

# THE INTERNATIONAL WĀDĪ FARASA PROJECT (IWFP): PRELIMINARY REPORT ON THE 2009 SEASON

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## **Introduction and Acknowledgments**

The field season 2009 of the International Wādī Farasa Project (IWFP) lasted from July 26th to August 20th. The IWFP 2009 was funded by the German Research Foundation (DFG) through the German-French project “Early Petra” directed by Michel Mouton (Paris) and Stephan G. Schmid (Berlin), the cluster of excellence “Topoi” (Berlin), Humboldt-University (Berlin) and the Association for the Understanding of Ancient Cultures (AUAC, Basel). We would like to thank the director general of the Department of Antiquities, Dr. Fawwaz Al-Khraysheh, for his support and for granting the working permit as well as Dr. Eimad Hijazeen, commissioner of the Petra Park Authority for the kind logistic support. We would also like to thank the German Institute (DEI) at ‘Ammān as well as IFPO ‘Ammān for lodging the team during its stay at ‘Ammān.

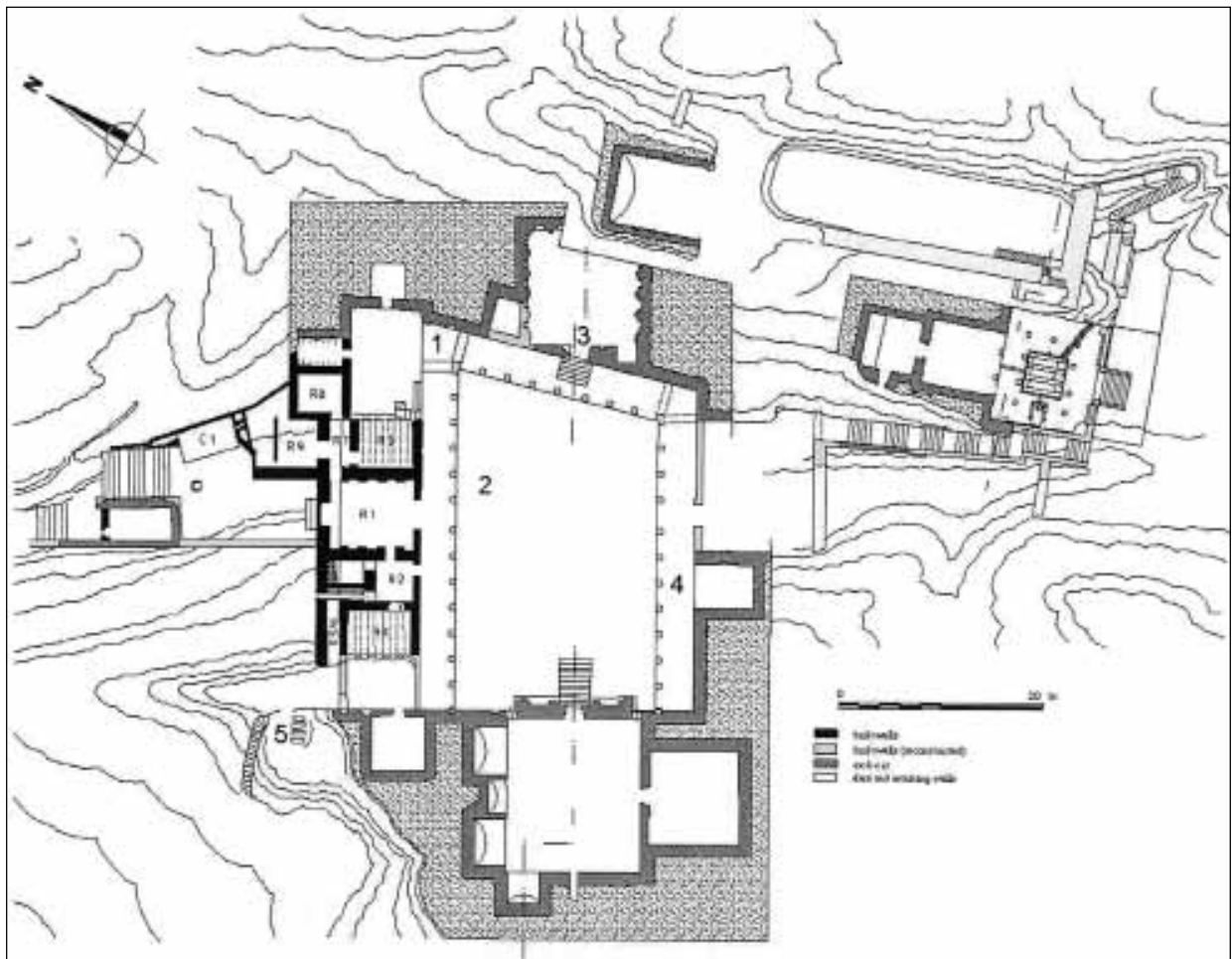
The following persons participated in the 2009 season of the IWFP. As archaeologists: Stephan G. Schmid (director), André Barmasse, MA (Basel), Laurent Gorgerat, MA (Basel), Christoph Schneider, MA (Basel), Marco Dehner, BA (Berlin), Maxie M. Haufe (Berlin) and Will Kennedy (Berlin); as geographers: Brian Beckers, MA (Berlin) and Nils Rhensius, BA (Berlin); as archaeozoologist: Dr. Jacqueline Studer (Geneva); as photographer: Antonia Weisse (Berlin). Representative of the Department of Antiquities was Talal Hamed al-Amarin, MA, whose help and advice were very much appreciated. Eighteen workmen and one tea woman from the Bdool tribe were employed. During the teams sojourn at Nazzal’s Camp, Ali Khalaf al-Bdool was a very efficient and helpful camp manager.

