3

THE EARLY IRON AGE SETTLEMENT
DEVELOPMENT TO ROUNDHOUSE AND BROCH

The earliest Iron Age phases on the site (Phases 3–6, illus 3c–d) follow a chronological break after the Neolithic (Phase 2), bridged only by the deposition of fragments of two Beaker vessels. Activities on the site over this period, from the 6th century BC to the start of the first century cal AD, cover the two main areas of the original tomb mound and the outlying ditch. Three main events took place in the area of the tomb mound: stone was robbed from the central cairn and entrance passage of the Phase 2 tomb; a roundhouse was constructed over the remains of this tomb and, finally, the collapse and demolition of the roundhouse was followed by the construction of a broch, Broch 1. Within the area of the Phase 2 tomb ditch, four main events could be recognized: an enclosure gully was dug into the upper fills of the ditch which were Iron Age in date; this gully was then replaced by another similar gully backed by a stone wall; partial replacement of the second gully and wall by a clay-cored rampart and rock-cut ditch was followed by numerous modifications to this rampart and ditch.

Between these two main groups of contexts lay the scattered and fragmentary remains of successive contemporary settlements. Most of the Iron Age structures occurred to the S of the old tomb mound. There is no evidence for major breaks in the occupation sequence of the settlement between Phases 3–6 and it has therefore been assumed that these phases represent stages in the development of a single Iron Age settlement whose plan remained consistent through to Phase 7.

3.1 • THE STRUCTURAL EVIDENCE • PHASES 3–6

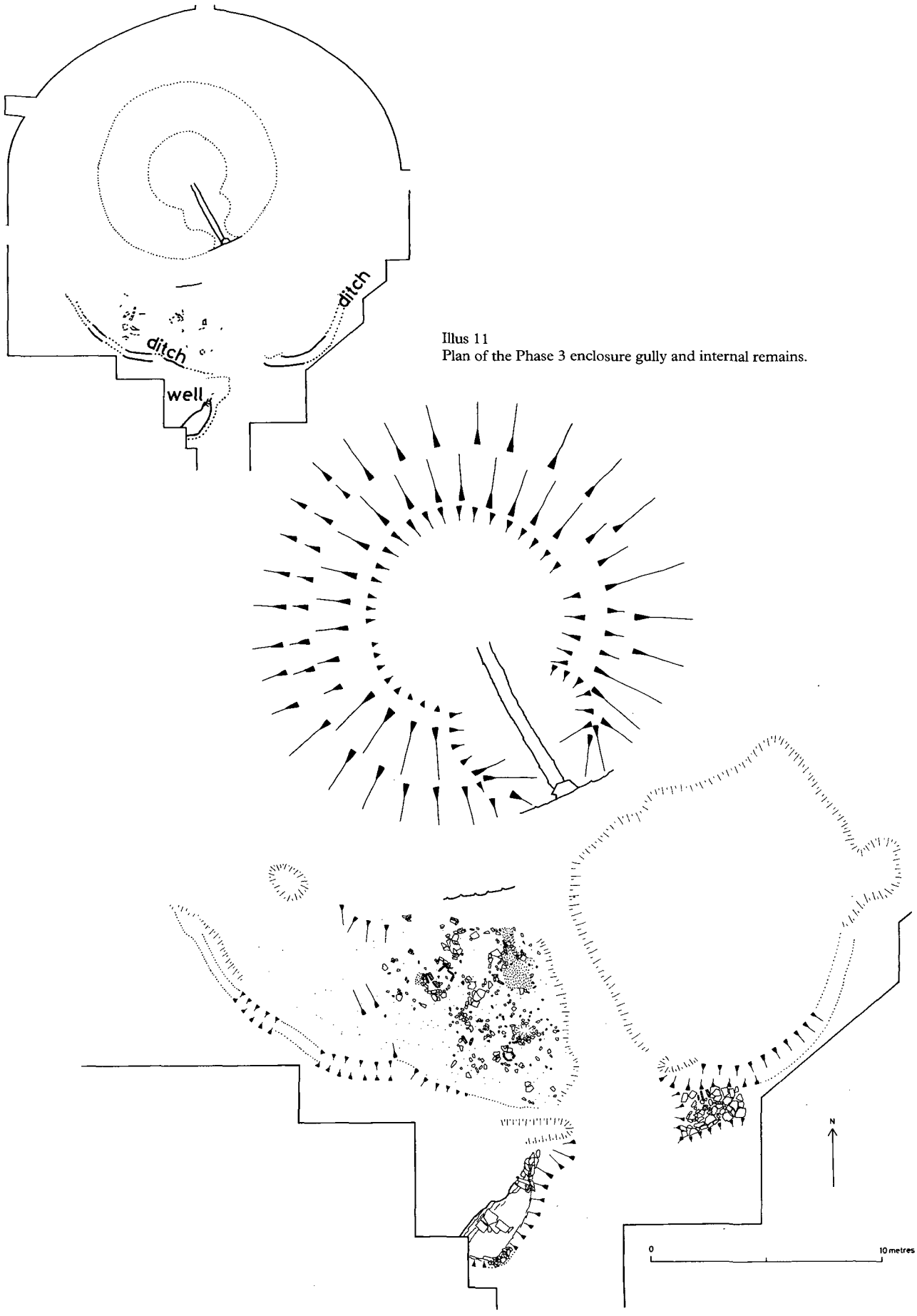
Those contexts that can be assigned to Phases 3–6 fall into two main groups which were rarely linked stratigraphically: the tomb mound and the defences. These deposits and structures, which precede the well-preserved Phase 7 settlement, are difficult to organize into clear constructional phases. This was due to repeated levelling which had destroyed most of the structures and removed the stratigraphic links, and incomplete excavation of the ramparts which made it difficult to correlate information from the excavated sections. The organization of Phases 3–4 was based therefore on a number of key sequences and stratigraphic links. Phases 5 and 6 cover the two superimposed, similar massive circular structures, the roundhouse (Phase 5) and Broch 1 (Phase 6), set into the centre of the Phase 2 tomb which had been destroyed preparatory to the construction of the roundhouse.

3.1.1 • PHASE 3 • THE EARLIEST IRON AGE EVIDENCE

Phase 3 (illus 11) is characterized by the filling in of the Phase 2 ditch and the partial demolition of the Phase 2 tomb. A small ditch or gully was dug which encircled the tomb mound and contained an entrance or causeway to the S. Beyond this enclosure, a rock-cut well was dug also to the S. There is evidence of contemporary structures within the enclosure, but the remains were slight.

In the silts and midden debris which developed over the filled in Neolithic ditch, was found evidence of the domestic activity on the site including the first incidence of a rotary quern, and bones from domestic cattle, sheep/goat, pig and also from red deer and whale. The midden also produced the earliest evidence for the cultivation of barley.

This earliest phase of the Iron Age is dated to within the 6th and 5th centuries BC.



Illus 11
Plan of the Phase 3 enclosure gully and internal remains.

STRUCTURES

Phase 3 includes all the Iron Age contexts that predated the construction of the enclosure wall and second gully of Phase 4. It may therefore cover a long timespan for which we have very little information.

