

## CHAPTER 5

**REPORT ON THE 1986 EXCAVATIONS  
THE COMPLETION OF THE MAIN CHAPEL AND  
FURTHER EXAMINATION OF ANIMAL PENS 300**

Site supervisor: Lisa Heidorn

**5.1 Introduction**

In reviewing the general state of the excavations outside the Walled Village from the point of view of satisfactory completion, two areas had been left with essential further work remaining: the south-east corner of the annexe to the Main Chapel, where the removal of the 1920s dumps had led to a postponement of excavation into the undisturbed ground; and the western, lower part of the animal pens of Building 300 discovered last year, where they interleaved with the debris filling the Main Quarry, offering an important stratigraphic linkage. It proved possible to complete both tasks with the same work team.

**5.2 South-east corner of the Main Chapel annexe**

Most of the dumps from Peet's excavations of 1921 which covered the Main Chapel were removed during the 1983 season; the last remaining part, however, was not dealt with until late in the following season (AR I: 15; AR II: 1). This left square S18 and part of S19 still buried as they had been prior to 1921. The 1986 excavations began, therefore, with the removal of the sand cover [2142, 2144], so exposing a complicated pattern of collapsed brickwork. As this was lifted a congested little complex of structures was exposed, largely related to food preparation. The numbering of areas begun for the previously excavated part of the annexe (AR III: 100, Figure 7.1) was continued, see Figure 5.1.

The western part of both squares was occupied by continuations of two already excavated courtyards, **Areas iv** and **v**, both floored with an organic deposit: [2353, 2354] in the former, [2556] in the latter. The removal of the former revealed an irregular spread of compacted marl [2669] above natural desert [2629]. In **Area v** the sole feature of interest is a rectangular bin [2554] in the south-east corner, 1.20 by 0.50 metres, made from a stone and marl plaster wall [2553, 2536]. It would also now appear that the entrance into this courtyard lay in the north-east corner, over a threshold of stones [2631] over which the organic floor deposit [2557] had spread. The doorway, about 0.80 cms. wide, was flanked by buttresses [2410, 2559].

**Area vi** occupied the south-east corner of the annexe, its boundary wall [2405] curving round to become the rear wall of the whole Main Chapel temenos. Its principal entrance was from **Area iv**, through the doorway flanked by buttress [2412]. It had initially been possible, however, also to enter from the south, through a doorway with stone threshold [2407]. This had been later closed with a blocking of stones [2406]. The use of this door had left a patch of ash [2598] on the desert outside. The entire area was covered with a layer of almost black ash [2336] which had filled up irregularities in the desert surface to reach a depth of 48 cms. in two places. The source of the ash was a cylindrical oven built against the south wall. It consisted of a cylindrical ceramic lining within a casing of bricks and mortar [2408]. It stood on a very localised layer of compacted silt [2561, 2663], perhaps formed simply during the construction of an earlier oven. The present one was probably a replacement made when most of the ash had accumulated. As a result it stood on a rough circular foundation of marl and ash, formed by the remains of previous ovens. Part of a pottery storage jar [2376] lay buried in the ash in front of the oven.

Adjoining **Area vi** on the north was a bench or platform, measuring about 4 x 2 metres, and 55 to 60 cms. above the desert surface, thus 50 to 55 cms. above the top of the organic floor deposit. The bench had been subdivided into four smaller areas, nos. **vii** to **x**. Access seems to have been simply by stepping up directly from the ground on to the edge of the narrow space, **Area x**. This step was, however, no higher than the step beside **Area ix**, which gave access to the corridor running behind the Main Chapel itself. From the plans it might be suspected that various groups of stones in front of the platform had originally served as steps, but in actuality they appeared very unsuitable either because they were entirely at ground level [2670] and buried

