AN ARCHAEOLOGICAL INVESTIGATION OF THE KAT BALCONY: THE CASTLE

Prepared for

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1. INTRODUCTION

During a site meeting at the Castle in early June 1999, it was brought to my attention that the Kat Balcony was undergoing restoration. It also came to my attention that members of the crew of the restoration contractor, for whatever reason, decided that in addition to removing the tile surface from the balcony, they would remove the fill lying below. They were stopped after they had removed approximately 4m³ of deposit, and having seriously undermined one set of the present balcony's steps .

Inspection at this stage showed that earlier structural remains had been revealed during removal of the fill and suggested that an earlier balcony, with steps, pre-dated the elaborate 18th century balcony that is so well known today. It was also clear that the fill was stratified and contained artefactual material.

A full archaeological investigation was commissioned to interpret the structures. Owing to prior work commitments this could only take place in August and all restoration work was stopped until completion of the archaeological study. The location of the Kat wall and Balcony at the Castle is shown in Figure 1.

2. BRIEF BACKGROUND HISTORY

As no archival study has been undertaken as part of this commission, only a few very basic facts surrounding the history are presented here.

Construction of the Kat wall commenced around 1683-5. Shortly after the completion, the buildings which housed the governor and his second in command were erected against the Kat (and today house the William Fehr Collection and administration). The present balcony was only added much later, toward the end of the 18th century.

While the cursory inspection of the structural remains revealed below the surface of the present balcony undoubtedly represented an earlier structure with the same use, inspection of a selection of early plans of the Castle showed no evidence of a balcony at this location during the last part of the 17th or the early part of the 18th century. The absence of such a structure is unusual since a drawing of the Castle prior to the erection of the Kat wall[1], shows a balcony with steps in front of what would then have been the governor's quarters (now known as B Block) (Plate 1) and so we know that such structures did exist.

3. METHOD

A grid of one meter squares was established over the site and excavation of the remaining deposit was undertaken according to these units. The deposit was excavated stratigraphically with individual layers bagged separately and according to square. The grid layout and section drawings are shown in Figure 2. Detailed site notes were kept and digital, slide and video photography was made of both the stratigraphy and structural elements. A selection of building materials from different layers was also kept.

All deposit was screened through a 3mm mesh sieve. This included both the deposit from the excavations and from the spoil heap that had resulted from the unauthorised

[1] Wittebol drawing reproduced in Ras 1959: 58-59.

digging. While mixed, this nevertheless is a record of artefactual material from a deposit most likely related to the construction of the present balcony in the late 18th century.

While most of the archaeological observations are logical and follow a sequence that can be readily explained, some are more puzzling and at odds with the evidence. These may simply be evidence of changed intentions, that despite our best efforts, may never be explained. A full archival investigation could perhaps resolve some of these issues.

4. OBSERVATIONS

A plan of the site (Figure 3) shows the various features which have been uncovered during the excavations. Side and front views of the features are superimposed on drawings of the extant balcony for comparison (Figure 4). Each of the features will be discussed below in the order in which the archaeological evidence suggests that they occurred. Briefly summarised these events are as follows:

- Buildings against Kat wall completed (c1680's)
- Early balcony with steps on either side constructed (c1690's?)
- Early balcony enlarged and steps upgraded (c1700-?)
- Drainage channel in front of old balcony enclosed (c1786-1790)
- New elaborate balcony constructed and area behind enclosing walls filled up with soil and rubble (c1786-1790).

4.1 The accommodation block adjacent to the Kat wall

Despite the lack of precise archival information regarding the dating of the building of the governor's quarters, these were certainly in place by the end of the 17th century. This is important since the layering of the archaeological evidence places this as the earliest feature of those described in this report. We have been able to isolate the trench that was excavated to lay the foundation stones, in deposits that were in place prior to this event (Plate 2). We know too that the vaulted structure (that will be discussed in detail under point 4.2) was built up against this wall suggesting that it was added at a later stage, rather than being built at the same time as the accommodation.

We notice that the wall enclosed by the vault is not plastered, and does not appear to ever have been. This could suggest that the balcony was added before the outer wall of the accommodation was plastered. This in turn means that the balcony was added sooner rather than later, as we would expect the walls of the governor's residence to have been plastered shortly after completion. If the intention to have a balcony had not been there immediately, the wall covered by the balcony would surely have been plastered as well.

Two pits cut into lower deposits were obviously dug before the balcony was erected. The levels from which these pits were dug also gives some idea of the original ground levels during these early years. Similar pits have been observed in D Block and are believed to represent holes that supported scaffolding used in the early construction process (Plates 3,4). The pit below the opening in the old balcony was much larger than would be necessary for scaffold. Because of its awkward location we were unable to fully excavate its content and therefore do not know its depth and cannot comment on its use. The pit had been cut through a compacted surface covered by a lens of

crushed marine shell. This compacted brown deposit covered by shell was also found in a test pit outside the vault and indicated an earlier surface but not necessarily man-made (Plate 5).

Bricks in the wall of the accommodation are approximately 200mm long and are held together with mud mortar. No samples of these bricks could be obtained.

