

8. Excavations of Building Z1

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Introduction

Building Z1 is situated towards the northern edge of the site at Kawa. Sections of the building's walls were visible on the ground surface and a plan of these was made in 2000 after brushing of the surface (Plate 8.1). The remains were fully excavated in the winter of 2001-2, the work supervised by Pip Stevenson.

Summary of the phasing

Phase 1 – Construction

Phase 2 – The use of Building Z1

Phase 3 – Collapse of the building and subsequent activities

Phase 1 - Construction

Building Z1 lies on the edge of the Kushite period river bank 40m to the east of the present day bank. It is partly set on the plain but its western room is terraced down the steep slope. As preserved it consists of a single rectangular room (room Z1-I) aligned roughly north-south measuring



Plate 8.1. The building's walls visible immediately below the surface before excavation began. The ruins in the background are of the dig house constructed by Griffith – scale bar 2m.

8.05 x 3.18-3.36m internally with a long narrow room containing a stairway (width 1m) against the exterior of its east wall. Extending 3.5m beyond this to the east is a single wall (Figures 8.1 and 8.2). Preservation varies dramatically.

The most easterly section of the building survives to a maximum height of 60mm above foundation level while to the west the east wall of room Z1-I is preserved to over 1m in height. It is entirely possible that the eastern parts of the building have been totally removed presumably by aeolian erosion. However, there are no traces of additional walls extending beyond the rooms preserved and the eastern end of the wall running east from the stairway is a dressed corner.

The mud-brick walls of Building Z1 are constructed on a clean light brown sand deposit. They are built from bricks measuring approximately 360 x 170 x 90-110mm in size. Walls (Z15)2, (ZH5)6 and (ZH5)7 are approximately 570mm, 600mm and 670mm thick respectively with one row of headers and one of stretchers forming the course, the greater width of (ZH5)7 being the result of it having a mud core. The foundations vary from wall to wall. Wall (ZH5)7 has over most of its length a single course of two rows of headers set on edge, but towards its western end to level up the sloping surface on which it was built, the foundation is of greater depth, built of stretchers laid flat, headers on edge and some rubble (Figure 8.3). Wall (ZH5)6 has a foundation of three courses of alternating headers and stretchers as in the superstructure but little care has been

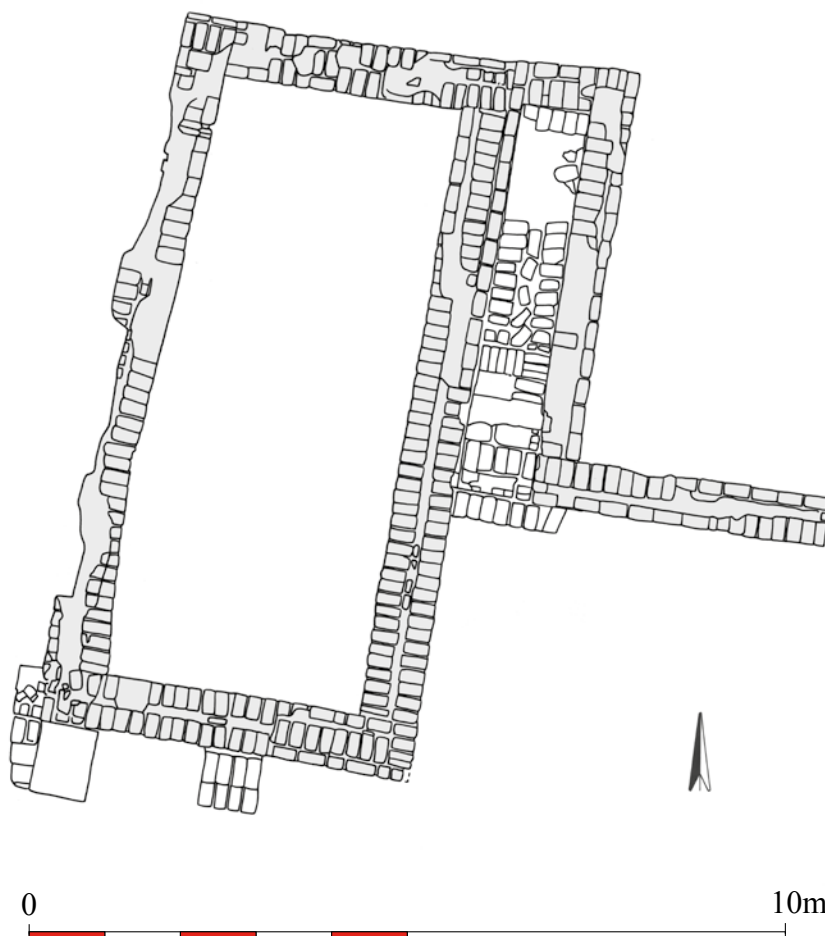


Figure 8.1. Plan of Building Z1 (scale 1:100).

