

CHAPTER 3

REPORT ON THE 1985 EXCAVATIONS BUILDING 300: A SET OF ANIMAL PENS

Site supervisor: Linda Hulin



Figure 3.1. View of squares R10 and S10 at an early stage in excavation, looking east.

3.1 Introduction

To the north of Chapels 570 and 571 the ground rises to form a low plateau the western slope of which overlooks the valley floor in which the Main Quarry lies buried. Last year's discovery of garden plots beneath and beside Chapels 570 and 571 (*AR II*: Chapter 3) pointed to the need to examine this higher ground to the north, the most likely direction in which a continuation of them could be expected. However, instead of simply running the excavation up the slope from Chapel 570 on ground which was evidently very denuded, the new excavations were sited between 15 and 20 metres to the north in order to capture at the beginning of the season an area which showed direct signs of ancient structures. A line of three squares was laid out down the western slope, their grid numbers being R10, S10 and T10, and, after surface planning,

excavation was begun (Figure 3.1). The excavation was subsequently enlarged to cover the ground running between these squares and Building 540/541 (including square U10; Building 540/541 is the subject of Chapter 4), and northwards over R11 where the edge of the Main Quarry and its fill were encountered. At the end of the season the excavation of this latter square was still far from complete and has been omitted from the general plan, Figure 3.2. On the south the site continues unexcavated for a distance that is probably not great, but which must include in square R9 the rest of the courtyard in which the lower animal pen stands.

The site had escaped notice during the preliminary survey of 1977, and is omitted from the published plan of that work (Kemp 1978: 25, Figure 2). It was only in 1982 that it was singled out as a site for future investigation, along with what has since become Chapels 570 and 571. The top of the low plateau is by nature very stony. As the west flank was approached the stones became larger and denser and on the slope itself could, with a little imagination, be resolved into a few alignments. However, the general surface did not appear to swell into a low mounding as often occurs when ancient buildings lie beneath. A ruined chapel simply built, stepped down the hillside, was thought to be a possibility.

The removal of surface sand in the first of the squares to be excavated, R10, quickly dispelled this notion and revealed the site for what it was: a further set of pens for the raising of pigs, similar to Building 400, but with some parts unusually well preserved. The whole unit has been designated Building 300 (Figure 3.2).

3.2 The lower pens, Areas i to iv

The slope of the hill and the fact that it had been cut back in the course of ancient quarrying had helped to protect this area to a degree unusual even for Amarna. This applies particularly to the southern part, **Areas iii** and **iv**. After abandonment sand had blown in and buried them before much of the masonry of the walls had started to collapse. The result is a definitive pig pen. The overall arrangement is the standard one for buildings of this type: an outer enclosure with feeding trough (**Area iii**) and an inner pen (**Area iv**), this one with curved walls, as was so often the case (Figures 3.3 and 3.4). The outer court is still not entirely excavated: its southern portion lies, probably only a very short distance away, in the unexcavated squares R9 and S9. The courtyard had been partly dug into the valley floor (the cut [1552] running beneath the line of the walls), and partly into the hillside, which rose above the pen and had covered it with an overhang which had subsequently collapsed into the pen as it filled up with sand, leaving an escarpment [1551]. The cut is adjacent to the Main Quarry, and it is possible that the cutting and digging were done initially for the extraction of marl clay to make bricks. The northern and western walls [1387] of the court were made of stones set in marl mortar. The former rose to a height of 1.40 metres, but the lower part of this was formed by the side of the cutting [1552] into bedrock (Figures 3.3 to 3.5). The fill of the court consisted of sand with an increasing mix of stones towards the bottom covering a layer of grey/black organic material [1407] over bedrock [1388]. On the western side

[(Facing page). Figure 3.2. Plan of Building 300 and the southern end of Building 541. The cross-hatched areas represent those where the floors were covered with a compacted organic layer, cf. Figure 3.6. (Originals by L. Hulin)].

removal of the organic layer exposed a low circular construction of stones in mortar [1803]: presumably a feeding-trough, resembling the one in Building 250, **Area viii**, unit [1864] (see Figure 2.5). This probably lies close to the exit from the courtyard, still buried in the ground. By the time of abandonment this roughly built trough had filled completely with organic material and had probably been replaced by a rectangular limestone trough. This had been removed anciently, but the shallow depression where it had stood [1442] was noted on the surface of the organic floor layer [1407].