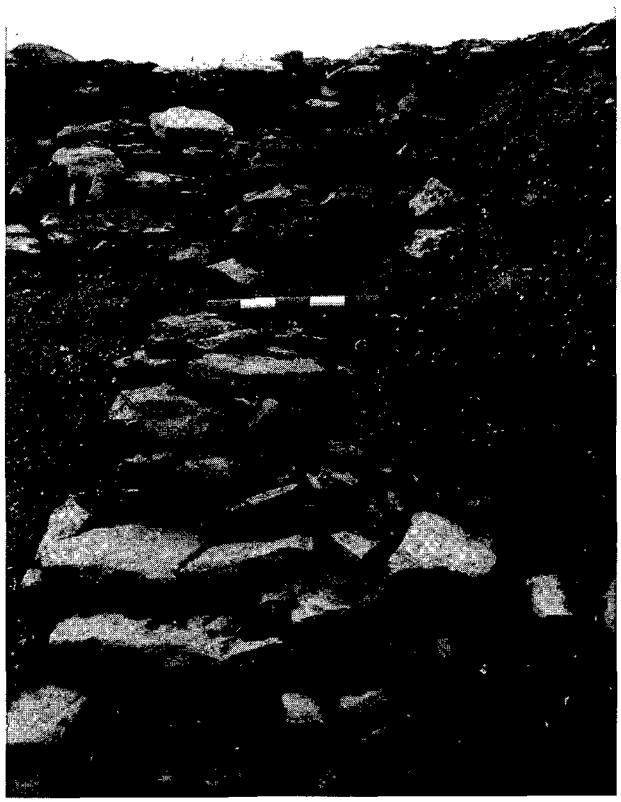
The earliest Iron Age deposits were the upper fills of the Phase 2 tomb ditch on either side of its entrance. They consisted of rubble overlain by clays and silts as well as some silts which were notably rich in midden material. The rubble within the ditch had presumably derived from the Phase 2 tomb and appeared to have been tipped in from both the outer and inner sides. This suggests that it had been deliberately tipped rather than being the debris from the collapse of the adjacent tomb facade. Further evidence suggesting that stone had been robbed from the tomb came from sections cut through the tomb ditch on the N and NW. These failed to show any rubble from the adjacent tomb outer revetment wall, of which only a few courses survived. Had the revetment collapsed into it the ditch should have contained a mass of clay and rubble. As it was, the ditch contained layers of silt which had built up until the start of Phase 3 when the rubble was dumped into it. This suggested that the tomb remained largely intact at the start of Phase 3, and this was supported by the fact that most of the ditch fills at the tomb entrance were Iron Age, showing that little material had come from the tomb before this time. The removal of at least the upper courses of the outer revetment wall would have exposed a vertical face of the boulder fill of the clay mound which would then have rapidly eroded, contributing to the clay and silt layers that filled the tomb ditch during Phase 3.

By the start of Phase 5 most of the tomb stonework had been removed leaving only the lowest courses of the revetment walls, the entrance passage and the central cairn, however one piece of evidence suggests that the central cairn was not robbed until Phase 5. The inner end of the entrance passage within the central cairn was left intact although all the stone was removed from around it. This was unlikely to have been accidental and suggests that the Phase 5 plan to reuse the passage (see below) had been decided before stone was robbed from this part of the tomb. If this argument is correct, the Phase 3 and 4 robbing must have been limited to the outer walls and the outer section of the entrance passage, which unlike the inner end had been much reduced. It was however impossible to separate those parts of the tomb that had been robbed in Phase 3 from those in robbed in Phase 4.

Building stone was clearly in demand at the start of Phase 3 but evidence of structures was minimal. The presence of midden rich silts in the ditch overlying rubble indicated the existence of a settlement, yet no structures had survived unless the well was contemporary (see below). A pit cut into, and filled by these early midden layers, was found over the W ditch terminal. The only surviving Phase 3 structures were a well, an enclosure gully cut through the midden deposits, and fragments of house floors overlying them.

THE WELL

The well had been largely destroyed by Phase 5 ditch digging, but the rock cut base, access steps and some side walling survived (illus 12a). It had been dug through a ground surface containing Iron Age material but it cannot be linked stratigraphically to other Phase 3 features; however, the existence of another well by the start of Phase 4 implies that it had a Phase 3 date. The base of this well was filled with silts overlain by rubble (illus 12b).



Illus 12
a) The Phase 3 southern well steps outside the enclosure; scale – 50cm; from S;
b) the Phase 3 rock-cut well under the later defences; scales – 1m & 2m; from E.

THE GULLY

The gully was revealed only to the S of the mound due to the partial excavation of later ramparts. It appeared to enclose the mound, 7.5m–9.5m from its base and probably did so, as did its Phase 4 replacement. It survived up to 1m deep and included a 4.5m wide entrance gap. The position of this entrance was maintained throughout Phases 4, 5, 6 and 7 and was evidence of some continuity in the layout of the settlement. There was no evidence for a contemporary wall inside the gully as there was with the similar Phase 4 gully but one may have been completely removed.

THE REMNANT HOUSES

The surviving fragments of houses all lie within the enclosure gully and included a tank and two successive hearths but the extent of the settlement was not known. It was reasonable to suggest that the settlement that developed in Phase 3 was reorganized within the enclosure gully later in that phase forming the earliest version of the enclosed settlement of Phases 4–7. The internal arrangement of the settlement in Phase 3 was unknown.

3.1.2 • PHASE 4 • DEVELOPMENT OF THE ENCLOSED SETTLEMENT

The Phase 3 settlement was reorganized in Phase 4 (illus 13) and the encircling ditch was recut. In addition, it now supported a stone wall on its inner edge which entirely encircled the Phase 2 tomb mound, but the causeway position was retained. The Phase 3 well had collapsed or been destroyed, causing the construction of a new well or cistern within the E half of the enclosure, possibly at the end of Phase 3 or the very beginning of Phase 4. At least three houses were constructed within the defences during this phase.

Artefactual evidence produced a range of stone and bone tools and the first incidence of dog and horse on the site. From C14 dates the phase lies within the 5th to 4th centuries BC.

STRUCTURES

THE GULLY AND ENCLOSURE WALL

The start of Phase 4 was marked by the levelling of the Phase 3 settlement and the replacement of the Phase 3 gully by another similar gully on approximately the same alignment. This new gully was backed by a stone wall which encircled the tomb mound. This enclosure wall had survived under later ramparts up to 1.1m high, but was reduced to fragments of foundations elsewhere, when the settlement was cleared at the start of Phase 5. Those sections buried under later ramparts on the N and W sides appeared to be of one build but on the S and E where it had been abutted by contemporary structures, the surviving fragments had been rebuilt on more than one occasion. The wall was not concentric with the tomb mound, lying up to 8.4m from it in the S but only 4.8m on the NW. The entrance gap in the gully matched that in Phase 3 but the wall had not survived at this point so there were no details of the actual gateway.

REMNANT HOUSES

Within this wall were the levelled remains of at least three houses. Two of these lay to the W of the entrance gap and the third was on the E side next to the Phase 4 well.

Only two walls belonging to buildings within this settlement had survived, making the remains of the floor plans difficult to interpret (illus 14). The floors included hearths, small tanks, areas of flags, packing probably for orthostat screens and a soakaway.