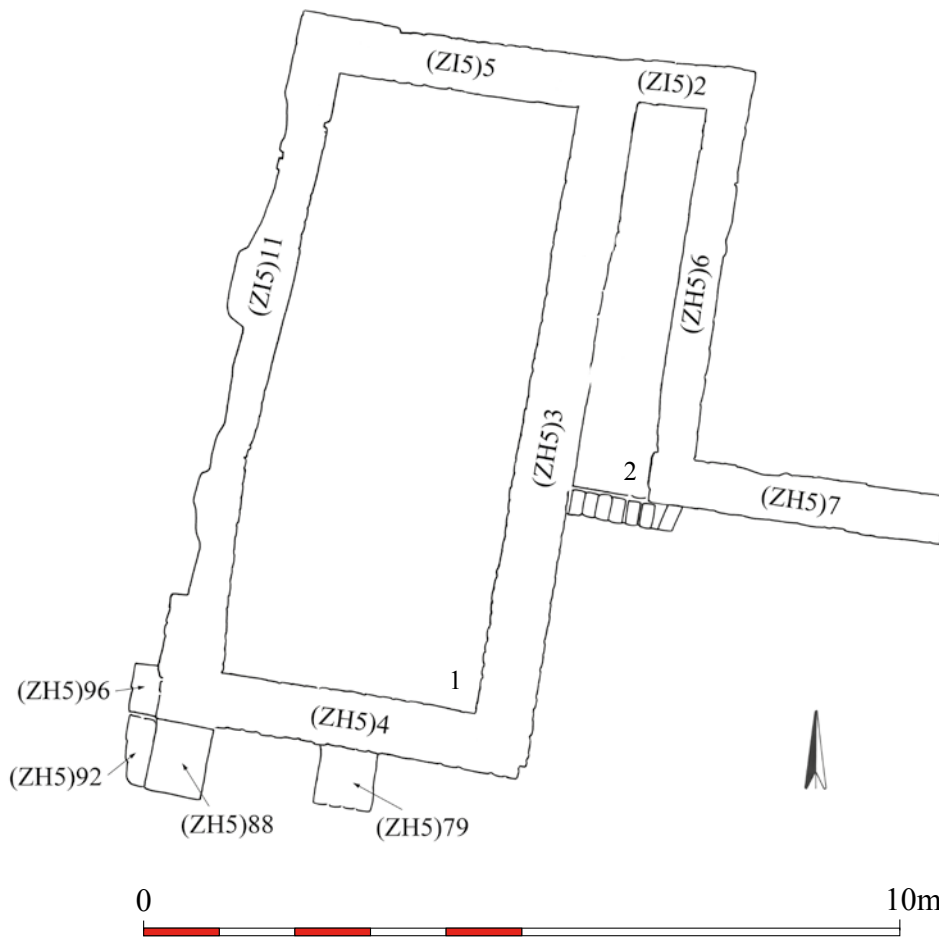


Figure 8.2. Building Z1, context numbers of major structural elements (scale 1:100).

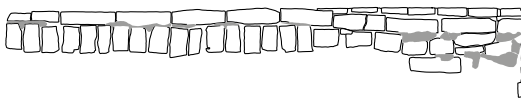


Figure 8.3. Elevation of the north face of wall (ZH5)7 (scale 1:50).

taken to form a smooth wall face. At each end the foundation is deepened by a partial course of stretchers set on edge (Figure 8.4).

The walls of room Z1-I are thicker. The east wall which is typical of the others, is 800mm thick constructed of alternating courses of two rows of headers and two rows of stretchers with a row of headers between. It survives within room Z1-I to a height of 1.06m above the foundations, a single course of headers set on edge surmounted by two courses arranged as in the superstructure. The level of the primary floor is indicated by the mud-mortar rendering, up to 20mm thick, which begins above the third course (Plate 8.2). At the external south-east angle of the room there is a vertical rectangular rebate, presumably designed to accommodate a upright squared timber of 90 x 100mm scantling. The east wall of room Z1-I acts as a terrace wall having been built up against deposits of clean sand approximately 750mm in thickness upon which room Z1-II and the walls to the east were constructed. The west wall of room Z1-I also has a similar function and is founded 200mm below the level of the east wall.