Figure 3.3. View of the courtyard and pen (**Areas iii, iv**) in square R10, looking north.

The pen in the north-east corner (**Area iv**) had been made by running a curving wall of bricks [1406] between the rock face [1551] and wall [1387]. The course of the wall had been stepped in slightly as the curve ran southwards and



Figure 3.4. View of the courtyard and pen (**Areas iii, iv**) in squares R10 and S10, looking north-east.

eastwards, and this slope had later been accentuated by weathering. The pen thus came to have the appearance of the lower part of a dome which had been taken up to the level of the bedrock overhang (cf. Figures 3.3 and 3.4), but this may be an illusion. Insufficient bricks were found inside the pen to account for the collapse of a dome, and it is therefore likely that an oval gap was left between the top of the wall and the edge of the overhang. This would have been required, in any case, to allow for inspection of the animals and cleaning of the interior. It might be noted in passing that neither were wood nor grass from a light roof found in the fill. The surface of the rock face had been coated with mud plaster [1432] of which the lower part only survived. At a level well above the floor a small cavity [2053] exists in the rock face. The "rock" is so soft and crumbly that it was difficult in practice to clear the cavity without also enlarging it slightly and it may have had initially a less regular appearance. In view of the difficulty of access to the pen it is hard to see that the cavity would have served any useful purpose, and it is likely to be a natural product of

erosion rather than man-made.

The door [1411] into the pen had been constructed where the pen met the north wall of the courtyard (Figure 3.5). A rectangular opening had been left in the brickwork, 30 cms. wide and 45 high, flanked on the outside by projecting buttresses [2054, 2055]. Across the front of the entrance and very close to the ground a pair of parallel wooden poles [2056] had been built with their ends in the brickwork, the standard arrangement in the other groups of pens (Chapter 2, Figures 2.8 and 2.9; *ARI*: 44, Figure 4.2). There remained also the traces of a piece of wood which had run across inside the doorway at the top, serving as a lintel [2057]. A welcome addition to our knowledge of how these pens were used were the traces of an upper pair of wooden poles [2058] running between the buttresses. If this was a regular provision it explains why the buttresses are also so common a feature of the pens. It is tempting to see them used to hold a wooden door in place which was slid down between the poles from the top. But, as can be seen from the detail drawing (Figure 3.5), the pole alignments are not very accurate for this, nor have any of the pens shown any trace of vertical grooving from the action of such a door. For the moment a question mark must hang over this whole arrangement.

