

**CHAPTER 4**  
**THE SOUTH PYLON**

by  
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**4.1 Introduction**



**Figure 4.1.** Aerial photograph showing (in the bottom part) the north-west corner of the South Pylon, the western wing wall of the north ramp leading up to it, and (in the upper part) the South House.

Along the southern edge of Kom el-Nana a low ridge runs intermittently which, even before excavation began, could be recognised as the line of an enclosure wall. Opposite the site of the Central Platform its line was interrupted by two features: a patch of stone and gypsum chippings, and, immediately to the east, a tall, steep-sided mound apparently composed largely of mud-brick rubble. As part of the investigation of the ceremonial area a grid of five-metre squares was laid out to cross the line of the enclosure wall in continuation of those south of the Central Platform. By the end of the season a block of nine five-metre squares had been excavated in this part: AA10–12, AB10–12, and AC10–12. They joined up with excavation squares in which lay the South House (Figure 4.1).

The excavation provided an explanation for one of the distinctive surface features, the patch of stone and gypsum chippings: it was the remains of a large stone platform which had occupied the space between a pair of mud brick pylons. The other feature, the steep mound, lay outside the block of excavation squares, but something of its character was, nevertheless, revealed along the eastern side of square AC10, from the discovery of a distinct Roman level.

#### 4.2 The pylon tower

Across the western half of the excavation the removal of a superficial deposit of sand [6151] followed by decayed brick rubble ([6157], [6159]) revealed the base of a pylon tower built of mud brick [6170] (Figures 3.1, 4.2). How far it extends to the west is not yet known, but in width it was 6 m, making it a structure of monumental scale (the pylon widths at the Small Aten Temple are: 8.40, 6.40, and 6.80 m). The brickwork survived to a very modest height above the ancient ground level inside the enclosure, being virtually flush with it in some places. Very little rubble surrounded it, too, yet the dimensions of the pylon base imply that it rose to a height of many metres. The lack of a greater quantity of rubble and the absence of more brickwork *in situ* can only be explained by substantial removal of bricks in later times, as happened with the second and third pylons at the Small Aten Temple. The foundations are very deep, however. This was exposed towards the end of the season in the trench dug along the east face of the pylon (see section 4.4 below) which eventually exposed 1.15 m of brickwork, most of which lay below the ancient ground level.

The bricks were predominantly of alluvial mud, laid in mud mortar with reed or straw tempering. The mortar had either been spread as an even layer, or, for every brick, two round pats of mud had first been thrown down. Apart from a single stretcher course which ran along the south face, all the exposed bricks, even though they represented at least three courses, were laid as headers, often in irregular lines, especially towards the middle of the pylon. Along the south edge four linear patches of brown dust ran back from the face of the pylon. These must be the remains of wooden beams, like those used at the Small Aten Temple, here reduced to dust by termites.

#### 4.3 The pylon ramps and surrounding ground

The remains of the corresponding pylon tower on the east must begin beneath the steep mound which lies just outside the area of the 1990 excavations. The broad space between them had been filled with a stone platform, the evidence for which is outlined in section 4.4 below. As with the major royal buildings in the Central City, the platform inside the gate had been approached on both sides by shallow ramps edged with low brick walls. The beginning of the western wing wall [6354] for the southern ramp was preserved along the southern edge of square AB10. Its above-ground width was about 70 cm, but the exploratory trench revealed thicker though irregularly laid foundations (see section 4.4 below). In the angle where it met the pylon a shallow circular pit [6288] had been cut into the ancient ground surface. The fill [6287] contained charcoal, burnt bone, and sherds from beer jars, an offering stand, and at least three incense bowls.