4.2 The early balcony and steps

After removing layers of rubble it became obvious that the early balcony was not constructed as we had believed it would be i.e. three vertical side walls up against the Kat and filled with soil. Instead we noted that the balcony and steps had been constructed over a vaulted structure reminiscent of the one depicted in the Wittebol drawing shown in Plate 1.

The vaulted structure was constructed using red brick (210x100x50) with the bricks of the roof held together with lime plaster while the vertical walls were bonded with mud mortar. Removal of plaster from the front wall of the vault revealed a bricked-up opening which presumably was intended to allow access to the space below the balcony (Plate 6). On removing some of the brick infill however, we found that the space was entirely filled with deposit. Stratigraphic layering, particularly a band of white soil immediately adjacent to the vault roof (Plate 7), suggested that the fill had been in place before the vaulted roof had been constructed and was in fact used in lieu of a timber form to support the vault during construction (one can see how the wet plaster that had squeezed from between the bricks during construction had been rounded by impressing into the sand and had also incorporated particles of the sand into it).

The bricked up opening was puzzling as we had at first believed it to have been the access to a hollow space. On seeing the filled interior, and having reached the conclusion that filling had been done before completion of the roof, it seemed that the only likely purpose for the opening was to enable access to the space at a later stage, when, if it were decided to utilise the space, the bricks could have been easily removed (as we did) and the fill removed. This obviously never happened. The brick infill of the opening was carefully packed and suggested that there was no immediate intention to remove the fill.

We removed much of the fill to enable a number of observations. Firstly, we needed to know if the vaulted structure locked into the Kat wall or not? We also needed to know if any form of flooring had existed prior to filling? The latter proved to be negative with the fill having been thrown onto an uneven surface below which we were able to detect the presence of both the foundation trench for the Kat wall, and the presence of a large pit over which the front wall had been placed.

The front wall of the early balcony had been plastered during its use. The plaster consisted of the standard shell lime type, but in this instance had been tinted to give it a bluish-grey appearance (see Plate 6) Charcoal appeared to have been used to create the tint , but we cannot say, without analysing some fragments, if the charcoal is a particular substance which when charred formed a bluish tint. The grey tint of the plaster is a vital clue to matching different phases of the balcony with the steps.

As has been mentioned, there are two phases to the early balcony. The earliest phase which we have been discussing up to now, certainly had steps leading down from either side, and though subsequent alterations destroyed virtually all traces of the step platforms, some clues to their existence and form were preserved. The best of these clues was preserved in the plaster of the Kat wall where an episode of replastering subsequent to the construction of the steps, preserved the outline where they abutted the wall (Plate 8). Impressions were preserved in this way on both sides of the balcony. The shape of the steps can clearly be seen in the photograph. Traces of grey plaster are still preserved within some of the mouldings and appears to be the same colour as the plaster on the front of the early balcony, suggesting that these went together. It therefore also suggests that unlike the steps of the latest balcony, which utilises a hard-wearing hornfels stone for the steps, the earliest steps were probably made from brick which would have been plastered to form the rounded moulding. This seems a little odd as one would assume that plaster would have been too fragile for this task. Using an average step difference of 212mm, and the top of the crushed shell layer as an approximate old ground level at the time of construction, then we estimate that there would have been 7 steps on either side.

The front wall continues on either side of the vaulted structure and the edges presumably followed the steps down at an angle. The original structure has been disturbed to such a degree by the second phase steps that we can no longer determine precisely the appearance of the front of the balcony at that time. Alterations have also left no trace to enable us to conclude if there would have been any ironwork such as handrails etc. It is unusual that the original steps were so completely destroyed during the next phase of modification. One possible explanation for this is that some of the building material was re-used in the later construction.

4.3 The modified balcony and steps

At some point it was decided to alter the older balcony. Based on the archaeological observations, modifications were intended to make both the landing? and the steps broader. In the process some of the original fabric (such as the steps) was removed and new structural elements were added. A rough stone wall was constructed against the front of the vaulted structure. Roughly constructed with an uneven face, this seems to have been intended to carry the moderately widened steps. More of the second phase steps have survived compared to the earlier ones and we could see that the bricks of the second phase extended onto the surface of the stone wall (Plates 9,10) which angled down to follow the steps (Plate 11).

While there are some bricks still in place (and numerous impressions in the clay showing where bricks had been), we do not know more about the form of these steps. We do know that medium sized cobbles set into clay were used as a base on which to lay the bricks[2]. What is unusual is that there does not appear to be any marks/stains against the plaster of the Kat wall to suggest any shape. This may mean that the newer steps replicated the older ones (but no artisan is likely to have been able to replaster a step so accurately). The only other possibility is that our conclusions regarding the small patch of grey plaster in the moulding linking it to the older balcony is wrong, and that perhaps the second set of steps was also plastered using tinted plaster. In other words, perhaps the forms preserved in the plaster are those of the second set and that it is the

[2] The same way of preparing a base for brick steps has also been observed in the old garden stairs at Waterhof. See Halkett 1998.

forms of the first set that we are lacking. We just do not have enough preserved to know for sure (although my gut feeling is that the outlines go with the earlier steps).

