ditch measured 9m long by up to 0.8m wide, being nowhere in excess of 0.25m deep. As discussed above (Section 7.2.4), it intersects the area of putative House 10, although it is highly unlikely that the two co-existed. Its form on plan bears superficial similarity to the ring-ditches characterizing Houses 3, 7 and 8. However, in the absence of either paving or associated structural remains, this interpretation can be rejected. On plan the feature also resembles a souterrain, but the depth of this feature, even accounting for plough-truncation, allows such an explanation to be rejected. Similarly, its spatial relationship with fence-line O36 (illus 3, g) might suggest that two combined to form part a paddock within the south end of the outer enclosure, although this also seems unlikely given their differing character. Pottery (Cat No 73, illus 58), a saddle-quern fragment (coarse stone, Cat No 29) and iron slag were discovered in the sandy fill of this feature.