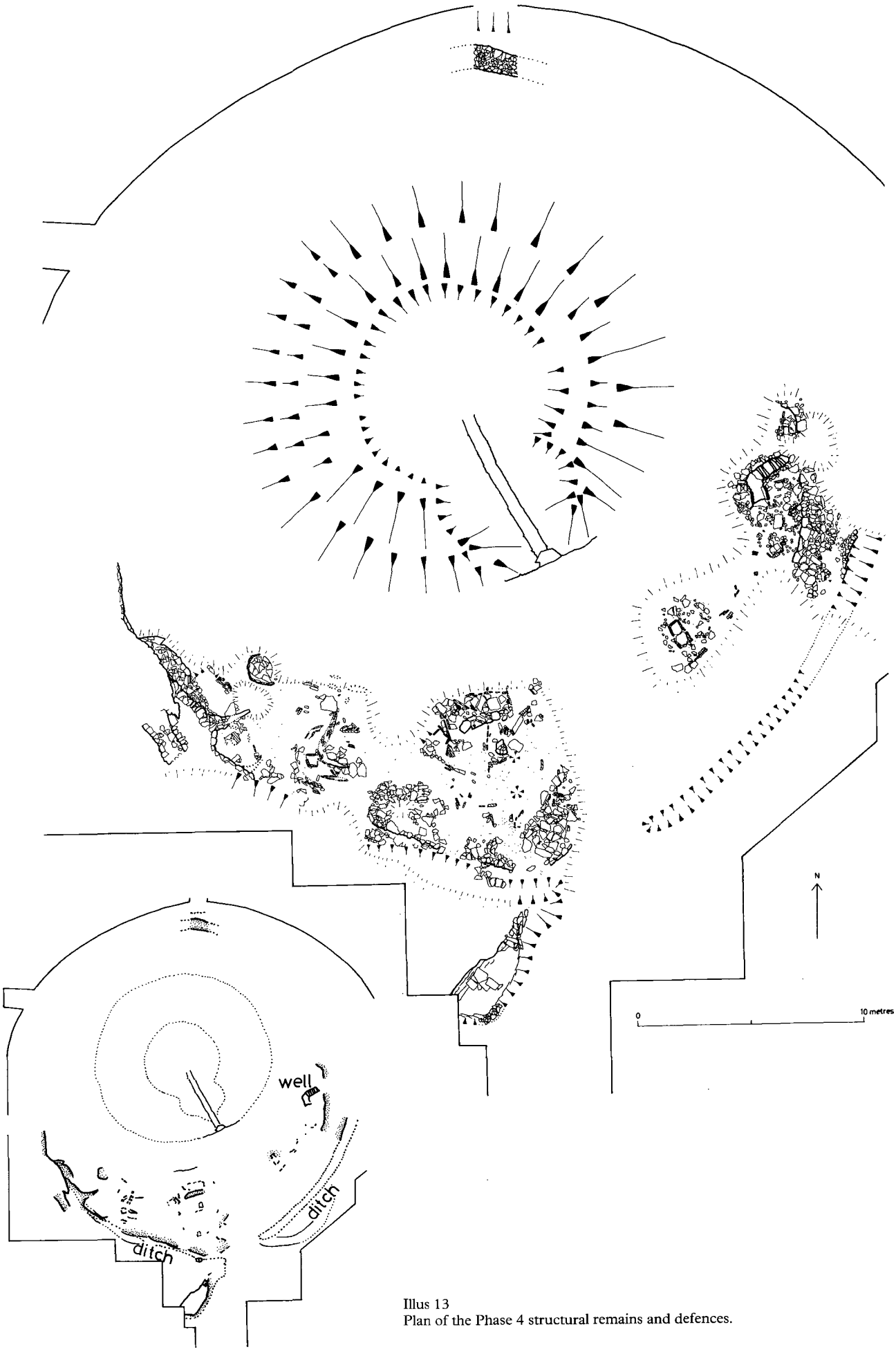
THE PHASE 4 WELL

The well on the E side of the settlement had survived intact with a complete corbelled roof. The fill of the pit dug for the well chamber was overlain by the Phase 4 enclosure wall. This well must therefore have been built either at the start of Phase 4 or late in Phase 3 (possibly to replace the earlier well after the digging of the Phase 3 gully). This second well was accessible until the end of Phase 6 and as no other wells have been found on the site it was probably in use until that time. The finds recovered from its silt included the substantial remains of four red deer skeletons (7.3 Animal bone report below). These are unlikely to have been placed in the well until it went out of use and have therefore been considered as Phase 4–6 material.

3.1.3 • PHASE 5 • THE ROUNDHOUSE SETTLEMENT

The start of Phase 5 was defined by a major reconstruction of the settlement (illus 15) that had developed during Phases 3 and 4. This involved the levelling of both the houses and the adjacent sections of enclosure wall to the S and E of the mound. These were replaced by a large clay-cored, stone-faced rampart and rock-cut ditch which abutted the Phase 2 tomb mound and enclosed a thick-walled roundhouse, built into the tomb mound. Other than the roundhouse itself, no remains of houses could be definitely ascribed to Phase 5, although fragments structures from contexts placed within Phase 5/6 (see below) were located in the SW of the settlement.

The position of the causewayed entrance was maintained and formalized with a gate. The interior of the tomb was cleared out, and an earthhouse with an entrance shaft was built into the underground Neolithic cell (illus 8c). A drain was constructed from the roundhouse entrance, across the enclosure to exit at the E ditch terminal.



Illus 13
Plan of the Phase 4 structural remains and defences.

Illus 14
The Phase 4 building foundations within the enclosure; scales – 2m; from S.

The new design of settlement and defences was to be modified on many occasions before the major reconstruction at the start of Phase 7. Features assigned to Phase 5 were only those considered to have been part of the original design of the Phase 5 settlement.

Radiocarbon dates suggest that the roundhouse was built some time within the 4th to 3rd centuries BC.