There is no doubt that there were two sets of steps. One can see clearly how the second set were laid over the top of the partially demolished front wall of the earlier balcony and rested on the rough stone wall that was built alongside. The unevenness of the front of the stone wall, as well as the type of stone used (Table Mountain Sandstone, TMS), suggested that this would not have been exposed[3]. Excavation of a test trench in front of the stone wall showed indeed that there would have been an additional wall built in front of the rough stone wall. This is marked by foundation material consisting of shale (Plate 12). In addition, a line of cobbles which had been laid up against the new wall was left in place and marked the edge (Plates 12,13). Although no trace of the actual wall itself remained, I think it would be safe to assume that it was constructed of either stone (shale) or brick. All the other balconies in front of F Block of constructed out of yellow clinker bricks and it would therefore be fairly safe to assume that the modified Kat balcony utilised similar materials. In fact, I think the complete absence of any trace of the wall points towards it having been constructed of clinker brick. Although we have no direct evidence for it, I believe that the façade of the modified balcony was dismantled when the new Kat balcony was constructed in the late 18th century and the clinker (which at that time might have been scarce enough to warrant recycling) was re-used. I think that this too explains why there is no trace of the surfacing of the second phase of steps as these were probably also made from clinker as with the other balconies. It is interesting to note that the restorers working on the bricks in the front of the 18th century balcony complain of the poor condition of those clinkers. I think that this, together with the archaeological observations, points to clear evidence of re-use of clinker bricks.

It is interesting to note that the distance from the Kat wall to what would have been the front of the added wall, measures 2.4 meters, the same as the width of the balcony in front of the Sekund's quarters. It could then be that the modifications could have been in part to bring some symmetry to the alignment of the balconies?

There is no way of knowing if any ironwork was present on the modified balcony. A number of fragments of shaped bricks and tiles have been recovered from the fill surrounding and covering the old balcony. This fill was clearly added after the walls of the new balcony were constructed, and although we cannot say precisely where this shaped brick may have come from, it is tempting to suggest that they originally formed part of the embellishments of the modified older balcony (and that some or all of those might have been re-cycled from the original balcony). These shaped bricks and tiles were not cast in that form before firing, but were rather ground into shape at a later stage as needed. There are signs on same fragments which could suggest that metalwork was at one time attached. A number of these shaped fragments have been collected.

4.4 The covered drain

The decision to construct the elaborate Kat balcony in the late 18th century led to the partial dismantling of the older balcony/s, probably as we suggested to re-use some building materials such as clinkers. The added width however, meant that the drainage

[3] Exposed walls at the Castle are usually either made from brick or shale.

channel, one of a complex of such channels carrying runoff from the courtyards out into the moat, that ran parallel to the Kat wall would have been interrupted. It would appear that, rather than undertake the effort (and cost?) of altering the course of the water channel, a decision was made to simply keep the original channel where it was, but with the addition of a vaulted cover which would allow it to be built over (Plate 18). It is not clear why the covering had to be quite so elaborate as it would seem that a cover of shale slabs with plastered gaps would have sufficed to stop sand from filtering through and causing blockages.

While we do not have the precise date of construction of the original system of channels of which this was a part, it must have been during the late 17th or early 18th centuries.

4.5 The later balcony

The balcony that survives today is probably a lot more elaborate than the earlier ones. The fact that the older balcony was superseded suggests that there was a desire on the part of the authorities to have a structure that by virtue of its design underlay its importance as a place from which important announcements were made. The latter half of the 18th century was a time when in general, an increase of architectural elaboration is noticed at the Cape.

5. CONCLUSIONS

Archaeological work has demonstrated that a simple balcony was constructed in front of the governor's residence in the latter part of the 17th century. The style of construction over a vault is reminiscent of a balcony, shown in a Wittebol drawing, in front of the early governor's residence which was located between Oranje and Leerdam bastions before the construction of the Kat wall. It can also be shown that this early balcony was modified to make it wider. When the elaborate balcony was added, the older one was partially demolished and we believe some of the building materials were re-cycled into that structure.

6. RECOMMENDATIONS

No more archaeological work needs to be undertaken at this location. It has been suggested that the remaining portions of the old balcony could be preserved below a concrete slab. This would assist with the control of moisture in the lower part of the Kat wall and allow access to interested parties to study the remains in the future. This should be viewed as a positive step.