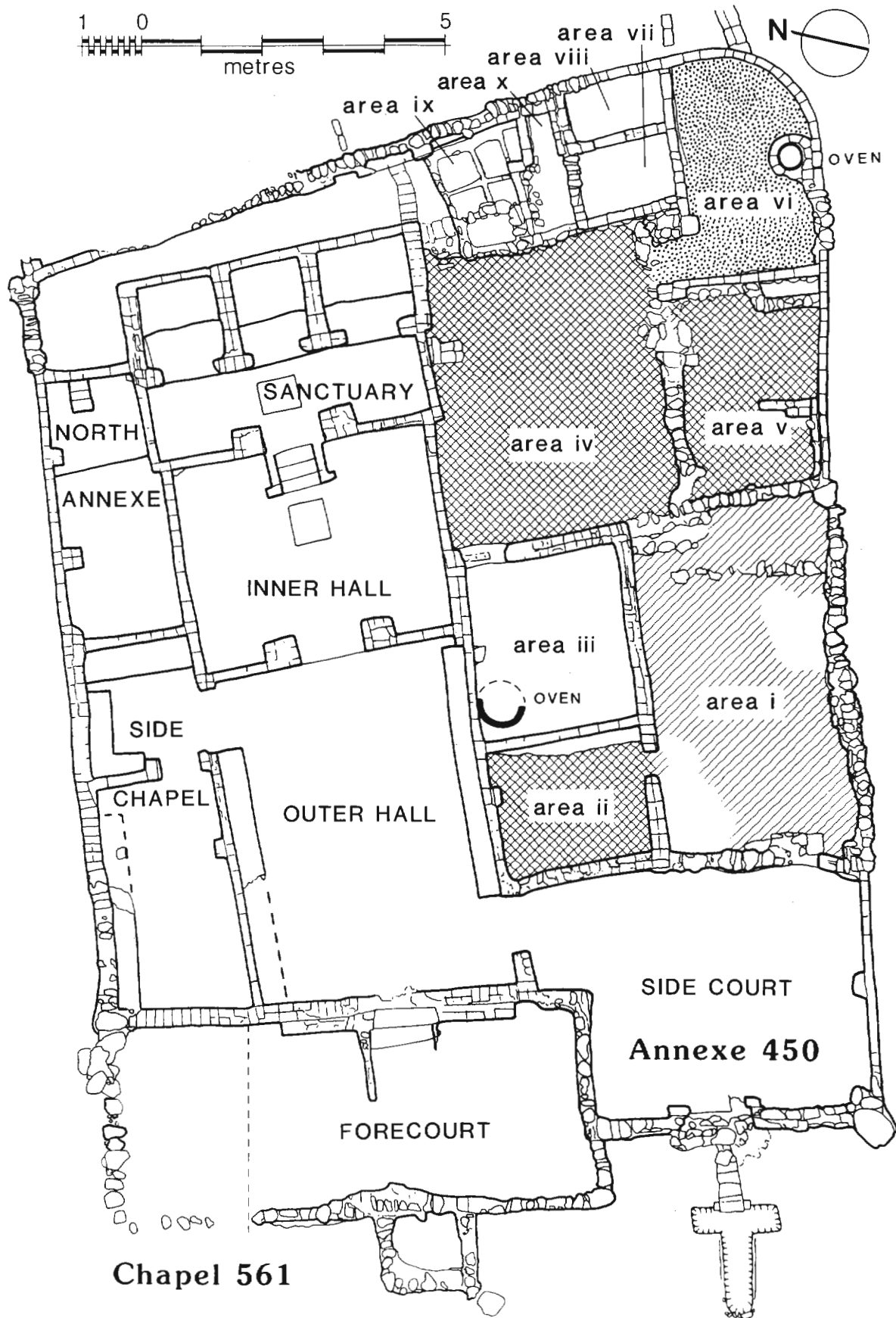
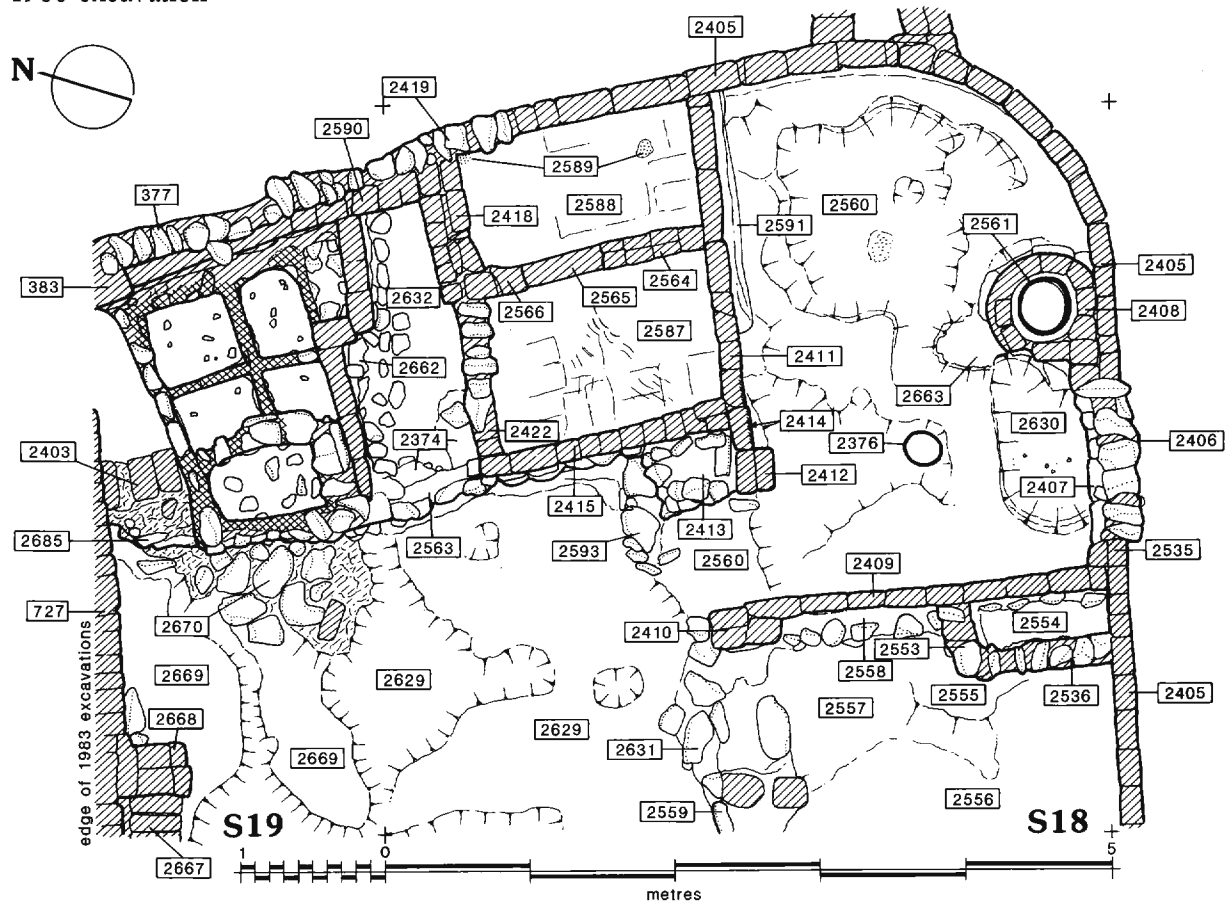


Figure 5.1. Completed plan of the Main Chapel. Organic floor deposits are shaded: simple hatching for thin deposits, cross-hatching for thicker deposits. Ash is represented by dense stippling.