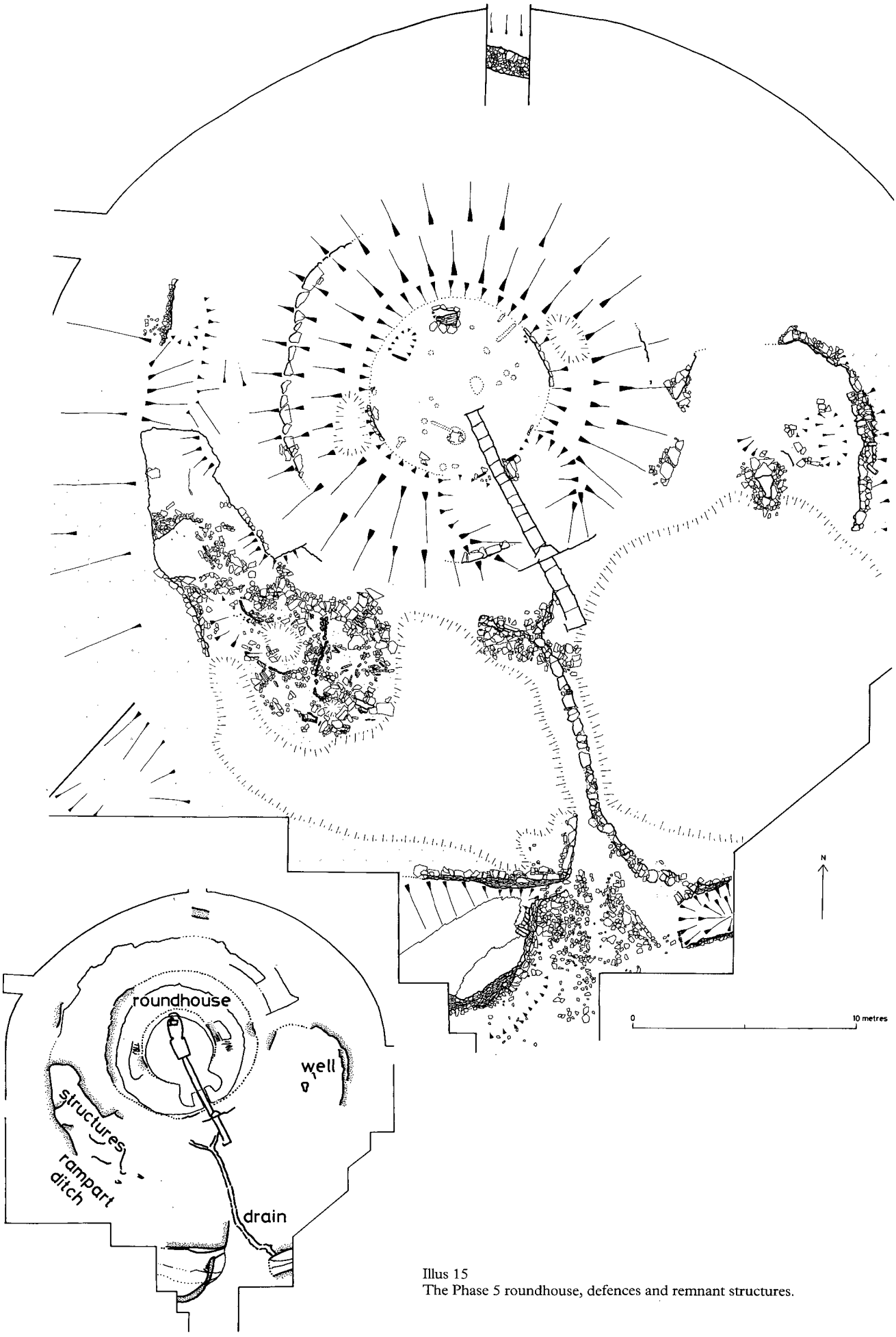
STRUCTURES

THE ROUNDHOUSE (illus 15)

The roundhouse was constructed over the remains of the Phase 2 tomb after the interior of the mound had been levelled with clay. Its walls were built on the tomb mound with its entrance aligned over the Phase 2 tomb passage. The robbing of the central cairn of the tomb was completed at this time, leaving the partially destroyed entrance passage and an 8m diameter quarry hole where the cairn had been.

Little remained of the roundhouse itself (illus 16), only fragments of the outer and inner wall faces, approximately 4m apart. The interior was subsequently cleared in Phase 6; some floor deposits survived under clay slips beside the inner wall face but most were mixed with the Phase 6 floor. The bases of two pots were found *in situ* set into the floor clay; other features survived only as cuts in this clay. These included one large rectangular pit (1.5 × 1.0m) which was apparently originally stone-lined and extended down into the remains of the tomb masonry. Other cuts appeared to be post holes and slots for stone partitions.

Nothing remained of the roundhouse entrance passage except for parts of its junction with the inner wall face. Two thin uprights, 1.1m apart, were set in position to form door jambs at the inner



Illus 15
The Phase 5 roundhouse, defences and remnant structures.

Illus 16
Phase 5 roundhouse clay floor; the earthhouse shaft is in the bottom right corner, with remains of the roundhouse walls to the top right and bottom left; scales – 2m; from E.

end of the entrance passage. On the E side, the upright was abutted by a wall face which formed the side of the drain (tomb passage) at this point. This presumably supported the roundhouse wall above it.

THE EARTHHOUSE, CIST AND DRAIN

THE EARTHHOUSE

The lower central chamber of the Phase 2 tomb was exposed and then doubled in size, by the addition of an extension on the N side to form a rectangular earthhouse (illus 8c; 17; 18). This was roofed with large flags supported on stone pillars which were covered with some sort of skin (7.2 Plant Report below).

A shaft with steps connected the earthhouse to the floor level on the N side of the roundhouse interior (illus 16). Although the earthhouse had survived intact until its excavation in 1982, it was found to be empty and clean; it was reused in Phases 6 and 7, and therefore its condition on excavation reflects its use in Phase 7 and not Phases 5 or 6.