7. PROFESSIONAL TEAM

Report	Dave Halkett
Excavations	Dave Halkett
	Peter Nilssen
	Mzwondile Sasa
	Mzumzima Mjikaliso

8. REFERENCES

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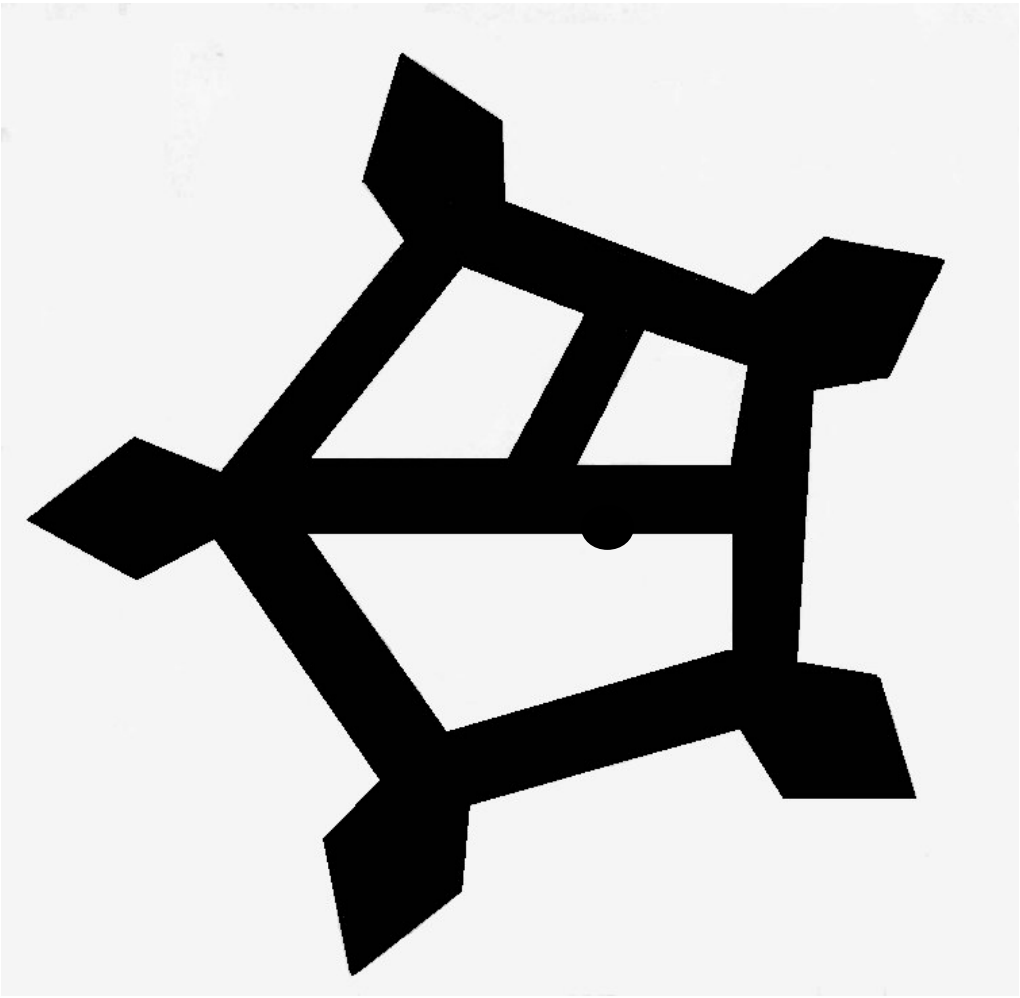
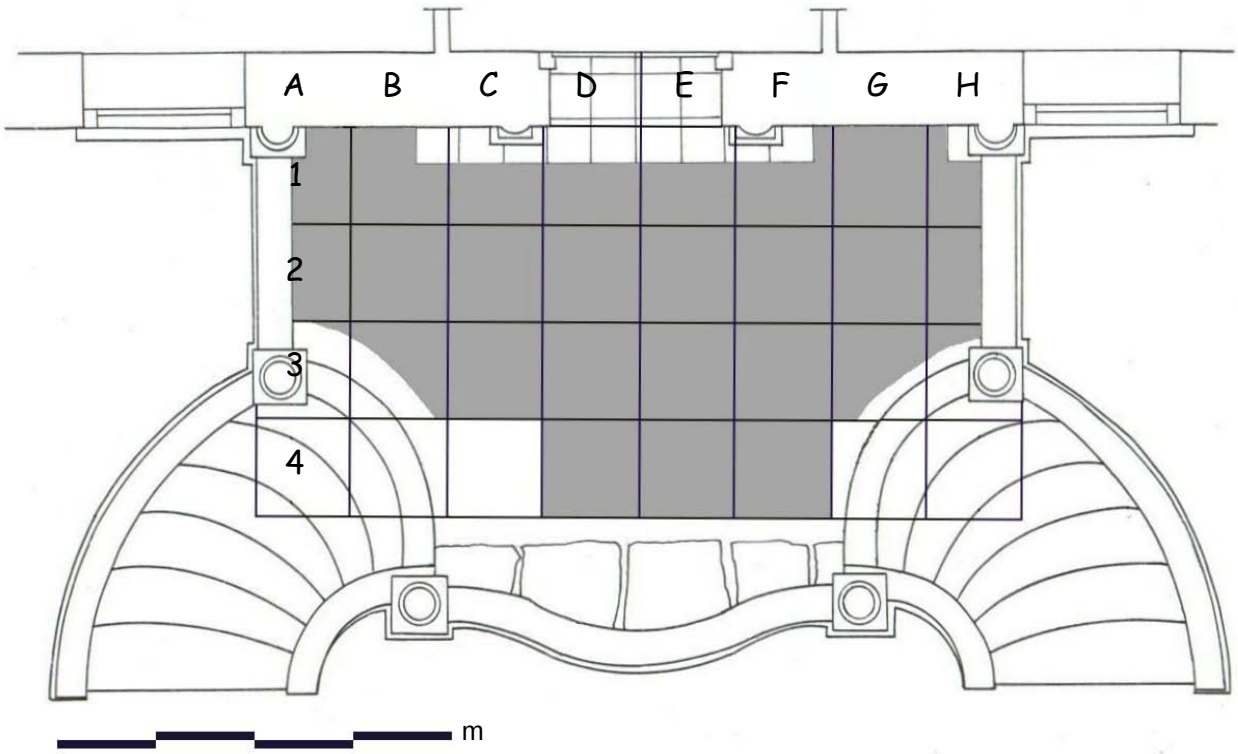
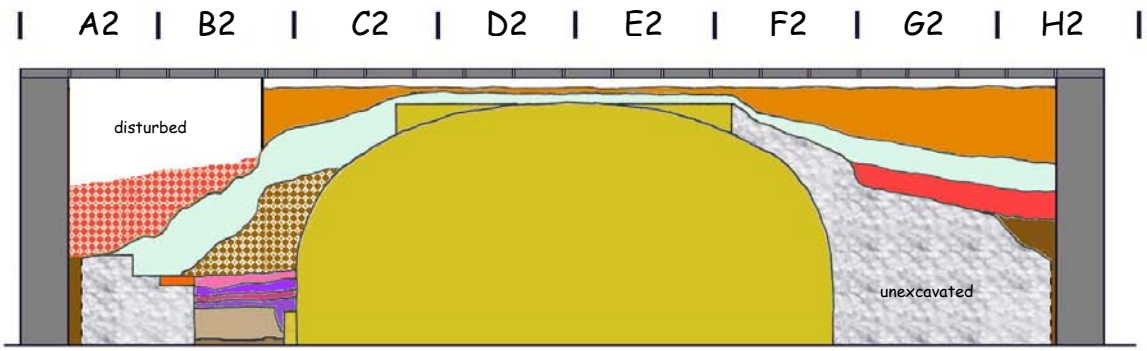
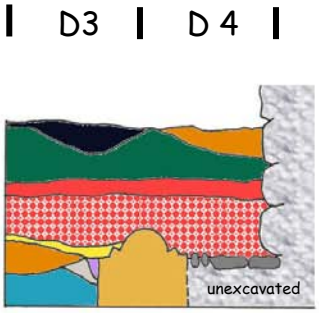