1986 excavation



**ANNEXE 450**

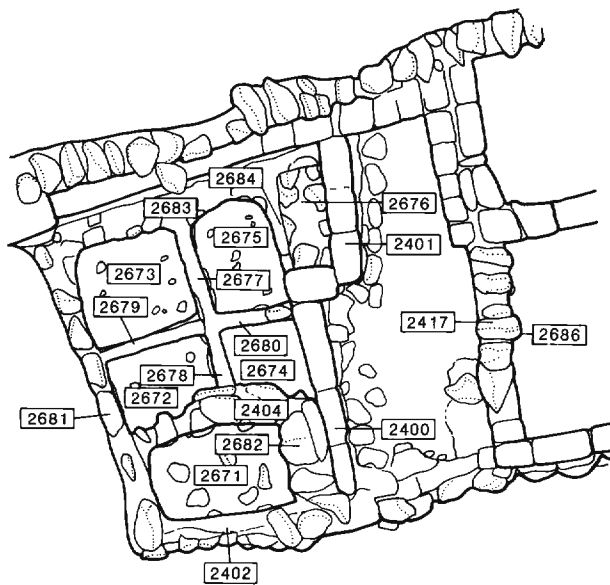


Figure 5.2. Plan of the south-east corner of the Main Chapel (original by Lisa Heidorn). Part of the plan has been repeated at a larger scale in order to accommodate the numerous unit numbers.

by the floor deposit, or because they rose to the full height of the preserved walls in one stage [2413]. Areas vii and viii were rectangular spaces, measuring 1.55 x 1.08 and 1.55 x 0.86 metres respectively. Both had been carefully floored with bricks [2587, 2588] and bore faint traces of gypsum plaster [2589], as well as a few scratch or cut marks. Intercommunication seems to have been by a gap with low threshold [2565] in the dividing wall [2564, 2566]. The only obvious



Figure 5.3. Areas ix and x, showing the alluvial surface deposits in the growing-plots.

sign of external access was the grouping of stones [2417] apparently forming a threshold [2686] in the west wall [2422] to Area vii. The general nature of these rooms resembles very closely others found in Buildings 540/541, 523 and 350, all seemingly devoted to animal keeping. In consequence it was suggested in AR III: 71-75 that they were butchering areas, and that explanation is necessarily transferred to this part of the Main Chapel annexe as well. It has already been pointed out that one purpose of the rooms and courts of the annexe was probably to pen animals (AR I: 24-25), so that butchery is likely to have been carried out somewhere in the building.

Area x, as already noted, probably served as an access. Beyond it on the north was another small distinctive area of walls, Area ix. More than half was subdivided into four rectangular spaces [2672, 2673, 2674, 2675] by means of thin partition walls of bricks set on edge. Each one contained a layer about 10 cms. thick of dark alluvial soil [2368, 2369, 2370, 2371], which served to identify them immediately as plant growing-plots. As the section and elevation show (Figure 5.5), the plots had been constructed with sufficient added depth to accommodate a lower



Figure 5.4. Areas ix and x, looking south, at the end of the excavation with deposits within the growing-plots removed.

layer of sand [2373, 2705, 2375, 2706] about 20 cms. deep. This was presumably to provide a water reservoir. Originally the plots had probably numbered six, with two more to the west. They had later been converted, however, into a single compartment [2671] with thicker walls. When excavated it was found to contain only rubble, but patches of alluvial soil adhering to its plastered walls showed that it had originally been used to contain, perhaps to store, the cultivable soil that was used as the growing medium in the plant beds. Similar patches were noted on the walls of Area x. A further small compartment in the south-east corner had extended Area ix at the expense of Area x. Although it looked at first as though it might have been a further growing-plot which had been covered up by the creation of Area x, examination of the floor and surround of the latter showed this was probably not the case. This small compartment contained a thin layer of marl over a floor of stones [2676].

A narrow space separated the platform from the south-east corner of the Main Chapel. This space was the beginning of the corridor which ran behind the chapel and gave access to some of