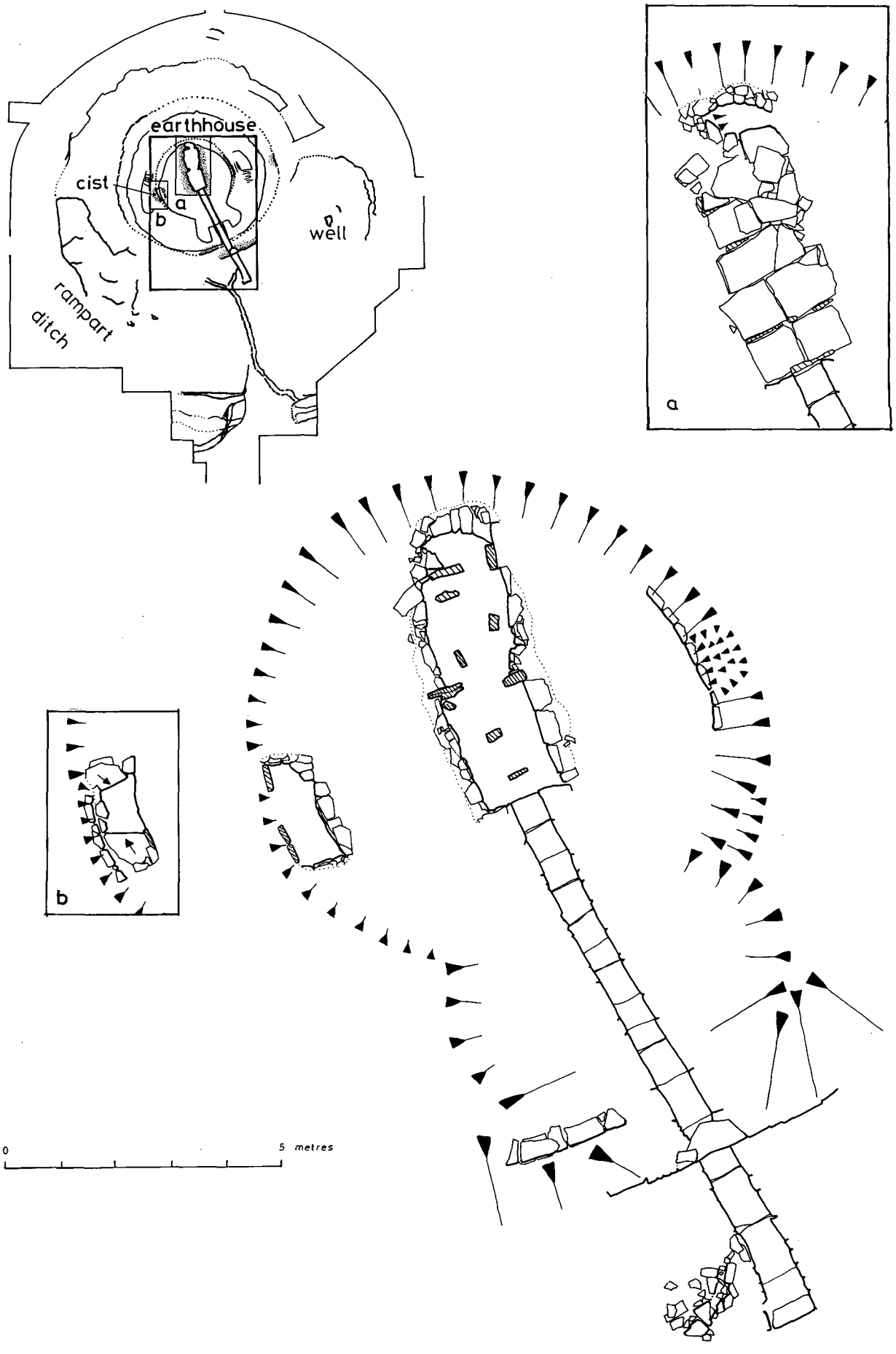
THE CIST

At the same time as the construction of the earthhouse, a cist-like structure (illus 17b) was cut into the remains of the tomb inner revetment wall on the W side of the quarry hole. It measured 2.0 × 0.8m and was 0.4m deep with a flag lid which was found collapsed into it. Nothing was found in the cist which underlay the inner wall face of the roundhouse; it may have been a foundation burial but if the cist originally contained anything it had completely disappeared. At the time of excavation this feature was thought to be the collapsed roof of a chamber to the Phase 2 tomb and therefore samples of the cist fill were not collected from the uniform clay fill. A high phosphate concentration could have demonstrated the former presence of a body. Opposite the cist, on the E side of the quarry hole, was a similar gap in the Neolithic inner revetment wall but it contained no evidence of an inserted cist. This may be the site of a planned second cist that was never completed or one that was subsequently emptied and backfilled to provide a better foundation. The cist and earthhouse were buried under 1m of clay which formed the floor of the roundhouse interior. This yellow clay could have been reused from the tomb mound or come from the newly dug Phase 5 ditch (see below).

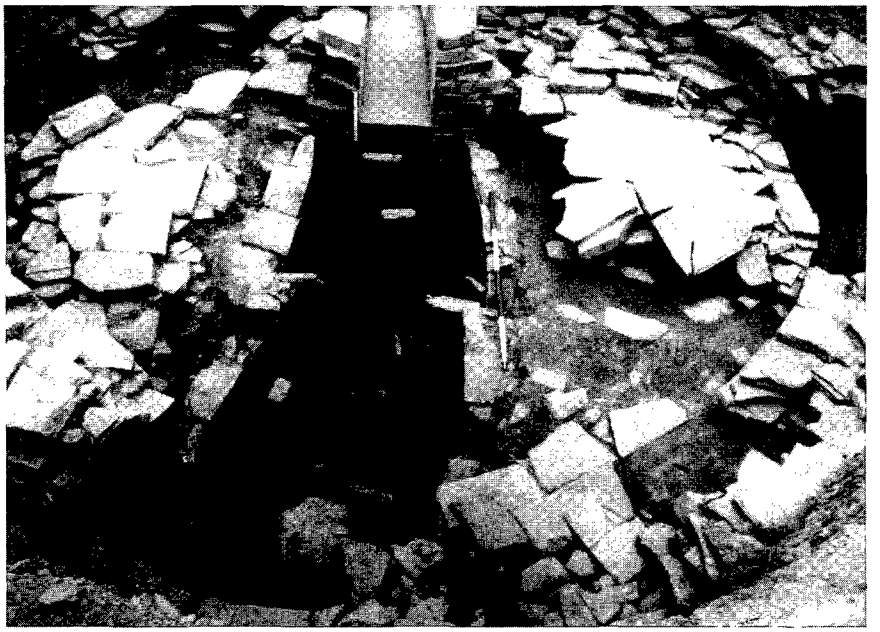
THE DRAIN

The entrance passage of the roundhouse incorporated the tomb passage as a drain beneath it, with clay replacing those sections of passage wall that had been removed in Phases 3 and 4.

The drain was extended beyond the tomb passage S through the settlement (illus 15), and into the E terminal of the ditch at the rampart entrance. Where the extension crossed the outer tomb facade, it divided and a branch led W but only the first 2.25m of this had survived. This could be an alteration to the original drain which had a negligible gradient from this junction out to the ditch and therefore could have silted up easily. However, the W branch must have drained away within the settlement but no soakaway had survived.



Illus 17
The Phase 5 earthhouse; a) details of roofing; b) details of cist.



Illus 18
a) The Phase 5 earthhouse inserted into the Phase 2 tomb shown after its roof had been removed; scales – 1m & 2m; from N;

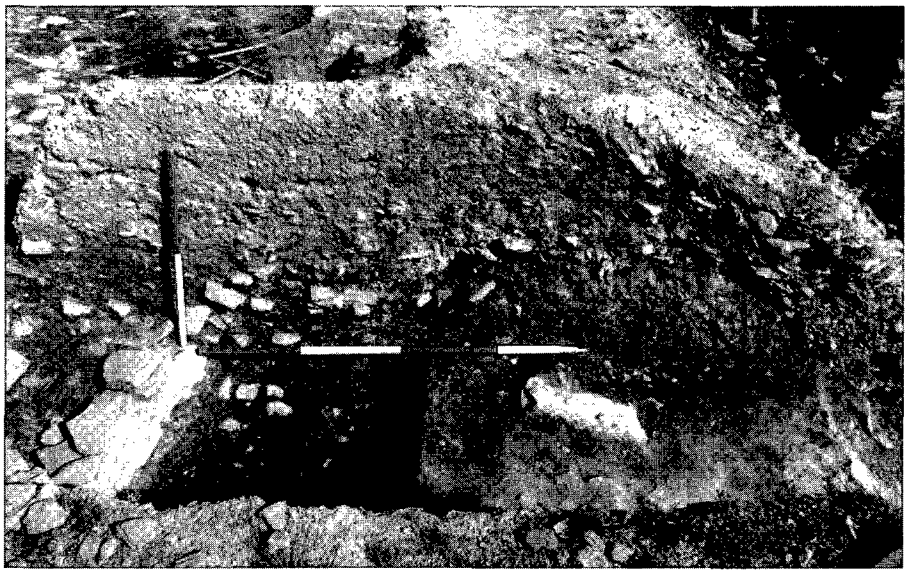
b) view inside the Phase 5 earthhouse with the pillars supporting its roof; scales – 50cm & 1m; from N.

THE DEFENCES (illus 15; 19a–c)

The rampart and ditch constructed at the start of Phase 5 are only partially understood because of subsequent rebuilding and also because of the limited excavation. On the S side, where the defences were most extensively excavated, the Phase 5 rampart had been largely destroyed and the main ditch excavation (the W terminal at the entrance) was complicated by the presence of the Phase 3 well. From the available evidence, the original Phase 5 rampart was stone-faced with a clay core; the clay was presumably obtained from the ditch which cut through yellow boulder clay into the flagstone bedrock beneath. It appeared that this rampart did not extend right round the mound, but instead turned in to meet the mound on the E and W. The evidence for this came from the W side where the rampart (formed here from a dump of shillet, capped with clay) ran over the top of the Phase 4 wall (which formed its inner face up to that point) and turned E to meet the mound.

3.1.4 • PHASE 5/6

Phase 5/6 was used to include contexts not specifically attributable to either Phase 5 or 6 but to activities overlapping these two periods, in particular remnant buildings within the defences and modifications to the ramparts.



Illus 19
a) The stone facing to the clay rampart of the ditch and defences in the SW; scales – 1m & 2m; from SW; b) Phase 5 stone ramparts and ditch SW of the entrance; scales – 1m & 2m; from SW;

c) Phase 5: section across rampart/defences in the SW; scales – 1m & 2m.

STRUCTURES

REMNANT HOUSES

Fragments of a number of structures were located in the SW of the settlement. These included a wall, hearths, kerbing and a possible tank. The demolition of the roundhouse and the building of the replacement broch in the centre of the settlement must have required widespread clearance, and any surviving structures would then have been removed before the replanning of the Phase 7 settlement.