Following the results of the previous cam-

paigns of the project (cf. Schmid 2009 for the results of the previous season as well as for further bibliographical references; see also the preliminary reports of the consecutive seasons on [www.auac.ch/iwfp](http://www.auac.ch/iwfp) and in the previous volumes of *ADAJ*), the following trenches and soundings were opened (cf. **Fig. 1**): In the northern portico, underneath the rocky plateau on the NE side of the complex, the last two squares within the portico were excavated (no. 1 on **Fig. 1**). One square was opened in the area of the courtyard of the complex, adjacent to the one already accomplished in 2001 (no. 2 on **Fig. 1**). The small sounding that was put down within the southernmost entrance to the huge *triclinium* of the complex in 2007 was enlarged and reached the main entrance of the *triclinium* in 2009 (no. 3 on **Fig. 1**). For the first time since the beginning of the project in 2000, an attempt was made to reach the Nabataean floor levels within the southern portico, more specifically in the area of the rock-cut room in the central area of the southern portico (no. 4 on **Fig. 1**). And finally, six remaining pit tombs on the western outcrop of the complex were excavated (no. 5 on **Fig. 1**), completing the excavation of the previous 11 pit tombs in 2005 (cf. Schmid and Barmasse 2006; Schmid *et al.* 2008).

## **NE-Corner of Complex**

In the area of the NE-corner of the complex, corresponding to the last two 5m<sup>2</sup> squares within the N-portico, work started already in 2006. However, during the campaigns of 2006 and 2007 rather important constructions of the medieval period were excavated on that spot (Schmid 2007B; Schmid 2009; for a concise overview on the Medieval pottery from Wādī Farasa East see now Sinibaldi 2009). Surprisingly, the medieval