At the south-west corner of room Z1-I was a buttress (ZH5)96 bonded into the south wall and extending 500mm west of the external face of wall (ZI5)11. It is 700mm in length and at least 250mm high.¹

Subsequent to the construction of the walls defining room Z1-I sand up to 400mm thick containing some mud-brick rubble was deposited to provide a level base for the primary floor, a thin mud surface with some charcoal flecks upon it, which was preserved in the south-west corner of the room.

Room Z1-II is 1m in width with a total length of 5.17m. What little survives indicates the presence of a doorway at the south end of the room with a staircase leading up towards the north bounded by walls (ZH5)3 and (ZH5)7. The threshold was of mud, 100mm wide and 50mm high up against a rectangular-sectioned timber long since decayed. The timber, approximately 100mm wide and 80mm thick, was set into sockets in the side walls to east



Plate 8.2. The north and east walls of Room I showing foundations and mud mortar render above the primary floor level looking north east – scale bar 2m.

and west and was associated with a shallow post-hole either for a jamb or door pivot at its west end. The function of the shallow depression 380mm in diameter towards the east end of the threshold is unclear. Additional sockets, with thin stone slabs forming their tops, are presumably for the timber front edge of the first step, the core of which is of mud brick (Plate 8.3). The lower part of the socket for

¹ Owing to the proximity of the edge of excavation and the very soft sand through which it was dug it was not possible to excavate the whole of this buttress.

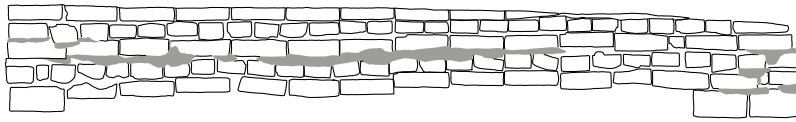


Figure 8.4. Elevation of the east face of wall (ZH5)6 (scale 1:50).



Plate 8.3. Room Z1-II. The threshold, 'pivot' and sockets for the wooden elements of the steps looking south west – scale bar 500mm.

another timber beam associated with the second step was located but no trace of steps at a higher level are preserved, the building not surviving above this level. However, the solid mud-brick infill of the rest of room Z1-II was presumably designed to support a staircase with perhaps a landing at the top giving access to the west onto the roof or upper storey over room Z1-I.

In front of the doorway, abutting the north-south wall to the west and the south face of wall (ZH5)7 to the east is a step measuring 1.48m in length constructed of a single course of bricks laid as headers leading up from the sandy surface to the south. To the south the natural sand was overlain by a 200mm thick deposit (ZH5)54 of small fragments of mud-brick rubble upon which the step is laid. The surface of the rubble was then used as a surface contemporary with the use of the staircase in room Z1-II (Plate 8.4).

Phase 2 – The use of Building Z1

None of the surfaces within room Z1-I could be traced right across the room and many were only defined as such



Plate 8.4. Rubble Surface (ZH5)54, wall 19 on deposit 43 and rubble 18 looking north west – scale bar 2m.

when features were found at a particular level. A number of isolated patches of mud may represent repairs to floors designed to fill hollows. Overlying the primary floor surface was another mud surface located in the south-west corner covering an area 1.35m in length and 1.68m in width. It is covered in

an ashy deposit and is burnt a reddish brown colour. There is no sign of burning on the adjacent walls. Surfaces of sand (ZH5)66 and 69 in different parts of the room may be contemporary. Cut into these were two shallow pits 200 x 230 mm by 60mm deep and 260mm in diameter and 40mm deep and what may be a post-hole 300 x 230mm in size and 250mm deep containing some charcoal flecks.

Context (ZH5)49 is another surface with a matrix of sand, ash, and a little charcoal and other organic material. Up against the south wall it is 60mm thick, further to the north it is 30mm in thickness. Midway between the east and west walls and a little south of the centre of the room a substantial oval post-hole with vertical sides and a rounded base 320 x 370mm in size and 250mm deep was cut from this surface. Within this is a clearly defined post-pipe filled with charcoal fragments, 150mm in diameter and extending to the base of the hole with two large pieces of mud brick used as packers. The post set in this hole is almost certainly associated with a socket 290mm wide, 250mm high and



Plate 8.5. Post-hole in the centre of Room 1 and associated beam socket in the west wall – scale bar 500mm.

210mm deep roughly cut into the east wall of the room and only about 220mm above the surface of (ZH5)49 (Plate 8.5). At a comparable level at the north end of the room was an organic deposit [(ZH5)56] containing fibrous material.