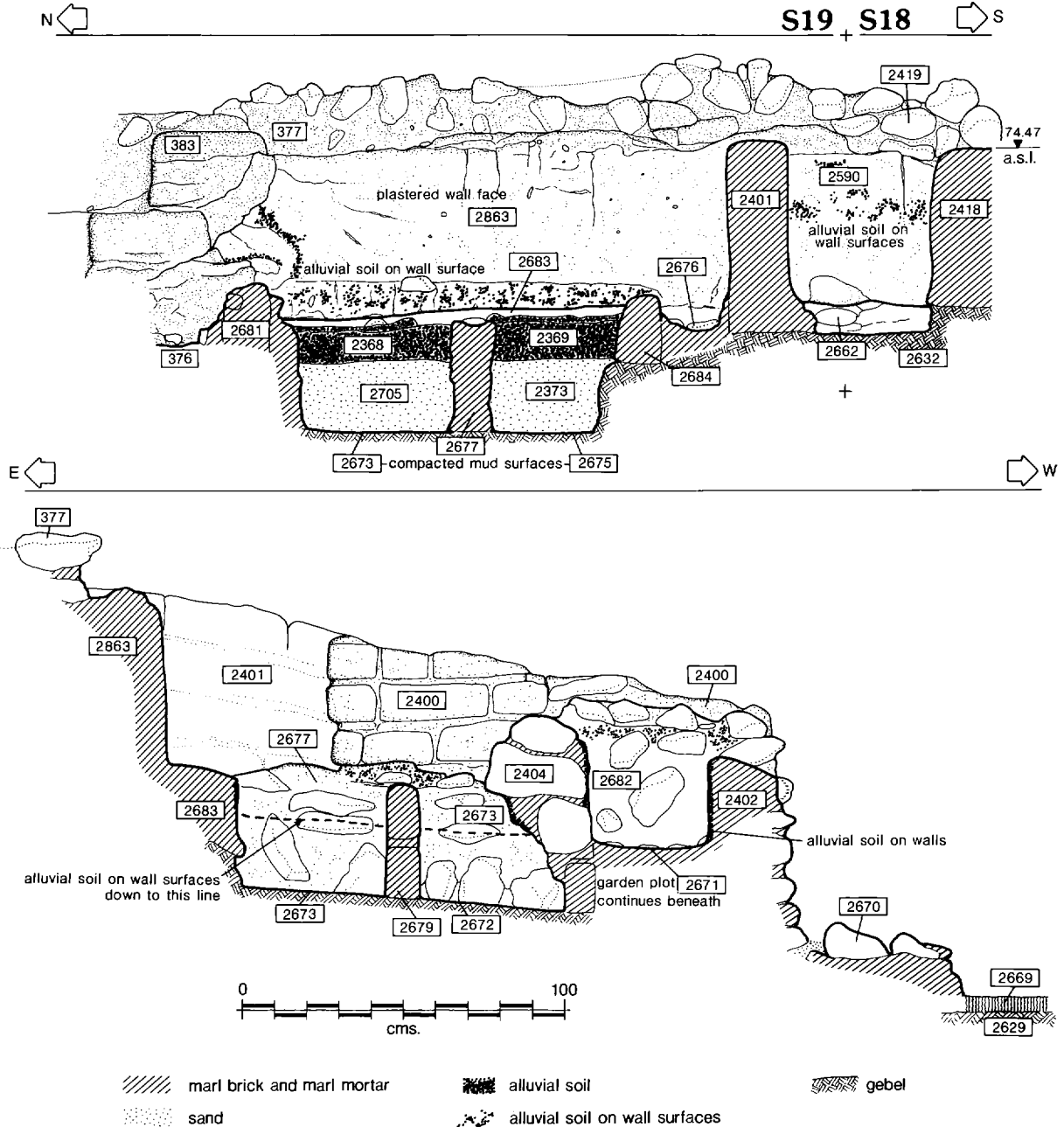


Figure 5.5. Above: section through garden plots and Area x, showing the fill of the plots. Below: east-west elevation and section across garden plots (originals by Lisa Heidom).

the rooms on the north. A high step [2685, 2403] took the ground level up to the floor of this corridor, which was partially an artificial fill covering the remains of an earlier construction (AR II: 6-8).

Annexe 450 is one of the most distinctive features of the Main Chapel, both in its size and in the range of its provisions for food: bread and beer, meat and plants. Its very existence, as well as the depth of floor deposits, implies that the eating of meals within the chapel proper was a major aspect of chapel activity, regular and on a large scale. In simpler terms it suggests communal feasting.

The excavation of this sector was also extended eastwards to take in squares T18 and T19, thus the southward continuation of Building 523, the northern part of which was dug in 1921 and

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re-cleared in 1983 (AR I: 25-27). Clearance revealed only shallow deposits, partly disturbed in modern times. The principal walls remained, but formed only the southern end of a rectangle with a small rounded enclosure in the south-west corner (too small to be an animal pen), abutting the rounded south-east corner of the Main Chapel annexe, and corresponding to a small enclosure in the south-east corner exposed in 1921 (COA I: Pl. XXIV). Patches of surviving floor deposit showed that the southern part of Building 523 had been covered by a thin organic layer.

**5.3 Western part of Building 300**

Building 300 was a discovery of the 1985 season, a set of animal pens terraced down a hillside and further to the south than those already encountered (AR III: Chapter 3). The lower, western part, more deeply buried in sand, was very well preserved, and showed signs of connecting directly with the stratigraphy of the Main Quarry fill. Time had been insufficient to finish the excavation in 1985, but the rapid completion of the remaining work on the Main Chapel annexe this season allowed the team responsible to be transferred to continue at Building 300 (Figure 5.6).