RAMPART MODIFICATIONS

The Phase 5 rampart and ditch were extensively modified before reaching their final forms at the beginning of the Phase 7 settlement, and very little rampart work in fact belongs to that Phase. Two separate areas of the defences were excavated at the entrance and the N side of the rampart, which showed a sequence of alterations throughout phases 5/6. The entrance sequence was straight forward and represents successive shifts of the rampart outwards. Therefore no inner faces of the rampart survived but four outer ones did on the W side and two on the E side of the entrance.

The rampart on the N side was only partially excavated and was therefore not fully understood. It was fully sectioned by a 2m wide test trench in 1978–79 but this unfortunately revealed a complex junction of rebuilds. Most of the rampart inner face as revealed on the N side was Phase 5/6 in date but not all of one build. The outer face was only revealed in the test trench where it was formed by the Phase 4 wall. The earliest identified alteration to the rampart involved the junction of the rampart with the mound on the E side. This was cut

away and the rampart extended round the N of the mound over the remains of the Phase 4 wall. The original inner face on the E side was replaced by one with an orthostatic bottom course; this face was not followed as far as the test trench in which it was absent.

Subsequently, the destroyed junction of rampart and mound was replaced by a *c* 3m thick cross wall which butted the mound and rampart face. The slope of the mound was then revetted to the N of this cross wall by a stone facing presumably as part of a support for either the roundhouse or Broch 1. This was followed by a refacing of the rampart N of the cross wall masking the inner face and doubling the width of the cross wall as the new inner face turned to the mound 3.7m short of the N face of the cross wall. This inner face was partially buried by up to 1m of small rubble before the construction of Broch 2 in Phase 7. The rubble may have come from the collapse and demolition of Broch 1 at the end of Phase 6. The building of the cross wall and rampart face involved a large volume of rubble also.

The quantity of rubble available could be connected with the demolition and construction work at the start of Phase 6. It may be noted that the rampart rebuilds at the entrance all used small rubble mixed with much midden material, probably derived from the demolition of the adjacent houses. Whilst the rebuilds at the rampart entrance are clearly associated with extending the settlement outwards, the functions of the extensive alterations on the N side are not clear. However, they do indicate that the Phase 5 and 6 settlements continued for a considerable time, providing evidence which was lacking from the settlement itself.

3.1.5 • PHASE 6 • THE EARLY BROCH

After the collapse of the Phase 5 roundhouse, another roundhouse or broch was built on the same alignment, with internal staircases, entrance cells and a partitioned interior surrounding a central hearth.

The pattern of defences and settlement constructed in Phase 5 was modified during Phase 6. The rampart was extended to include the Phase 2 tomb mound, with the Phase 5 roundhouse, and was rebuilt several times. At the entrance to the site, the defences were modified, with a new rampart built into the ditch, probably to enlarge the enclosed area. The settlement was rebuilt, although little survived the subsequent Phase 7 constructions.

The surviving artefacts were undiagnostic, but both rotary and non-rotary querns appeared together, naked six-row barley was cultivated and iron and copper artefacts were present including a simple ring-headed pin of Early Iron Age type.

No radiocarbon dates relate directly to this phase, but by extrapolation from the preceding and subsequent phases it is estimated to lie within the 2nd and 1st centuries BC.

BROCH 1 (illus 20)

CONSTRUCTION

The roundhouse collapsed almost certainly because of the failure of its inadequate foundations. The outer wall face was built on the clay slope of the mound and slipped down slope under the weight of the wall. In the interior, the floor clay had settled leaving the inner wall face unsupported. Both faces collapsed and the wall was thoroughly demolished leaving only fragments of wall faces set in clay. It was replaced by a structure of similar size and complexity which because of its better state of preservation can be referred to as a broch (Broch 1).

Broch 1 had survived with an almost complete ground plan (illus 20; 21) including floor layout, despite levelling in Phase 7 and wall faces were found up to 1.6m high. The wall of Broch 1 was 3.5m thick with a projecting foundation course under the outer face. The entrance followed the alignment of the earlier roundhouse and tomb in the SE (illus 22a). The passage was 0.8m wide but only 11.1m long because of the curious arrangement of the cells on either side of it. These cells opened directly off the interior of the broch without a restricted doorway and are therefore unlike any style of entrance cell previously published. The novelty of this cell arrangement was recognized at the time of excavation and therefore a careful search was made for a conventional closed cell. However, the inner wall face clearly turned directly into the cell with no evidence of a restricted entrance passage.

The broch wall also contained two staircases with associated cells (illus 22b). These were located opposite each other on a line perpendicular to the entrance passage. The E staircase was better preserved and consisted of a short flight of six steps rising *c* 1m from the broch floor to an intramural cell. Then the main stairs ran clockwise round the wall from this cell, however only seven steps had survived rising a further 0.7m. On the W side, the lower short flight had been destroyed, but the cell and the first five steps of the clockwise main flight were present. The design of these stairs, and the height of the cells, was controlled by the presence of the clay mound in the core of the broch wall.

THE INTERIOR

The interior of the broch was divided into compartments by flagstone partitions of which only the stone packing and slots survived (illus 20; 21). The main elements of the floor plan were a large subrectangular room, 3 × 5m on the N side and a central square room 3 × 3m, with smaller radially divided compartments occupying the remaining space. The central room was partially destroyed by later cuts, but there were fragments of a large kerbed hearth and an earth floor with much ash and charcoal. S and W of this room were four smaller compartments; starting beside the W entrance cell and working clockwise, the first three appeared to be small storage spaces opening off the central room of which the first was flagged. The fourth was a small unflagged compartment at the foot of the W staircase with access to both the central and N rooms.

The main N room was flagged and included the earthhouse access shaft. A gap in the partition at the room's E end led to a small flagged compartment at the foot of the E staircase (mirroring the arrangement on the W side). This in turn gave access to another flagged compartment which opened on to the E entrance cell and the entrance passage itself. The layout of the area at the inner end of the entrance passage was confused and partially destroyed by later disturbances. There may have been access directly from the entrance passage to the central room or possibly via the first flagged compartment E of the entrance. The surviving partition slots and packing allow for either or both routes.

In addition to the ground floor layout of rooms there were post-holes and packing associated with roofing or an upper floor. Five post-holes and one post setting were located 1.5–2.0m from the inner wall face in two rough lines of three. They did not form a ring concentric with the broch wall face. The open area behind the short entrance passage contained two large groups of stone packing for uprights one of which was still present. These uprights were more heavily packed than any of the partition slabs and they were positioned across the gap in the inner wall face created by the open entrance cells. They may therefore have been the bases of supports for a structure (roof, floor or wall) spanning this gap at a higher level. The reconstruction of Broch 1 is discussed (3.2) below.

3.2 • THE EARLY IRON AGE SETTLEMENT • DISCUSSION

As described above, following the Neolithic phases at Howe, there was a break when the site was no longer used, and the Neolithic ditch silted up. The only evidence of any intermediate activity was the occurrence of fragments of beaker pottery around the entrance to the Phase 2 tomb. It is possible that the tomb itself continued to be used at this period, but there is no other evidence for this. The earliest evidence for Iron Age activity comes with the deliberate destruction of the centre of the tomb when the central chamber was completely removed, the side cells were levelled and the stone cairn was reduced to the level of the entrance passage. The stone was deliberately dumped within the encircling Neolithic ditch and when this rubble had silted over, only a shallow depression marked the remains of the ditch terminals. The N–S and E–W sections (illus 164) across the site failed to reveal any evidence of revetment collapse from the tomb. This implies that either the sides of the tomb mound were still intact, or that they had already been carefully demolished.