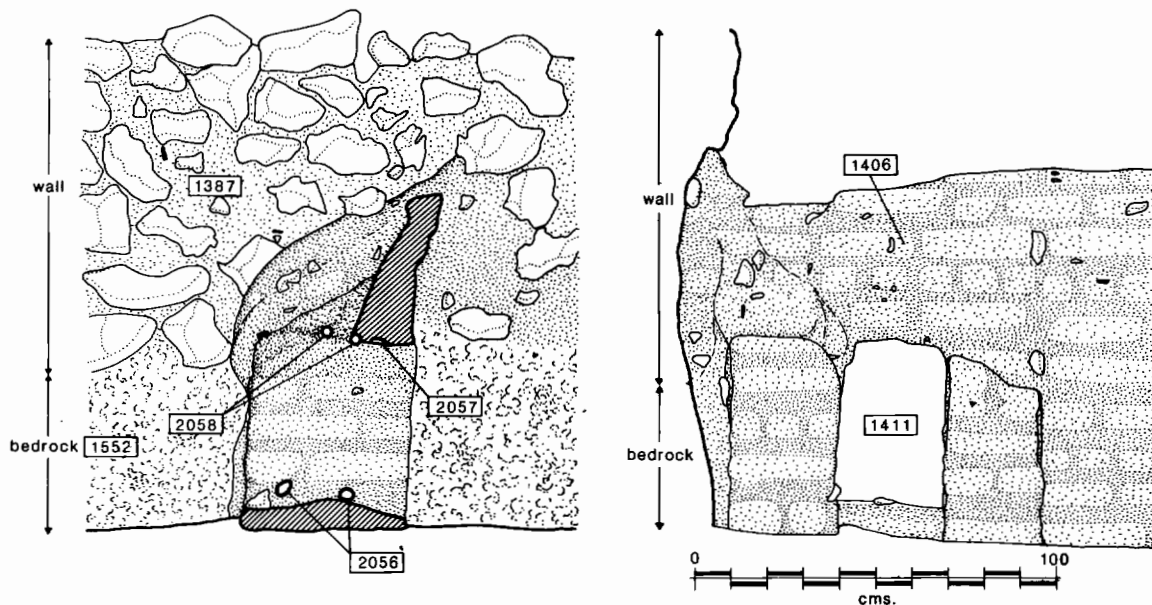


Figure 3.5. Elevation and section of the entrance to the animal pen (**Area iv**) in square R10 (original by I. Shaw).

One point became very evident during the excavation, and even more so whilst recording the pen: just how difficult it was for an adult person to gain access either through the door or by climbing inside without the risk of causing the inward-sloping wall to collapse from his weight. We have no evidence for long-handled farm implements from ancient Egypt. Cleaning the pens may have necessitated the use of small children.

On the north a rectangular court lay beneath the escarpment, **Area ii**, entered via a doorway [1443] with flanking buttresses [2059, 2060] in the west wall [1389]. This led out on to a packed marly surface. The rear, eastern wall of the

court [1800] had been built against the rock face [1551]. Much of the wall had collapsed anciently, leaving a foundation trench [1806]. A layer of organic material [1445] covered the floor. Further north still a third court had been built against the rock face, **Area i**, in square R11. By the time the excavation season ended the fill of this area had still not been completely removed so that few details can be given. On the west can be seen loose stones [1389] from a curving wall which runs back to meet the rock face, but the structural relationship to **Area ii** and the nature of floor deposits is not known. On north and west, however, the deposits change. A slope of organic rubbish [1419, 1439] descends from the east and dips beneath the sand cover [1420], whilst a different and much disturbed organic deposit [1419] descends from north and west into the north-west corner of the square. This latter deposit is part of the fill to the Main Quarry, the edge of which must run close by (as predicted from the resistivity survey, see *AR I*: 115, Figure 8.12). This provides an important contact between a set of structures - Building 300 - and the quarry fill, and it is to be hoped that further excavation will clarify the interrelationships.

3.3 The upper pens, Areas v to x

On the ground above the rock face a complex of walls had been laid out, using both stones in mortar and bricks. Those overlooking the escarpment had suffered from the crumbling away of the edge, leading to the collapse of masonry into the lower areas and a degree of uncertainty in interpreting what remained. **Area vi** on the north had evidently been an open court. On its floor was an organic layer [1562] and the remains of a limestone feeding-trough [1409]. This stands beside the north enclosing wall which has still not been fully excavated, but runs close to the edge of the square. Much of the south wall [1387] was recovered, although it had to be demolished after planning to avert the danger of it falling into **Area iv**. The west wall, however, had wholly fallen into **Area ii** lying below, and must have accounted for part of the extensive spread of rubble [1385] which covered this area. The point of exit from **Area vi**, and the related question of what **Area v** was, may possibly be resolved when the adjacent squares to the north and south are excavated. The gap at the east end of wall [1387] has none of the features - sturdy buttresses and stones on the floor - which characterise entrances into the other animal pens, and it may therefore be an accidental gap. Moreover a review of the deposits which filled the pen (**Area iv**) which lies below **Area v** provides no support for the idea that the latter was enclosed by a wall on the west side. If that proves to have been the case, **Area v** will have to be discarded as a part of Building 300, leaving **Area vi** as a courtyard on its own.

No such ambiguity of arrangement arises with the remaining areas on the hilltop. The next pair to the east, **Area vii** and **Area viii**, form a neat unit of outer court with limestone trough [1448] (Figure 3.6) and inner, brick-built pen. In this case the interconnecting doorway [1483] preserved no traces of cross poles. Both areas were found with an organic layer on the floor [1405, 1480]. The floor of the outer court had initially been very uneven and part had been made up with a fill of rubble [1682]. Later in its history a low brick wall or curb

[1446, 1450] had been constructed along the north side of the court, **Area vii**. The purpose of this, unless to create a dry food trough, is not clear.