The western wing wall for the northern ramp [6208] was excavated along its complete length of 7.25 m (Figure 4.1). It had a width of 60–65 cm, and along part of its eastern face still bore its original surface of mud plaster coated with white, which continued very patchily on to the adjacent mud floor [6203]. The mud floor [6203] to the west of this wall had an average



**Figure 4.2.** Western tower of the South Pylon, viewed to the north-west. In the foreground lie pieces of broken gypsum-concrete foundation platform brought to the surface by modern pitting. The exploratory trench was subsequently dug along this line.

elevation of 51.25 m, which is the general ancient floor level between the pylon and the South House (rising to around 51.28 towards the latter). The wing wall [6208] was preserved to about 40 cm above this, but with none of its original top surface left. On the east side the mud surface [6203] rose by a gentle but steady gradient, forming the ramp which originally led up to the stone platform within the gateway. The slightness of the gradient can be judged from a series of elevations along its axis: 51.28 m in front of the staircase belonging to the South House; 51.35 where the wing wall [6208] began; 51.52 at 4 m further south, which is also the point at which the ramp has been destroyed by the ancient digging out of the stone platform.

The northern ramp possessed a substructure. This has so far only been revealed in the side of the trench dug along the east side of the pylon tower (see the next section), and is in the form of a brick wall with sloping top which was intended to remain completely buried and unseen (Figures 4.4 and 4.5). In its final stage the top surface of the ramp lay about 55 cm above the top

of this wall, and the various layers which make up the ramp seem, from the short section exposed to have the same angle of slope. The wall (and there could be others further to the east) may have been built to provide a guide to the desired angle of slope for the benefit of the workmen laying down the final layers of fill.

Inside the enclosure the ancient floor surface between the pylon and the South House was formed from a layer of mud plaster ([6203], [6164], [6031]), presumably part of the same surface that surrounded the Central Platform and the south-east houses. As already noted, in a small part where it had become the surface of the ramp and had been protected by the western wing wall traces of whitewash survived, raising the possibility that the pavement as a whole had been treated in this way. In places where the surface had been cut into by pits an underlying hard layer of gypsum and limestone chippings, between 5 and 10 cm thick, was exposed, as it was in the small patch excavated beside the staircase belonging to the South House (Chapter 3, Figure 3.6). This did not lie immediately beneath the mud floor, but was separated by a layer of similar thickness composed of sand and gravel (numbered [6169] in AA12).

On the outside of the pylon only a very narrow strip of ground has been exposed by the excavation so far. Within this nothing of the surface of the ramp survives. Outside the pylon itself (squares AA10, AB10) the surface which appeared to be the ancient ground level (and into which pit [6288] had been cut) was simply of compacted gravel [6161] with no trace of a mud floor. As was revealed by the trench along the side of the pylon, and by an excavation carried out in 1988 and 1989 in front of the enclosure wall opposite the south-east houses, this gravel deposit is not the natural desert, but a bank of material dumped against the wall in order, presumably, to help equalize the depth of material banked against the inside.

#### 4.4 The pylon trench

At the end of the season a north-south trench of a nominal 1.5 m width was excavated along the side of the south pylon tower, down as far as the natural *gebel* (Figure 4.4). On the east side (Figure 4.5) the level from which the trench was started was the trampled mud surface [6168]/[6355] which underlay the collapsed brickwork mixed with late Roman pottery and which may well have been the ground level of the late Roman period (see section 4.5 below); whilst on the north the top of the trench was the top of the surviving Amama Period fill which was here sloping upwards slightly as part of the ramp as it approached the gateway through the pylon.

The excavation of the trench began with the removal of the filling of several pits which had been dug in probably fairly recent times (Figure 4.2). What was left — the bulk of the debris over the area of the trench — was material which had been sealed beneath the trampled surface [6168]/[6355], thus a record of what had accumulated prior to late Roman times. As the excavation proceeded many pieces of broken gypsum-concrete floor and fragments of limestone were recovered, until, over most of the area, the surface of the *gebel* lay exposed. This established, really for the first time in terms of unambiguous stratigraphy, that the destruction meted out to the gypsum-concrete foundation layers was ancient and not modern. The basic stratigraphic sequence is recorded in the right-hand part of a section drawn of the northern half of the east face of the trench (Figure 4.4). Below the trampled mud surface is half a metre or more of dusty sand devoid of bedding planes but containing numerous nodules of gypsum plaster with brown weathered surfaces. Below this is a dense layer of limestone and concrete lumps and fragments which lies on a layer, 25–50 cm deep, of unbedded coarse sand and gravel which rests in turn on *gebel*. Why there should be so much sand and gravel beneath the wreckage of the foundation layer is not clear, for one might have expected the destruction to have left the broken pieces very close to their original level; more evidence may yet be forthcoming from the large area of fill within the pylon entrance which remains unexcavated. The dusty layer above almost certainly represents the slow accumulation of debris blowing and trickling into the pit, which was left open following the removal of the stone platform within the gateway and the ensuing destruction of the foundation layer.