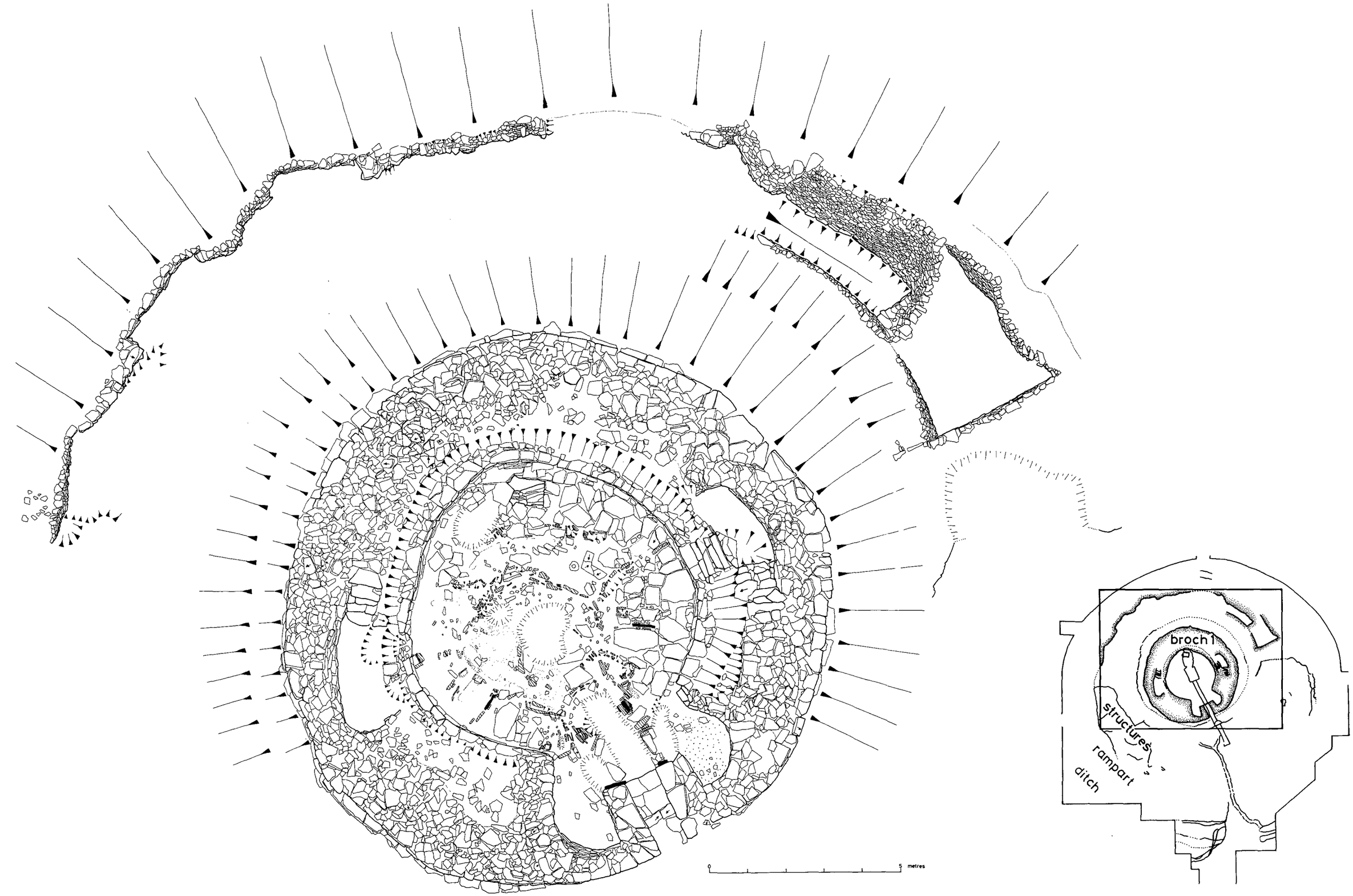
The fragmentary remains of sub-circular houses which survived, built over the Neolithic ditch silts, were typical of Orkney house types, which endured from the Neolithic to the Late Iron Age, constructed with dry-stone walls, orthostat partitions, flagged floors and internal features including hearths and tanks.

With the construction of the Phase 5 settlement, at some point after the end of the 5th century cal BC, the site assumed a character it was to retain for almost 500 years. For the first time, there is evidence that the Phase 2 tomb mound was reused, rather than just being robbed. The tomb was carefully levelled, the cell below the central chamber of the tomb was extended to form an earthhouse, and the inner end of the tomb entrance passage was blocked by a single flagstone. The centre of the tomb was then filled with clay leaving only a narrow shaft leading via steep steps to the earthhouse below. This clay was *c* 1.2m thick and rose to the top of the surviving Neolithic entrance passage sides. New flagstones were added to cap this passage and these formed the floor of the roundhouse entrance. The empty tomb entrance passage was now used as a drain, with an overflow at the outer end, which led out across the site and into the encircling ditch by the entrance to the site. This soon proved ineffective, no doubt because it was virtually horizontal, and a new outlet branched away from the drain at the mouth of the tomb and ran into a pit on the S side of the settlement. A new rock-cut ditch encircled the settlement completely surrounding the tomb mound for the first time, with a stone faced earth and rubble rampart behind. The importance of the drain is that for the first time there is unequivocal evidence that the surrounding settlement and its defences were constructed contemporaneously with the central building. It would have been impossible to add either of these as an afterthought. Phase 5, like the later stages of the settlement (Phases 6 and 7), was constructed as a single planned uniform entity, and initiated a major reorganization of the site.

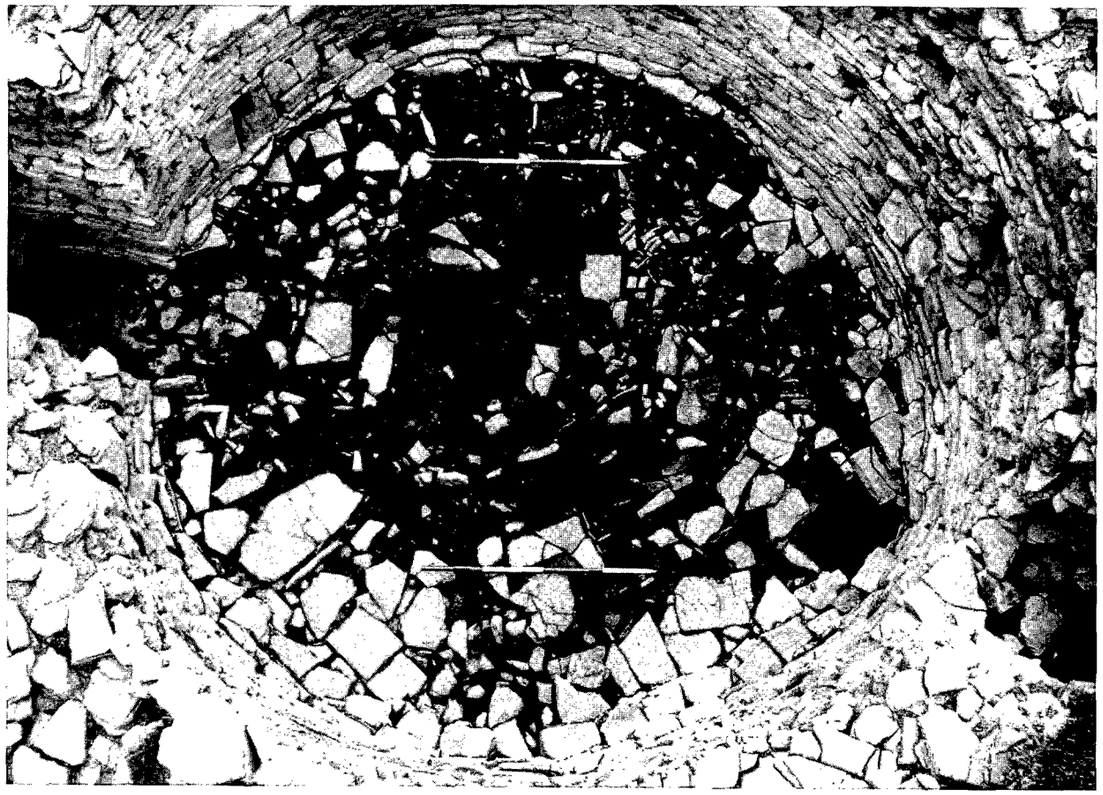
The roundhouse incorporated the clay core of the Phase 2 Neolithic tomb within its walls, and its stone facings survived on both the inner and outer faces. It is assumed that there would have been a central hearth with orthostat partitions, a flagged floor and timber uprights supporting a roof or an upper gallery. Unfortunately so little remained of this structure that it was impossible to confirm this, or ascertain the height of the building or how it was roofed.