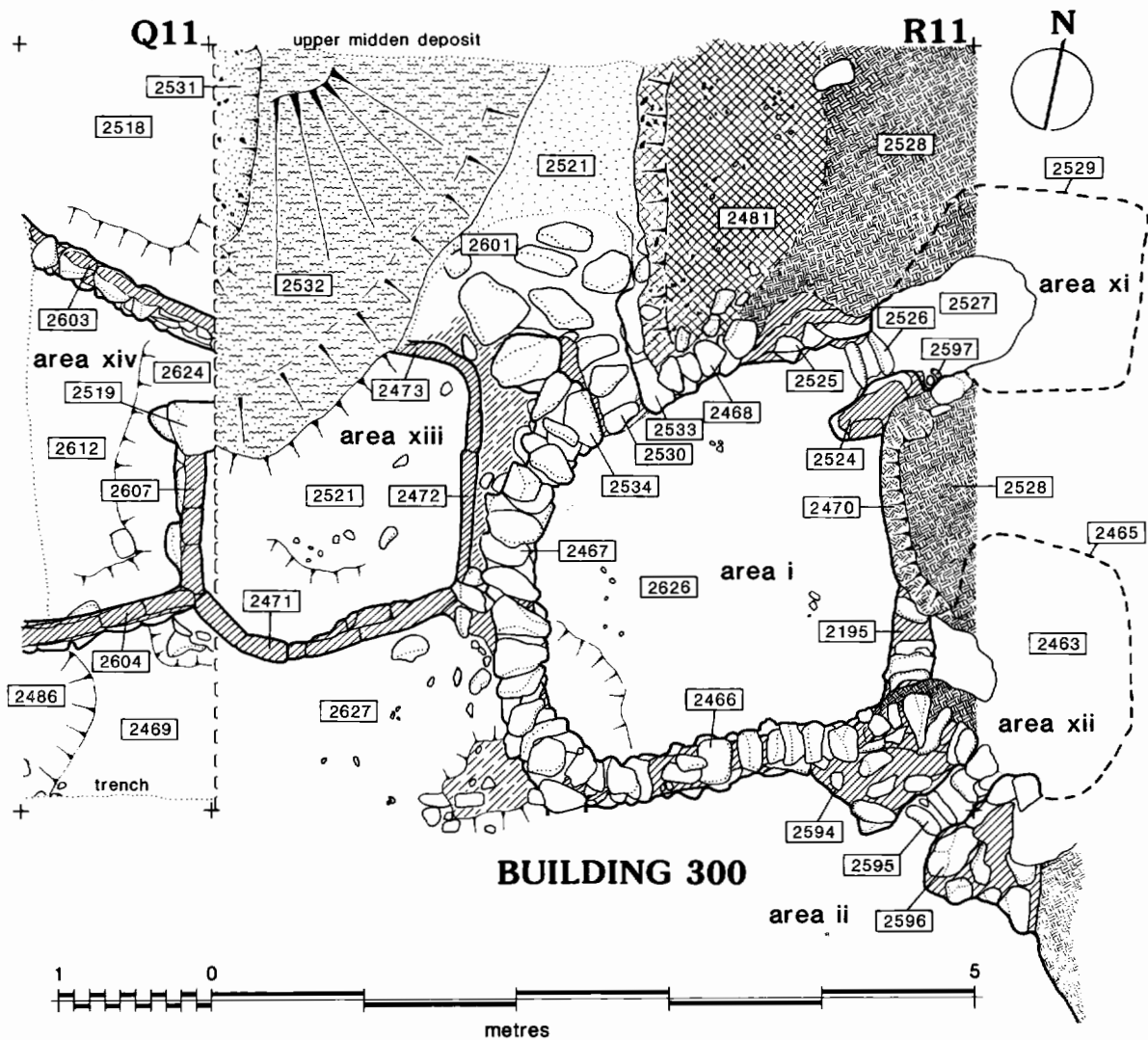


Figure 5.6. Plan of the western part of Building 300, including the stratigraphic trench in square Q11 (original by Lisa Heidom).



Figure 5.7. Building 300, Areas i and ii, looking east, showing the entrances to the caves which served as animal pens, Areas xi and xii.

Most of the digging was concentrated in square R11, where already the surface sand cover had been taken off (AR III: 52, Figure 3.2). Further excavation eventually revealed, as expected, a third courtyard enclosed by a stone and mortar wall, already designated Area i (Figure 5.6). It had its own entrance, in the north-west corner, consisting of a narrow space floored with stones [2530] and flanked by projecting buttresses [2533, 2534]. Like Area ii next to it, Area i contained no inner features. The reason for this was soon revealed. Both areas had, indeed, served smaller animal pens, but these had been cut back into the rock face instead of being built in one corner. In both cases the entrances to these caves lay in the north-east corner of their respective courtyards (Figure 5.7), and had the usual design of thick flanking piers [2524, 2525; 2594, 2596] and rough stone thresholds [2526, 2595]. In the case of the southern cave (Area xii) the rock face separating it from the courtyard belonging to the northern cave had been breached anciently, and the hole filled with a short length of wall [2195]. The caves also help to explain the cavity [2053] found last year in the rock behind the pen (Area iv) within Area iii (AR III: 54-55). This now looks like an attempt to create a third cave, abandoned perhaps because the rock was too poor, and instead replaced by the built pen, Area iv.

The rock is very soft, and has two horizontally lying members, the upper sandier [2528] and the lower more pebbly [2465, 2529]. It would have been difficult to make the caves very regular in appearance, and subsequent falls of material have left them looking even more irregular. As found they had the following maximum dimensions: 1.34 x 1.70 x 1.06 metres (northern); 1.70 x 1.30 x 0.98 metres (southern). Both were also floored with an organic layer [2462, 2517]



containing straw or plant fibre, coprolites, leaves, sand and pebbles, clear evidence that the pens had been used. The existence of these caves brings **Areas i** and **ii** into line with the general pattern of the animal pens, and emphasises that total shelter was a basic consideration of the husbandry in question. It adds weight to the idea that all of the inner pens possessed some form of roof cover, albeit of light construction.

#### 5.4 Stratigraphic link with the Main Quarry

Previous reports (Kemp 1983; *AR I*: Chapter 6) have included descriptions of the deep stratigraphy recovered at the western edge of the Main Quarry. The resistivity survey of 1982 suggested that the eastern edge of the quarry passed across the area which we now know as Building 300, and already during the 1985 season limited contact was established between this building and the fill of the quarry along its eastern side (*AR III*: 56-59). Further exploration of this was carried out in 1986. In order to do so satisfactorily the area of excavation was enlarged to the west by taking in 1.5 metres of square Q11.<sup>1</sup> This went on to provide the outline for an exploratory trench which, although it did not reach the quarry floor, nevertheless revealed a sequence of deposits which repeats in an interesting variation the sequence previously established along the western quarry edge, and confirms the basic correctness of the interpretation.

The lower pens of Building 300 (**Areas i, ii** and **iii**) opened on to flattish ground composed of compacted marl, units [1433] and [2627]. It could be seen that this was not bedrock, for in square R11 the top of a curving brick wall [2471-2473] appeared, almost flush with the adjacent ground surface [2627]. It was not the foundation course of a near-ruined building, for further digging in the trench showed that the wall descended beneath the ground for a further 70 cms. Thus when **Area i** was in use, this outer set of walls (**Areas xiii** and **xiv**) was hardly visible. There was no time to remove the fill of **Area xiii**, which had a compacted sand surface ([2521] over [2602]). In the trench, however, excavation reached the floor of the adjacent room, **Area xiv**.