More of the history of decay, as well as of details of the original construction, can be seen in the west face of the trench, which is, for the most part, occupied by the elevation of the side of the brick pylon (Figures 4.3 and 4.4). The concrete foundation platform had been laid down in a pit which was probably about 35 cm deep, if we take as the original desert surface the mud-



**Figure 4.3.** Southern end of the trench in the pylon gateway, viewed to the south-west

covered surface which runs from the base of the brick pylon wings and is clearly visible in the north section (Figure 4.4). The brickwork of the pylon tower [6170] was built afterwards and overlapped it slightly so that, although the later destruction was very thorough, the very edge was continuously preserved beneath the pylon brickwork, whilst at the south end a strip which represents the southern edge of the platform was left intact and runs the width of the trench. Most of the upper surface of this strip is smooth and blank, having lain outside the area covered with limestone blocks. That limestone blocks had filled most of the gateway between the pylon towers is evident from two observations. One is of patches which represent the edge of a bed of gypsum mortar into which the lowest layer of blocks was set: the outlines of the edges of individual blocks have been preserved in several places and imply a more or less complete coverage of the gateway floor. The second observation is of many places on the face of the brickwork of the pylon itself where small limestone chippings and gypsum mortar have become mixed with the

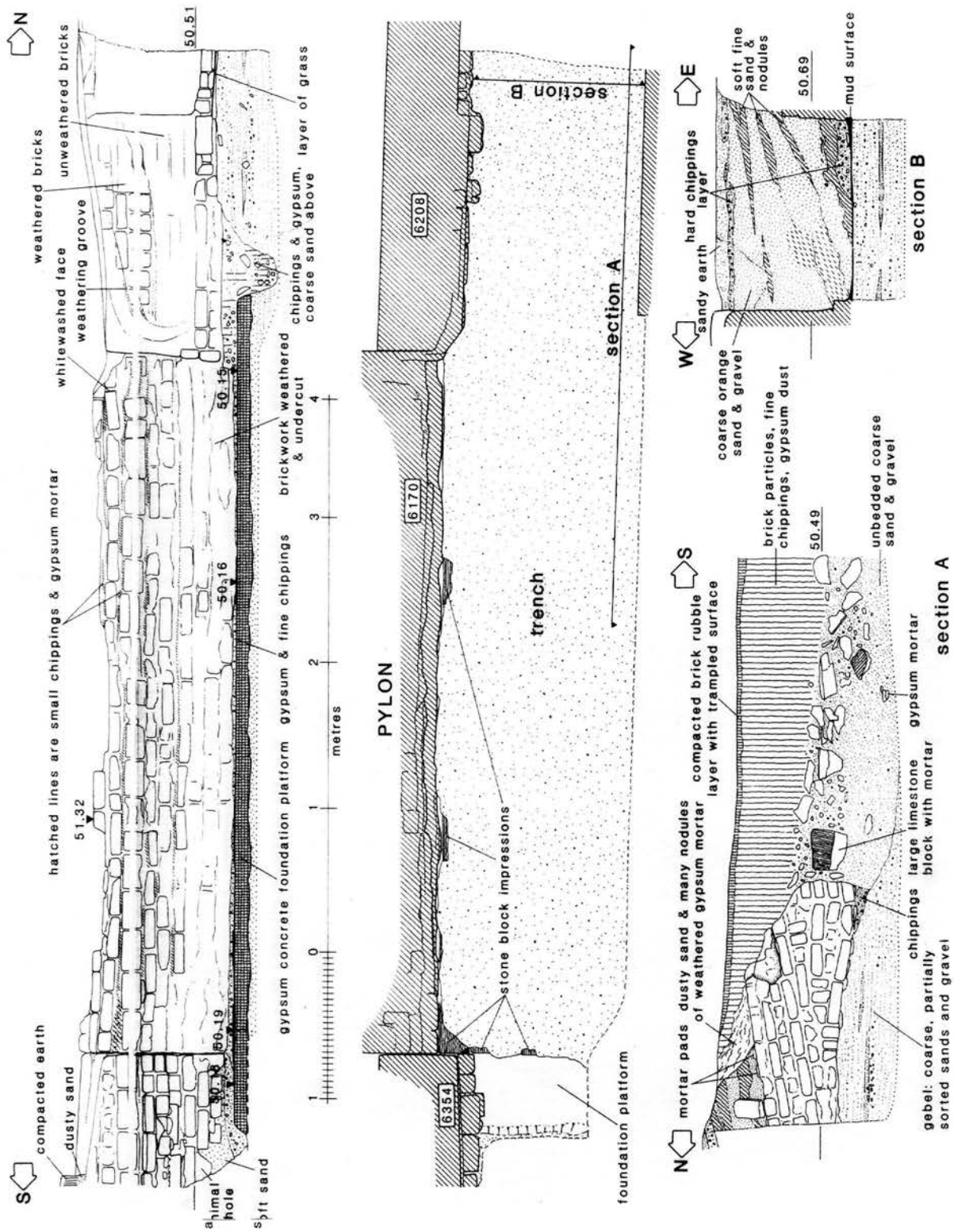


Figure 4.4. Elevation, plan, and sections of the trench in the pylon gateway.



**Figure 4.5.** Northern end of the trench in the pylon gateway, viewed to the north-east. Behind the edge of the trench is a modern robbers' pit.

mud mortar in which the courses of brickwork are set, although this does not extend very far into the brickwork. This points to the gateway having been completely filled with layers of limestone blocks set in gypsum mortar, and rising at least as high as the topmost preserved course, i.e. at least one metre above the foundation layer. The incorporation of chippings and gypsum into the mud mortar for only a very short distance implies that the stone layers were set down first and the brick pylon subsequently built up beside it.