The fact that the builders had gone to great lengths to construct a drain from the interior meant that drainage presumably of rain water was considered a problem, and rainwater which collected in the roof may have been channelled down into the building with the drain carrying the surplus away. Perhaps the entrance passage of the Neolithic tomb acted as a water tank, which was kept sweet by the flow of rainwater through it. This is paralleled at Dun Mor Vaul, where a similar arrangement of drain and tank was found.

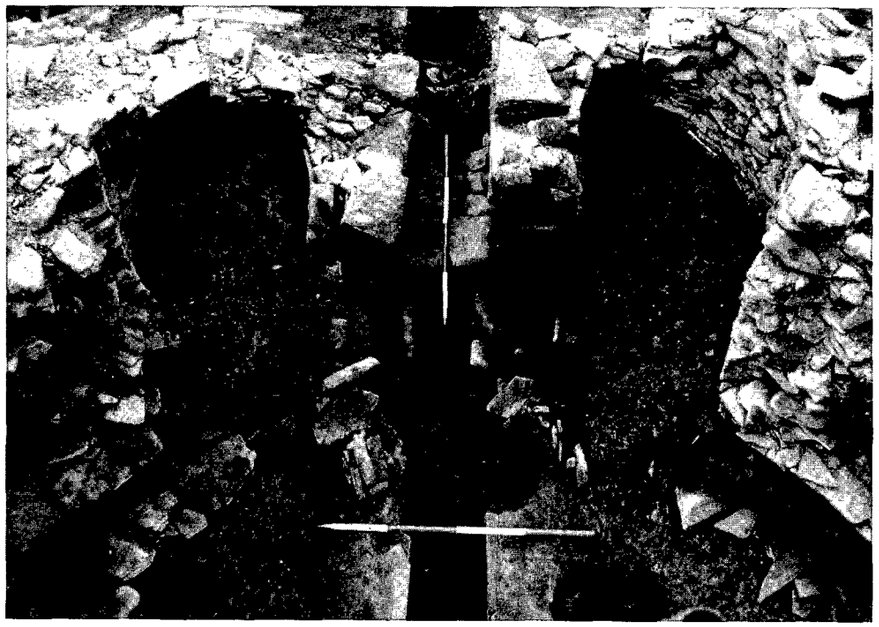
The sides of the roundhouse entrance collapsed into the drain, crushing what was thought to be one, now (9 Human remains below) established as two young persons. An original theory, that the remains were of someone who had gone down to unblock the drain, dislodging the masonry and burying themselves in the process, is now not considered plausible. The outer walls may have fallen outwards onto the surrounding buildings, but for the



Illus 20
The Phase 6 broch tower and N defences.



Illus 21
The Phase 6 broch floor revealed during the excavation of the Phase 7 broch tower; scales – 2m; from E.



Illus 22
a) The Phase 6 broch entrance, with entrance cells, over the Neolithic passage; scales – 2m; from N;
b) the staircase and intramural landing and stairs on the E side of the Phase 6 broch; scales – 2m; from W.

most part these would appear to have simply been demolished. Unlike the later buildings, there was no other evidence for a complete collapse, although this may merely reflect the surviving evidence.

The subsequent replacement of the roundhouse, and the surrounding settlement seems to have been precipitated by the collapse of this building. The dangers of building a substantial drystone walled structure half way up a clay mound were illustrated again and again during the life of this settlement. On this occasion, the walls of the central building collapsed off the clay mound, and the outer face of the replacement building (the Phase 6 Broch 1), was constructed on a ledge cut into the mound, above the remains of the roundhouse wall, so that the new wall was thinner than the old one.

The new building was called Broch 1, simply because it underlay the Phase 7 Broch 2 and it was not realized that an earlier broch-like building (the Phase 5 roundhouse) existed.

The replacement building, the Phase 6 Broch 1, was distinguished by having guard cells opening off the entrance passage, and two intramural staircases rising above the level of the Neolithic clay mound. Unlike other brochs, it was impossible to have intramural passages at ground level because of the clay core to the wall. As a result these started at first floor level and were reached by steps cut into the edge of the clay core from the E and W sides of the broch interior. The earthhouse remained in use, and the internal plan of the building resembled that of the earlier roundhouse. Post holes and radial orthostats divided the interior and suggested either a timber framed roof above, or an upper storey or gallery, presumably with a roof above. A central opening would have allowed smoke to leave, and the intramural stairs ran from the two side cells up to either this upper level or up to what must have been a walkway round the roof. The walkway presumably had a parapet which would have helped to trap rainwater within the building, rather than allowing it to drain outwards, unless the roof fitted over the walls and walkway.

Unlike all the other known broch tower guard cells, these opened directly off the entrance passage and were open to the interior of the building, thus giving a more open plan to the structure. However, they also considerably weakened the wall at this point and the presence of such weakly built cells and of two intramural staircase cells are powerful arguments to suggest that this was a relatively low structure.

The full history of this period of occupation, like that of the preceding phase, must remain unclear. This was due to the almost complete destruction of both Broch 1 and the surrounding settlement in preparation for the construction of the third and final phase of broch (Broch 2) on the site. The end of the Phase 6 settlement was signalled by what appeared to have been virtually a total collapse of the building. Apart from a few small sections of wall standing a single course high and part of the wall in the W surviving to *c* 1m in height, the only trace of the outer wall is the foundation ledge cut into the tomb mound. The rest of the wall survived only as rubble under the Broch 2 outer wall on the N side of the site. The inner face and core survived to a height of several courses, but even so the collapse must have been spectacular, destroying the surrounding buildings and leaving little of the settlement within the ramparts intact.

The major reorganization of the site which began in Phase 5 with the design of a large roundhouse/broch with a defended settlement, lasted from perhaps as early as the 4th century BC until the start of the 1st century cal AD. Although relatively little of the Phase 5 and 6 settlements survived, it appeared that in both cases, major reorganization was prompted by the collapse of buildings rather than a change of function of the settlement.