The sections (Figure 5.11) show that this room had been built on an earlier surface of compacted marl [2518, 2612, 2469]. Although superficially resembling bedrock the presence of animal hairs shows that it is really a layer of quarry fill which had accumulated before the walls were constructed (The marly layer [2514] beneath the floor of **Area xiv** is really another part of this). True bedrock was not reached. In the south-west corner of the trench an area of floor had a slightly different consistency, containing rubble and sherds as well as animal hairs. When removed as a separate unit [2486] it seemed to be the fill of a shallow pit. On this surface the walls of **Area xiv** [2603, 2604, 2607] were built, from stones in marl mortar with marl bricks above. Wall [2607] was interrupted by a gateway [2624], flanked by a projecting pier [2519]. The general arrangement of walls identifies the purpose of the building: it is another animal pen, **Area xiii** serving as an inner pen to an outer court, **Area xiv**. The organic floor deposit, rich in animal hairs, is unit [2482]. Above it lay sloping banks of rubble from the collapse of the walls, which, as the sections show, had tended to collapse inwards. As the walls collapsed, sand, marl-dust and organic material blew in, collecting between the bricks and stones, and subsequently accumulating above (unit [2605]). At the southern end of the west section it forms a sloping bank over an external heap of rubble; at the northern end of the east section it lies as a series of even layers against wall [2603]. These deposits were covered in turn by layers of sand both inside the walls [2602], and outside [2523, 2625]. At this point the stratigraphy becomes affected by the consequences of modern illicit digging, but sufficient is preserved to show that the sand was succeeded by a series of steeply but evenly sloping deposits with a high content of ash and fibrous organic material [2520, 2531], tending to divide into alternating beds or more fibre and less ash, and vice versa, with some layers notable pebbly. Both this deposit and the underlying sand can be followed into the adjacent square, R11, where they are numbered [2532] and [2521] respectively (Figure 5.6). Here a most important relationship is visible: the sand [2521] spreads over stones fallen from around the entrance to **Area i** (Figures 5.9 and 5.10). Yet **Area i** cannot have been built and used until much of the marly deposit [2606=2627] had accumulated around the ruins of **Area xiv**. The two drawn sections, Figure 5.11, thus hide a missing phase, namely, a

<sup>1</sup> A start on this had already been made towards the end of the 1985 season, taking the excavation beyond the stage represented by *AR III*: 52, Figure 3.2, but the planning had not been finished.

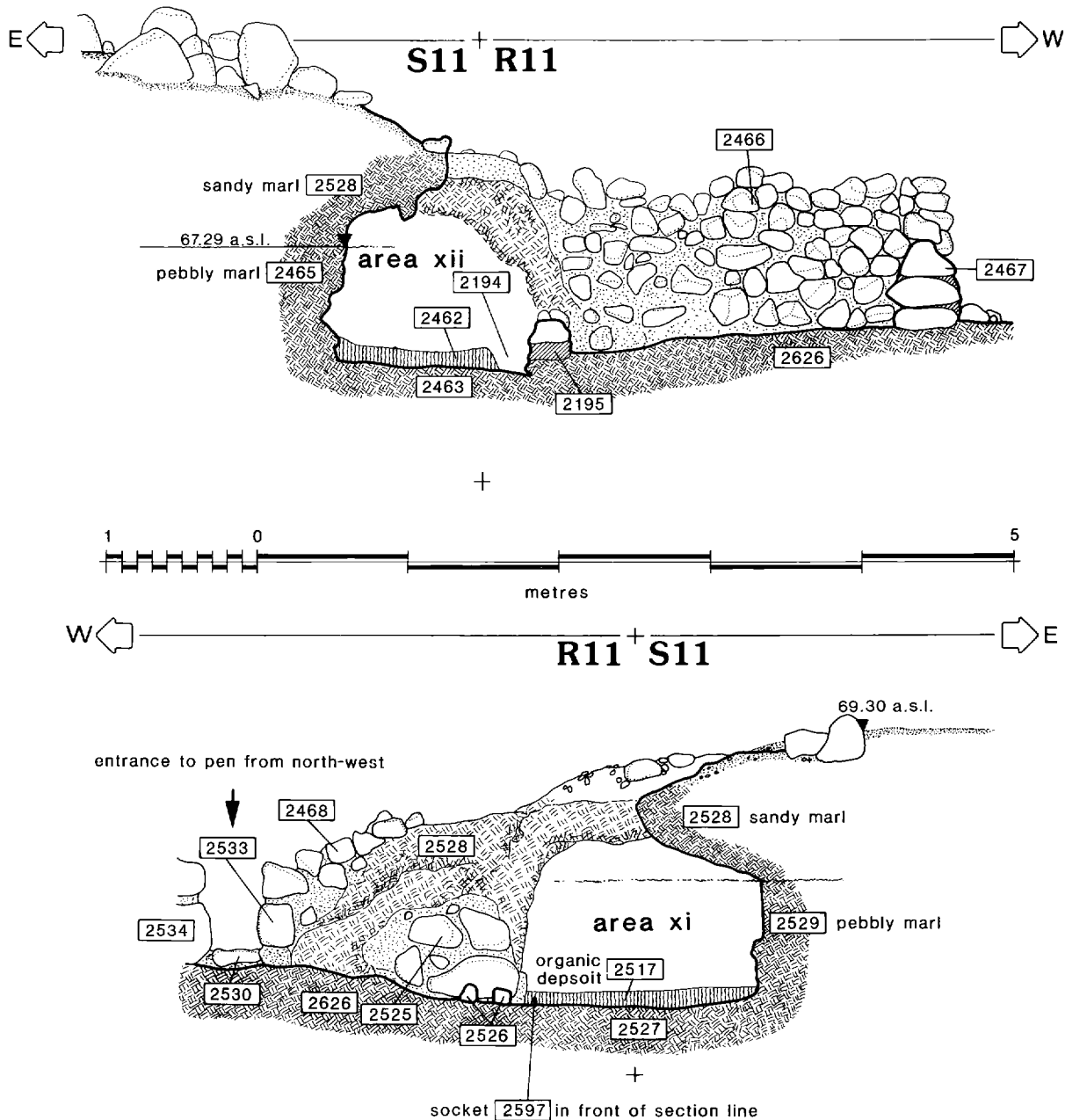


Figure 5.8. Sections and elevations across the caves in Building 300 (originals by Lisa Heidorn).

time when the upper surface of [2605] and [2606=2627] was acting as the ground in front of the newly constructed animal pens represented by Area i.