The trench also ran for a short distance along the faces of the north and south wing walls on the west side. The stratigraphy exposed in the north section shows that a mud floor or working surface marks the top of the *gebel*, and that the lowest courses of brick for the northern wing [6208] were laid not in a foundation trench but directly on this and as a rough bed slightly wider than the intended width of the wall proper. Where it overlapped the gypsum concrete foundation

layer, the intervening space had already been filled with sand and chippings. Once the north wing wall had been built, the ground level was artificially raised by more than a metre by desert materials dumped in from the east. Primarily they were a mixture of coarse orange sandy-gravel and soft fine sand which contained nodules of the same. Towards the top comes the hard layer of chippings which seems to have formed an underfloor over a wide area in this part of the site.

The short section of the south wing wall [6354] exposed in the excavation (Figure 4.3) shows roughly laid brickwork which juts out beyond the true line of the wall rising to a higher level than is the case with the north wing wall, probably a sign that the dumping of the fill between the wing walls on this side proceeded simultaneously with the building of them.

The condition of the brickwork of both pylon and wing walls adds further evidence to the history of this part of the site. The entire face of the pylon is badly weathered, to the point where, towards the bottom, it is not possible to distinguish the outlines of individual bricks. When we turn to the face of the north wing wall, however, a clear distinction is visible in the condition of the brickwork, between a lower part which is unweathered and still preserves the finger-smoothing of the mortar between joints, and an upper weathered area. The dividing line between the two parts runs diagonally downwards from north to south, and is reflected, a little higher up, in a deep weathering groove. The interpretation is plain: ancient robbing of the limestone platform inside the gateway left a large open pit which gradually filled with wind-blown sand and dust, and with material slumping down from the exposed sides of the dumped sandy fill used to make up the artificial ground level on either side. It was, as already noted, a process which had been completed by late Roman times.