Figure 3.6. Limestone trough [1448] and sectioned organic floor deposit [1405] in **Area vii**, square S10, looking south-east.

Adjoining this set of pens on the east was another, set further to the south and running into the unexcavated square T9. The usual two parts are involved, an outer court **Area ix**, and an inner pen **Area x**. The northern stone wall of the former [1548] has been partly destroyed by a modern pit [1564]. The edge of another modern pit occurs along the southern side of the square [1565]. Both parts lie on the top of the hill and have been exposed to much erosion, which has reduced the brick wall of the inner pen to a very modest height. Its entrance [1717] lies on the division between squares T10 and T9. A compacted organic layer survives over both areas [1566, 1629], patches of rubble [1630] lying embedded in the latter. This group must have faced south, the entrance to **Area ix** awaiting excavation in square T9.

3.4 Discussion

Building 300 is a further independent set of animal pens of the kind that we have come to see as intended for the raising of pigs. In this connection it can be noted that the organic layers on the floors of the pens contained the dark bristles that seem to derive from this animal (see section 4.8 of this volume). Although the excavation is not yet complete we can recognise at least three of the paired courts and inner pens that characterised Building 400 (*ARI*: Chapter 4), with the possibility that at least one more exists (the court being **Area vi**). This would still leave it smaller than Building 400, which possessed seven distinct paired courts and pens (including the two excavated this year at the southern end, in squares Q14 and R14).

As with Buildings 400, 540/541 and the Main Chapel the condition of the ruins implies that they were abandoned when the Village itself was abandoned, and thus that they were all in use at the end of the community's life. There was no sign of robbery of materials, dumping of rubbish inside, or of reuse. As noted in the Preface, the existence of three completely separate sets of pig-raising pens implies three separate groups of people responsible, not just for general tending of the animals but for their considerable water requirement and for the high cereal grain content of their diet. The pens represent a significant sector in the life of the Village.

Although we can be fairly sure that Building 300 was in use at the end of the Village's history, the date of its construction is open. No traces were found of any previous constructions, and the only alteration of which we can be sure is the low brick wall [1446] run across the north side of **Area vii**. We can also take note of the widespread use of stone for walls, something which is often a token of a later date in the Village's history. Further information on relative chronology should come from continuing the excavation in and around square R11 where the interleaving of deposits related to Building 300 and to the deposition of Village rubbish probably occurs. The pens must have stood very close to the eastern edge of the Main Quarry, the fill of which appears in the corner of R11. The same proximity occurs along the south side of Building 400, finally excavated this year (site supervisor: Janet Richards). In this latter case, although modern digging has destroyed much of the original stratigraphic connection between pens and quarry fill, an unbroken section was recorded along the line dividing squares Q14 and R14. This revealed that at this edge the lowest quarry-fill element (largely sterile buff silty sand with sherds) reached up to the lip of the quarry. The various deposits, some of them organic, which belonged with the animal pens, Building 400, ran over the top with virtually no change of angle to reflect the underlying quarry edge. The sides of the quarry must therefore have been completely buried by this time. What the excavation has so far still failed to find is a direct connection between the animal pens and the upper quarry fill member which by its content - chaff and ash - fits this last phase of activity on the site. It would certainly make good sense to see the quarry beneath Building 300 also filled to the top by the time it was built.

The proximity of the quarry probably explains the unusual setting for this site. Not only is the lower set of pens and courts (**Areas i-iv**) built into a shelf cut into the soft marly bedrock, the whole floor of **Areas iii-iv** is sunk below the

adjacent floor levels. This is most apparent along wall [1387], which gains part of its height from being built along the side of the cutting (Figures 3.3 to 3.5). This unusual attention to the ground is understandable only if it is seen as part of the quarrying itself. The lower tier of buildings, in other words, took advantage of cuts previously made in the course of marl extraction for brick making. The question of how long an interval elapsed between the two periods of activity brings us back to relative stratigraphy and this has to await future clarification.