1 LOCATION OF THE KAT BALCONY

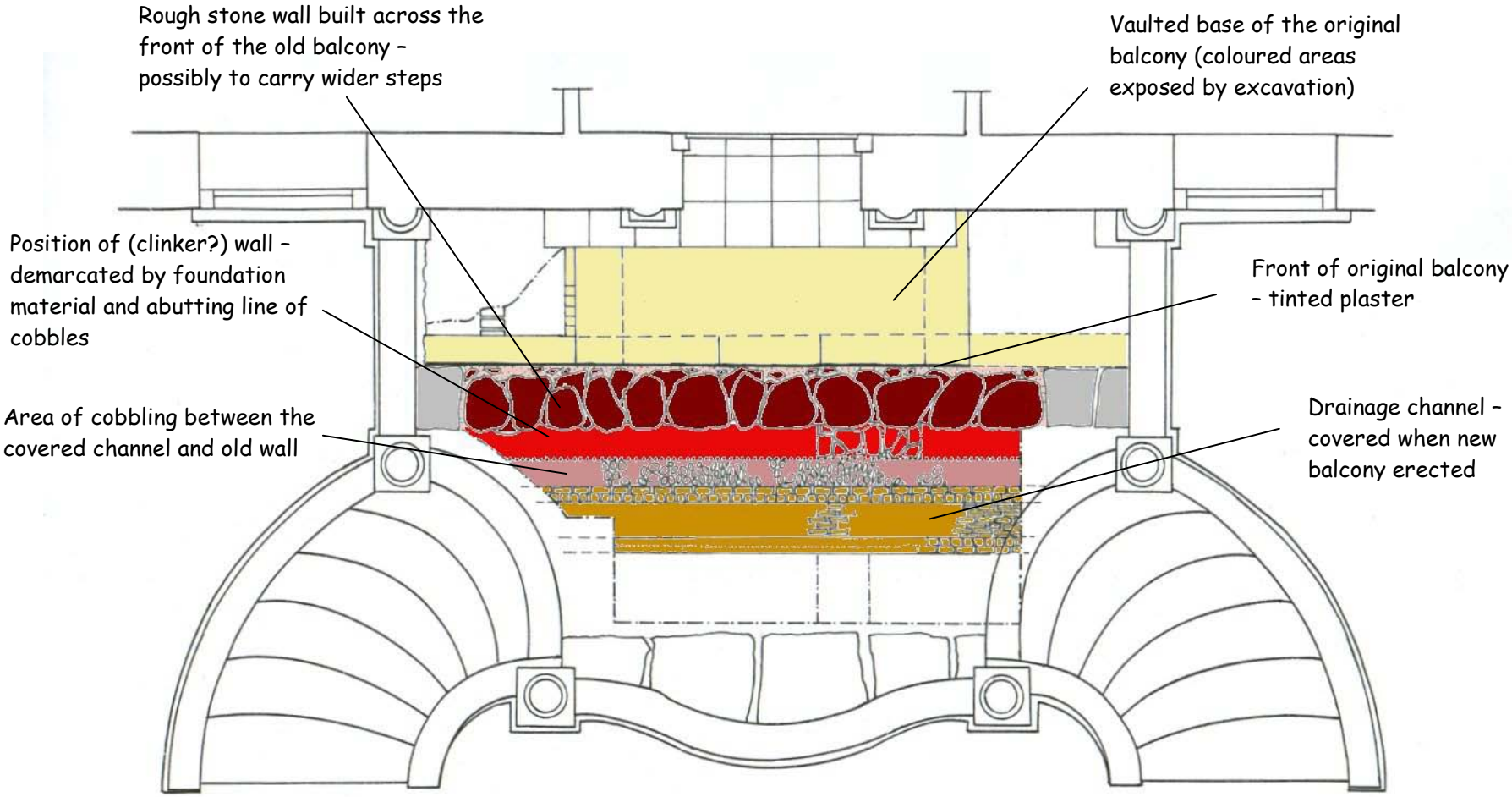




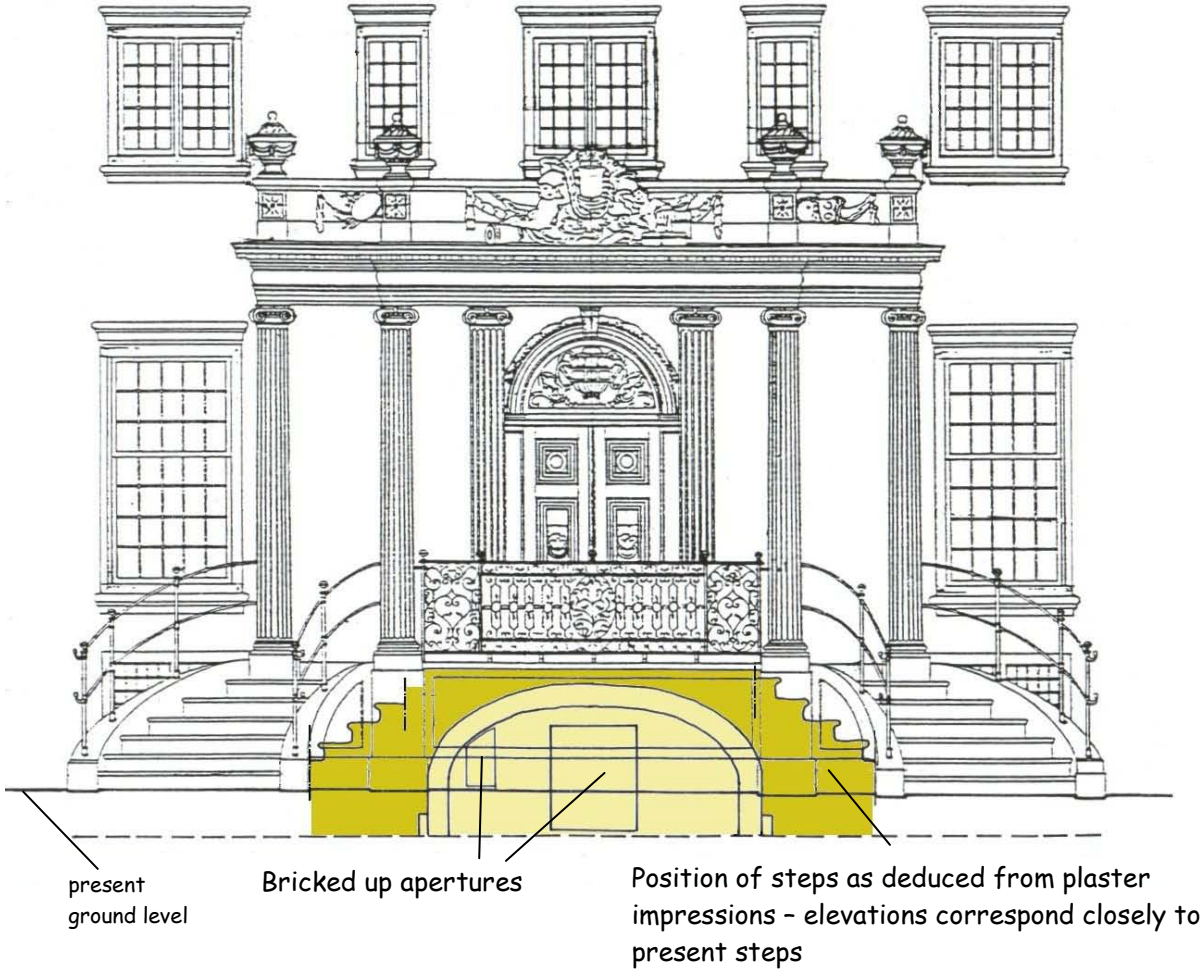


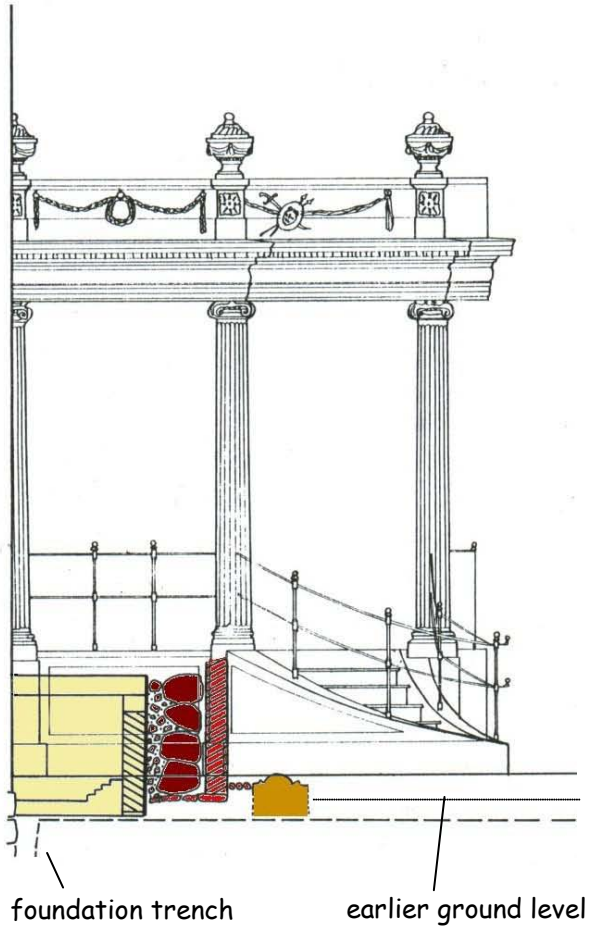
- plaster brick & tile (PBT)
- sandy red (SR)
- yellow green clay (YGC)
- reddish with dark clumps (RWDC)
- reddish w dark clumps 2 (RWDC2)
- orange sand w plaster flecks (OSWPF)
- loose brown w charcoal fleck (LBWCF)
- ash and charcoal
- yellow mottled clay
- hard orange clay w rocks (HOC)
- reddish with dark clumps (RWDC)
- sandy white (SW)
- loose brown above vault (LBAV)
- plaster residue alongside vault (PRAV)
- brown powdery alongside vault (BPAV)
- plaster residue alongside vault 2 (PRAV2)
- brown powdery alongside vault 2 (BPAV2)
- brown powdery alongside vault (BPAV)
- fine brown (FB)
- trench fill