#### 4.5 The late Roman level

Over much of the excavated area the deposits above the Amarna-Period brickwork and floors were the record of destruction, decay, and robbing. Within the gateway, however, there was a record of occupation much later than the Amarna Period. The key area lay in squares AC10 and AC11. Removal of a 5 cm surface deposit of wind-blown sand [6151] immediately exposed the surface of a sheet of mud-brick wall [6157] which had collapsed, retaining much of its articulation (Figures 4.6 and 4.7; also 3.7). From the alignment of the bricks it is evident that the wall had collapsed either from the east or the west. Except to the east, where it ran into unexcavated ground beneath the steep mound, its edges lay within the two squares. When the brickwork was lifted it was found to lie on a layer, 20–30 cm deep, of sand [6167] containing many sherds of the late Roman period. This in turn covered a hard-packed mud surface [6168]/[6355] which dipped slightly towards the middle of the pylon gateway. Nowhere did any laid bricks appear, nor were there any patches of mortar or other marks on the hard-packed mud layer consistent with the presence of a wall. It seems most unlikely, therefore, that the wall had fallen eastwards from an original line which would have run through the excavation area. The bricks lay at an angle, leaning westwards away from the vertical. This is also consistent with having fallen from the east, since it has often been noticed before that, when walls collapse in this way, the momentum of the fall displaces the inner face of the wall slightly beyond the outer face when the latter impacts with the ground. All the evidence points to the wall having run north–south within the adjacent square to the east (AD10), thus along the side of the steep mound.

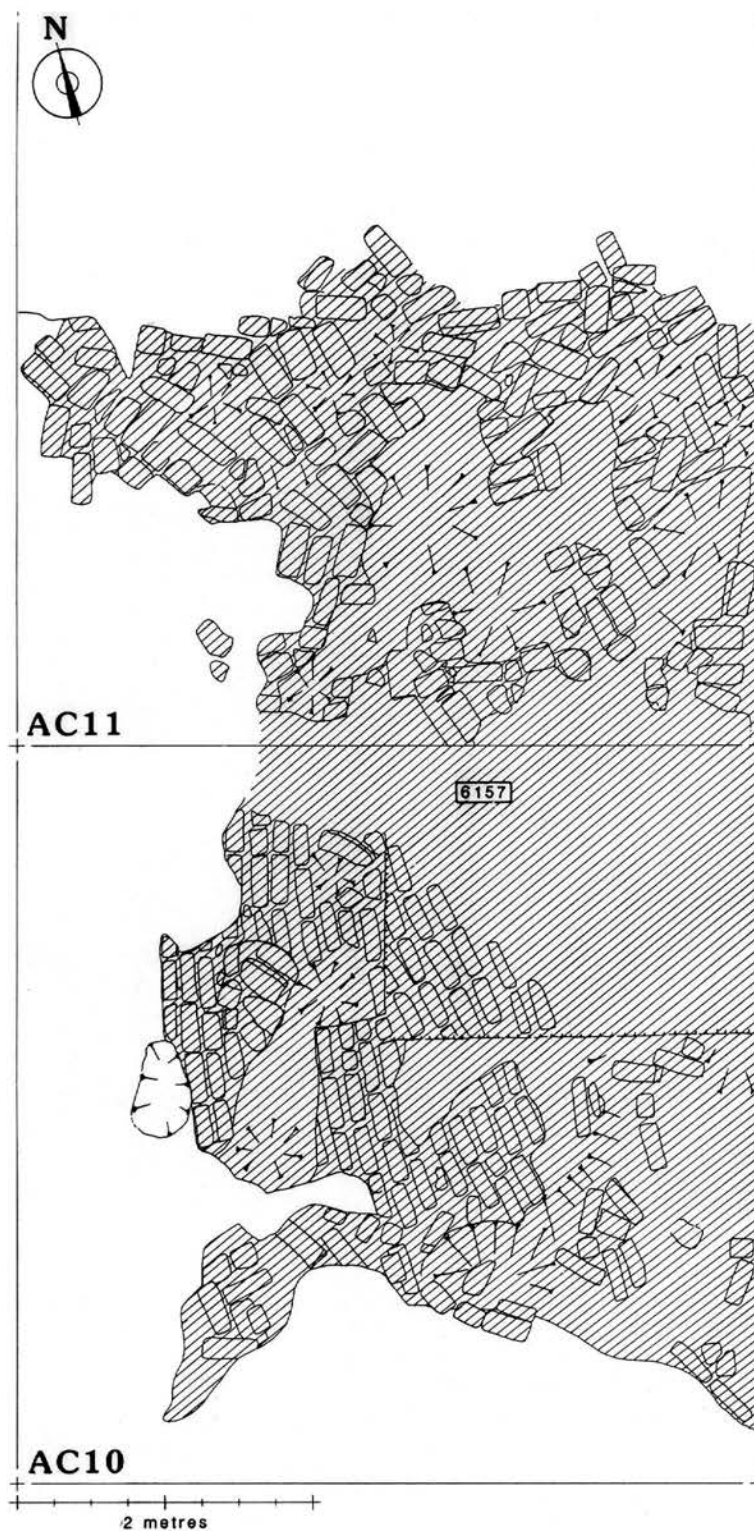
The size of the bricks is the same as that commonly used on the site in the Amarna Period. As already noted, however, the wall had collapsed on to a layer of sand rich in late-Roman sherds which in turn lay over a surface of hard-packed mud which, as the stratigraphy exposed in the trench reveals (Figure 4.4), had formed long after the destruction of the pylon gateway. Excavation of the ground to the east should clarify what has happened here, but for the present one can surmise that the steep mound, which seems to be composed of loose brick rubble, is the remains of the fill of a platform constructed in late Roman times and retained by walls built from bricks taken from the adjacent Amarna Period constructions. The packed mud surface [6168]/[6355] is a contemporary late-Roman floor. If much of the line of the pylon and enclosure wall had survived into late-Roman times, perhaps as a ridge of rubble, the space between the pylons could have still been utilised as a gateway.