It is important to try to relate this sequence to that previously recorded along the west side of the Main Quarry. The ideal would be to link them directly by a connecting excavation, but the amount of soil to be removed is considerable and would have meant an allocation of resources which was judged to be unjustified. On the west side of the Main Quarry the deposit above bedrock, termed “quarry fill”, consisted of dusty sand in part coloured orange from the presence of marl dust, containing some organic material, stones and sherds [80, 83, 88]. Its equivalent on the east is presumably the marly fill on which the walls of Area xiv were built, i.e. units [2518, 2612, 2469, 2486]. Unit [80] and an organic element that accumulated above (unit [79], part of the “lower midden layer”) terminated in the lower of two prominent weathering steps in the quarry wall. This pause in deposition would be matched on the east by the actual building and



Figure 5.9. Western part of square R11 and the trench in square Q11, looking north, at the close of excavations.

use of **Areas xiii** and **xiv**. The remainder of the “lower midden layer” on the west, unit [75], could then be equated with the time during which **Area xiv** and adjacent ground began to fill up with sand and was partly buried in earth with an organic content [2605, 2606] (and part of [2602]?). Eventually on the west, when the lower midden layer had ceased to accumulate, a brick-paved platform was constructed on the adjacent desert. When the wall that enclosed it on the east collapsed and fell into the quarry it was covered in turn by a deposit of clean sand, level (5) in square M10, and the “upper midden layer”, level (3). These last two have very definite equivalents in the east, in the sand units [2521, 2523, 2602, 2625], and the sloping fibrous deposits [2520, 2531, 2532]. This being so, it is very tempting to equate the period of Building 300 (as represented in R11 by **Area i**) with that of the brick-paved courtyard on the west.

The basic sequences for the two sides of the quarry and their likely synchronisation are given diagrammatically in Figure 5.12. The results emphasise further the surprising time-scale involved. Both sets of animal pens on the east are, by these equations, contained within the pre-sand layer



Figure 5.10. View to the north-east showing the dark organic deposit [2532] overlying the walls of Area xiii, as well as rubble from the entrance to Area i.

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sequence of the western section, with a mini-history of building, decay and deposition of strata occurring well within the period of units [79] and [75]. Furthermore, if we transfer the context which contained the Tutankhamun ring bezel from west to east, it becomes part of the deposits filling and burying Area xiv. Building 300 had yet to be constructed, and beyond this we have to account for the laying down of the uppermost fibrous deposits, the “upper midden layer”.