2 GRID LAYOUT AND SECTIONS



3 KAT BALCONY: PLAN OF STRUCTURAL FEATURES m





4 KAT BALCONY: FRONT AND SIDE ELEVATIONS

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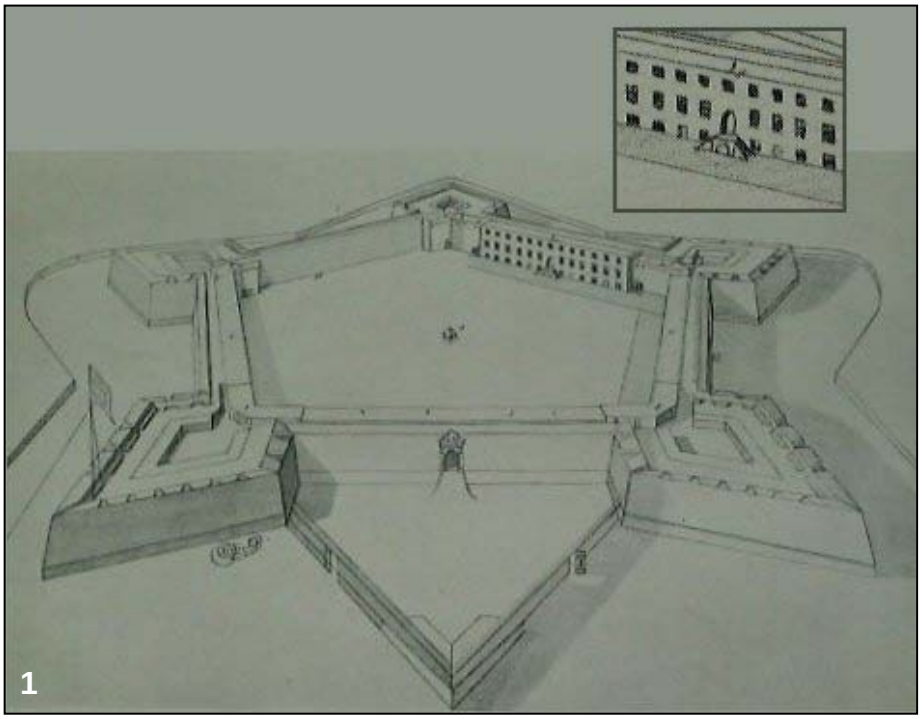
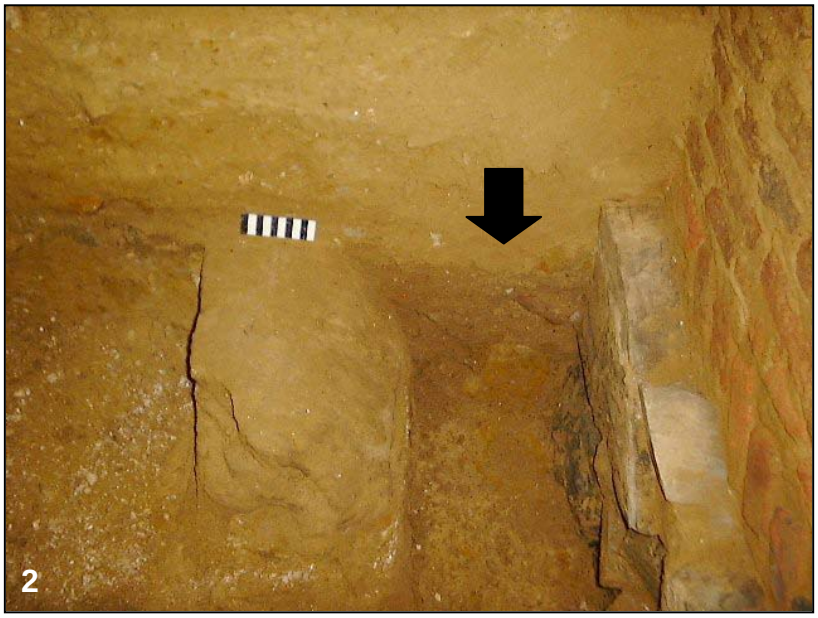


A drawing of the Castle in the 17th century pre-dating the building of the Kat wall and showing the Watergate still in use. The balcony in front of what is now known as B Block is shown in detail in the insert.

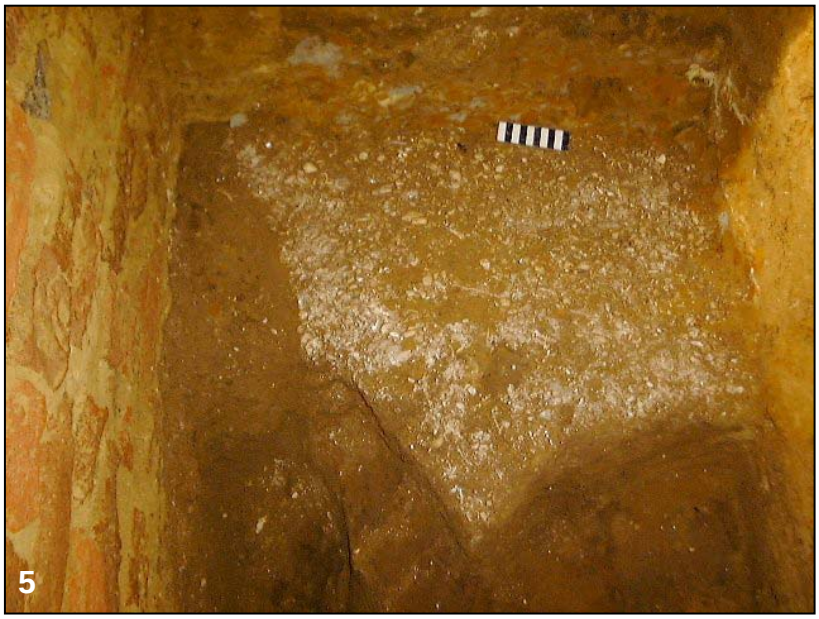
The foundation trench of the accommodation adjacent to the Kat wall.



A large pit over which the front wall of the vault had been constructed.

A smaller pit dug into what must have been an original surface. This type of pit has been observed elsewhere in the Castle and probably once held building scaffolding in place.

A surface covered by crushed marine shell. This is a natural layer which pre-dates the building of the Castle.



Edge of the opening to the vault clearly seen after tinted plaster removed.

A layer of white sand was found immediately below the vault roof. This was in place before the vault was built and the sand probably supported the brick during construction.

Impressions of the original steps preserved in the plaster of the accommodation block wall.

Traces of the second phase of steps which extended onto the rough stone wall shown here looking from above, and below from the front.

The rough stone wall angled down following the slope of the second phase steps. No finishes have been preserved however.

Foundation material was found immediately in front of the rough stone wall. This supported a facing wall probably made from yellow clinker bricks. A line of cobblestones originally was laid against the outer face of the clinker wall.

Line of cobblestones originally laid against the outer face of the clinker wall seen from the side. The plastered front of the original balcony, the rough stone wall of the second phase and the covered drainage channel can also be seen in this view.

The covered drainage channel showing some of the fill added when the elaborate Kat balcony was constructed.