**Figure 4.6.** Surface of the collapsed wall in square AC10, viewed to the south. A small amount of brickwork has been removed to expose a section.

#### **4.6 Decay and destruction**

The stratigraphic evidence in the trench showed unmistakably how the layers of limestone blocks which made up the platform which filled the gateway had been removed, and the gypsum-concrete foundation layer thoroughly hacked up well before late Roman times. The episode of destruction left a thin layer of gypsum and limestone [6204]/[6030] over the ground to the north, mainly spread as an arc around the site of the gateway itself but reaching almost as far as the south wall of the South House (Figure 3.7). For the most part this layer rested directly on the Amarna Period mud floor, as might be expected in view of the probable short interval of time that elapsed between the end of the Amarna Period and the destruction of the stonework. In



**Figure 4.7.** Plan of the collapsed wall in squares AC10 and AC11 (and see Figure 3.7). Originals by Susan Cole.

## Kom el-Nana excavations

squares AB11 and AC11, however, more of this deposit was found higher up, partly covering the western wing wall of the north ramp, and the deep pit over the site of the stone platform. This is probably attributable to more modern digging in this part of the site which will have brought to the surface more of the destruction debris from the pit on the site of the gateway.

Despite the original size of the pylon the amount of mud brick rubble which had fallen to the ground was remarkably slight. By their nature solid brick pylons are very stable constructions, but, as noted in the last section, the thorough robbery of the brickwork had probably begun by late Roman times. This is a point which excavation of the eastern pylon tower should clarify. A relatively thin (c. 25 cm) layer of mud-brick rubble spread across AA11 and much of AA12, and mostly reduced to an amorphous condition, was all that was really found this season.

The early stages of the excavation revealed numerous pits with ragged sides dug from fairly close to the present surface, sometimes with pieces of stone or gypsum concrete at the bottom. They were concentrated over the pylon and especially over the site of the gateway. It is highly likely that they are the work of local people over the last century or so looking for decorated stones to sell to dealers. None was obviously recent. The likely lack of success in finding much decorated stonework via these pits probably explains why the whole area was not systematically turned over, in contrast to what happened over the North and South Shrines.