The west wall of room Z1-I was built on the steep slope presumably down to the river. During the construction of the building buttress (ZH5)96 had been provided at the south-west angle. Abutting this buttress is another (ZH5)92

extending 980mm to the south, over 380mm wide and up to 200mm high, the top is stepped. After a build-up of sand against (ZH5)92 another mud-brick buttress (ZH5)88 was constructed partly overlying (ZH5)92 extending 960mm south of the building, 670mm thick and surviving to a height of 700mm (Plate 8.6). The buttress was covered in a mud-mortar render 20-30mm thick. To the east of this buttress 100mm of sand was deposited sealed by a thin layer of ash. On this surface mid-way along the south wall buttress (ZH5)79 was constructed of mud brick and covered in a mud-mortar render. It is 770mm wide, projects from the wall 770mm and is 450mm high and consists of two steps, the lower with a riser of 230mm. Abutting buttresses (ZH5)88 and 79 was a deposit 200mm thick of sand (ZH5)85 containing considerable quantities of lumps



Plate 8.6. The south wall of room Z1-I with buttresses (ZH5)96, 92 and 88 at the angle and (ZH5)79 midway along the wall, looking north east – scale bar 1.5m.

of mud many bearing seal impressions, along with a little pottery and bone.

Horizontal sandy deposits, some containing a little mud-brick rubble, continued to build up to the south of wall (ZH5)4 gradually burying the buttresses. One surface was



Plate 8.7. Pottery vessel containing an oyster shell – scale bar 100mm.

marked by a thin layer of ash, another had a complete pot (Type 000.00), containing an oyster shell, (Plate 8.7) and rubble on its surface up against the wall. In addition, the excavations in this area revealed a single upright stone and a reused grinder, set at the external angle of walls (ZH5)3 and (ZH5)4.

Extending across the doorway into room Z1-II was a single line of up to two ‘courses’ of mud-brick rubble. To the south fine rubble layers on the primary surface are overlain by a row of four mud-brick stretchers over a distance of 1.5m with another set off line to the west (Plate 8.3). The gap between the last brick and wall (ZH5)7 was filled with rubble.

East and a little north of the end of wall (ZH5)7 is a roughly circular patch of rubble and occupation material, pottery, traces of burning and charcoal, (ZH6)2 approximately 1.5m in diameter and up to 340mm thick. This is set in an expanse of soft clean sand which abuts the walls in this area. It is presumably the fill of a shallow pit associated with an occupation surface which has been removed by erosion. As the surface from which the pit was cut has been removed the stratigraphic relationship of the pit to Building Z1 cannot be ascertained. Immediately to the north of the pit is a line of two mud bricks.

Phase 3. Collapse of the building and subsequent activities

The beginning of the destruction of the building in room Z1-I is represented by 50-100mm of mud-brick rubble sealed

by yet more mud-brick rubble amongst which were pieces of mud showing the impressions of palm fronds, presumably material from the collapsed roof/first floor. Upon this rubble wind-blown sand accumulated. At a later date ash and other rubbish including animal bone and pottery was tipped into the room over an extended period and further layers of mud-brick rubble and sand completed the filling of the room. High in the sand fill in the south-east corner of the room were several mud bricks, a grinder and fire-blackened pottery, possibly evidence for some occupation of the ruins at this time.

Immediately to the north of the building abutting the north walls of rooms Z1-I and Z1-II is a mass of mud-brick rubble which is set on the sandy surface which slopes steeply to the north west and west.

Discussion

The nature of the original building on this site is uncertain. As it survives the plan of the building appears to be complete but if so its form is very unusual (Figure 8.1). Whether the building was ever more extensive is unclear. The depth of excavation on the west side of room Z1-I within the very



*Plate 8.8. General view over Building Z1 during excavation looking north east.
The relationship of the denuded walls of room Z1-I to the present ground level can be clearly seen – scale bar 2m.*

soft sand made it impossible to be certain if the building extended further down the slope. There is no evidence for walls abutting the north-east corner of room Z1-II nor for any continuation of wall (ZH5)7. Room I is a substantial structure but lacks a doorway. That and the presence of the stairway in room Z1-II suggests that it was designed as a substructure to support a first-floor room on the steeply sloping river bank. However, the material from within it indicates that the room was occupied and used for domestic activities at least on some occasions.

The presence of the mud sealings suggests that the building was of some importance but what this may have been is unclear.

The remains of the building have been greatly denuded presumably by aeolian erosion. The eastern part of the structure has been removed down to the level of the surrounding plain. To the west, however, the north and south walls of Room I have been eroded so that their tops slope markedly from east to west, a slope down of 880mm over a distance of 3.2m. This again presumably reflects the denuding of the walls down to the then contemporary ground level. Today however, the surface around Building Z1 is horizontal (Plate 8.8) indicating that the severe erosion of the building took place before the river bank migrated to the west and the area to the west of the building infilled with sand. There is no dating evidence available to suggest when this may have occurred.