1986 excavation

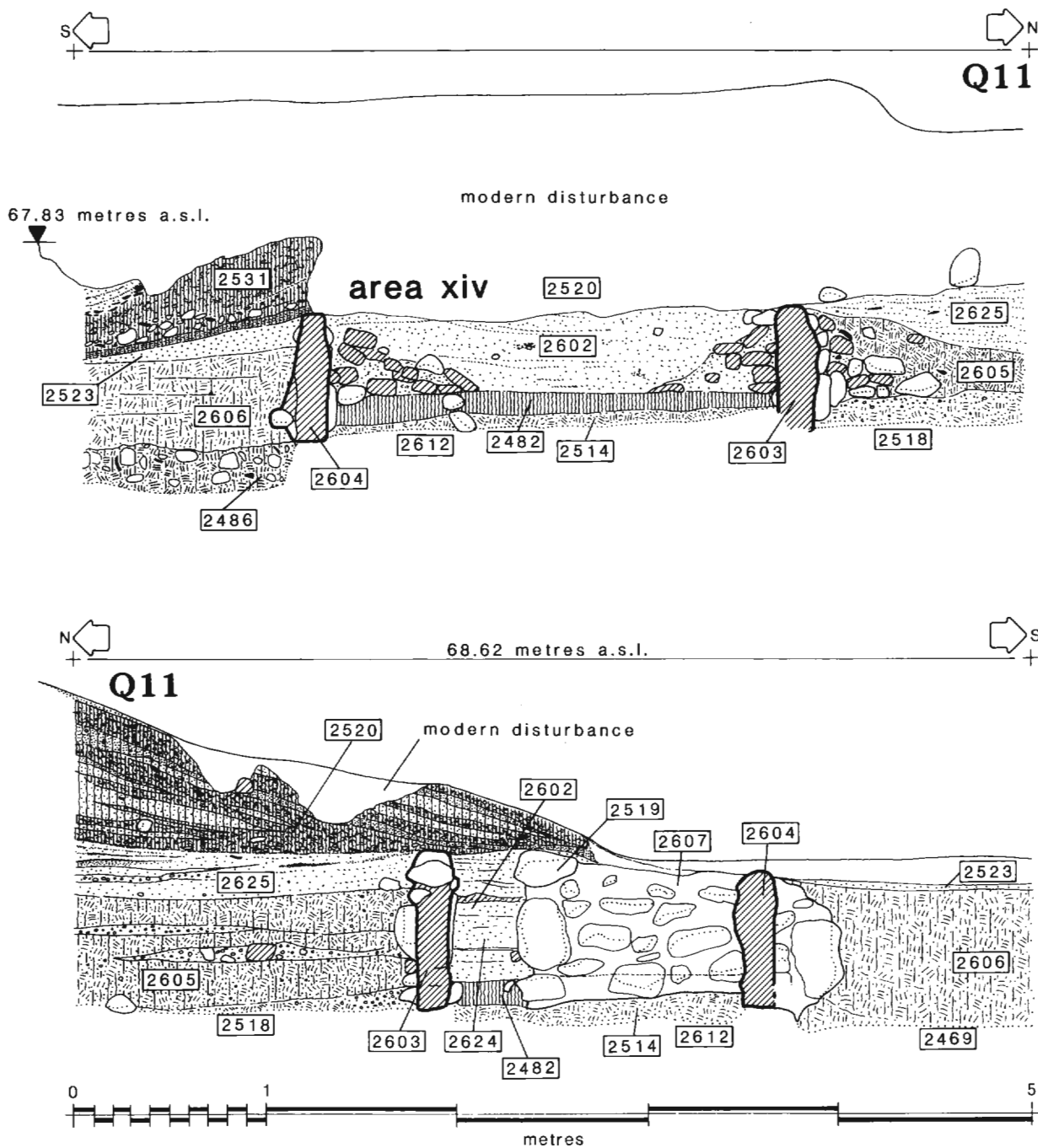


Figure 5.11. North-south sections along the sides of the trench in Q11 (originals by Lisa Heidom). The sloping fibrous organic layers [2520, 2531] are two aspects of the same deposit.

Completion tasks: Main Chapel and Animal pens 300

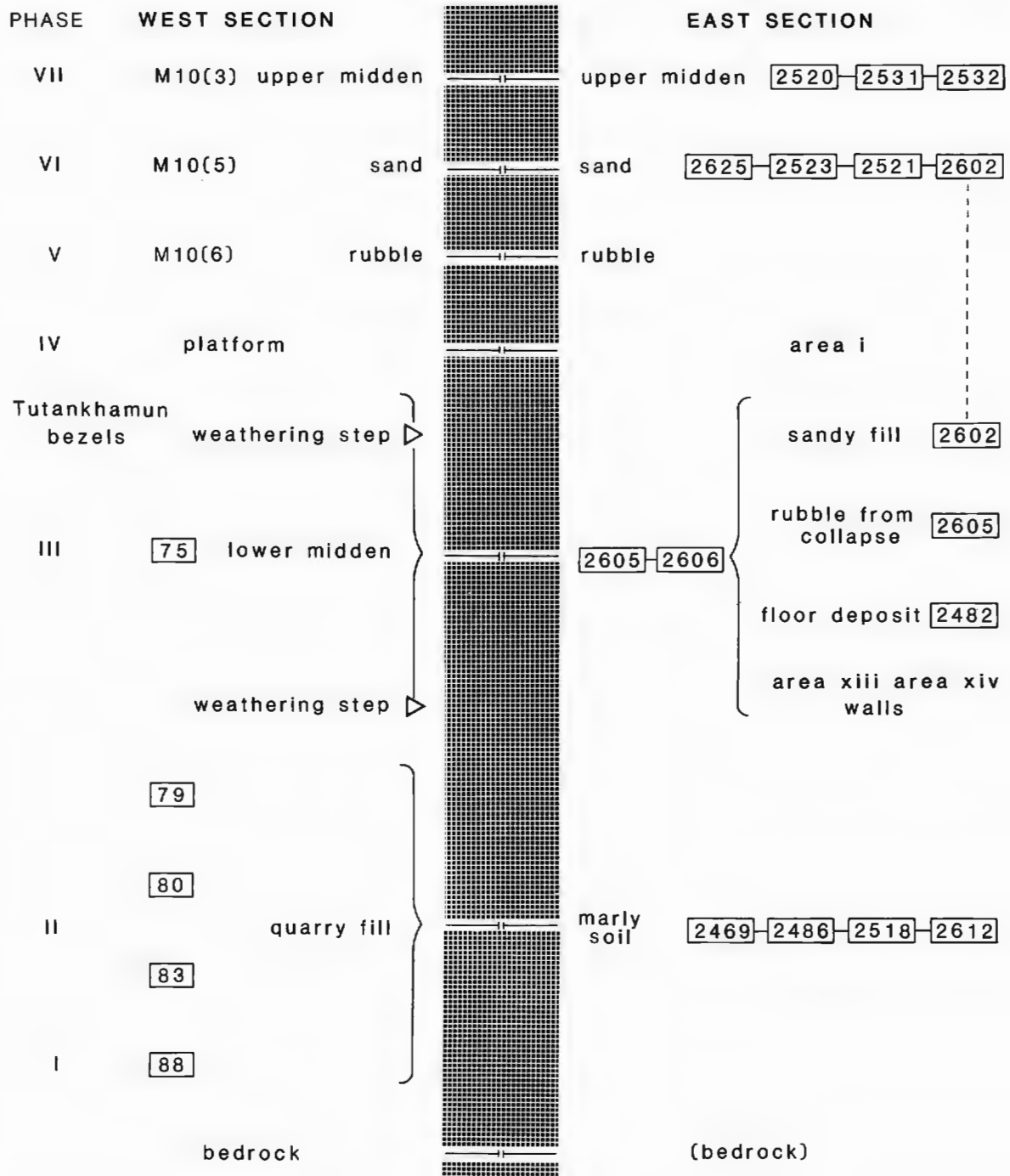


Figure 5.12. Probable synchronisation between the archaeological sequences of the western and eastern sides of the Main Quarry (cf. AR I: 85-88, Figures 6.3, 6.4).