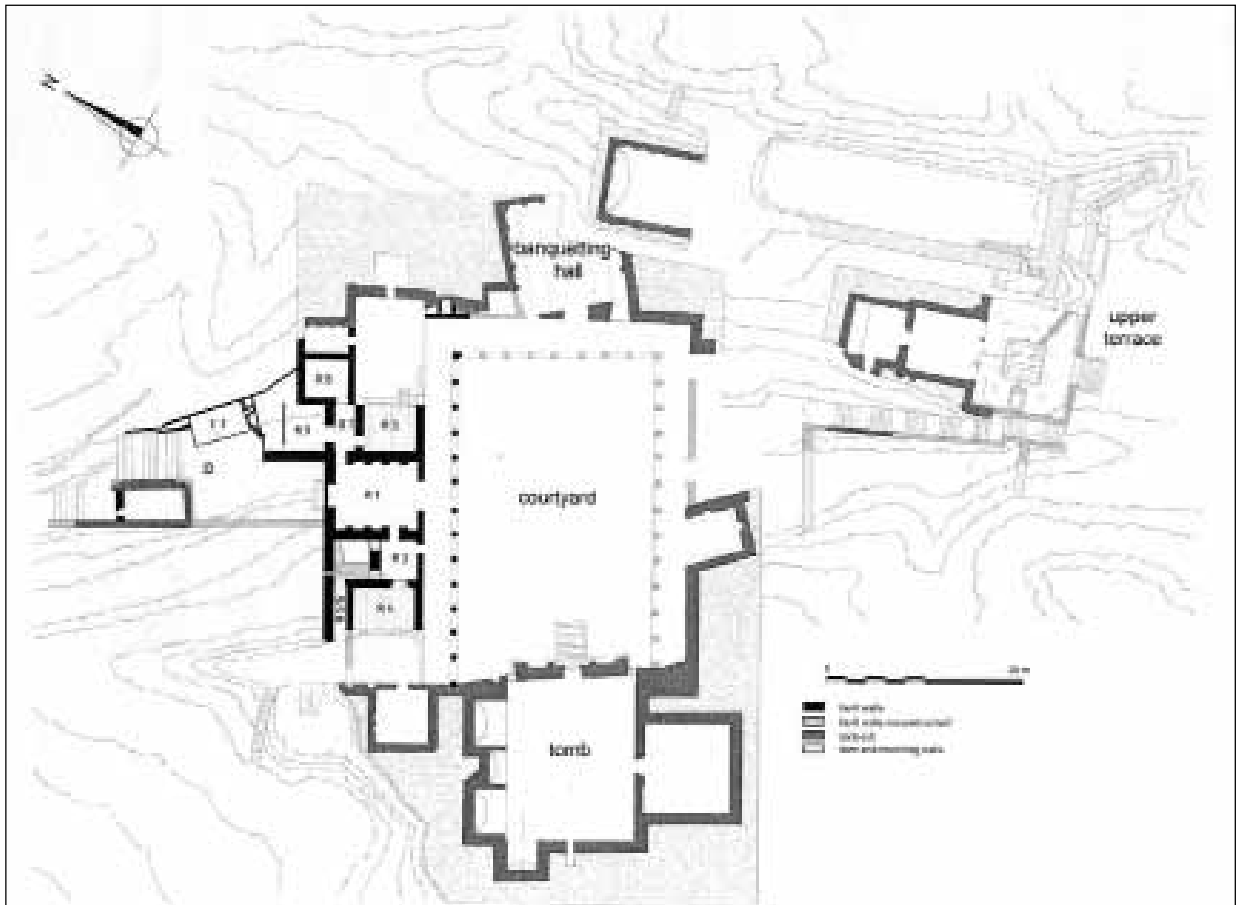


1. Wādi Farasa East, old general plan of the Soldier Tomb's complex (M. Dehner after Bachmann and Watzinger and Wiegand 1921).

structures started to appear on a rather high level at first sight and therefore were connected to the rocky outcrop on the NE-corner of the complex. The NE-corner used to be the base for the second floor of the entrance building in the Nabataean period. During our 2009 season, the explanation for these observations was found, together with the NE-angle of the courtyard, an event we were looking for since our first season in 2000. Quite an important number of information regarding the construction and structure of the Nabataean complex was ever since expected from that area.

The first remains of collapsed architecture first appeared on a level considerably higher than on previous occasions (**Fig. 3**). It soon became clear that it was partly due to the fact that the angle formed by the northern and eastern portico of the complex was built in shape

of a massive heart shaped column (centre right on **Fig. 3**). When the freestanding architecture of the complex collapsed during the earthquake of AD 363, the corner as well as the surrounding “normal” columns fell into the space formed between the row of columns and the rock originally being the back wall of the portico and the support for the upper floor of the complex. On several occasions we could observe that the main direction into which columns and other architectural remains fell seems to be from East to West (cf. also below on the S-portico). Since the column drums, capitals etc. from the angle were literally “trapped” in the corner of the complex, the collapsed remains are conserved at a considerably higher level than elsewhere what, in turn, also explains the higher level of the medieval constructions (cf. above).



2. Wādī Farasa East, new general plan of the Soldier Tomb's complex (M. Dehner).



3. Angle of N- and E-porticoes with architectural remains (Schmid).

Heart-shaped angular columns are quite well known from the region, especially from Herodian architecture, but also from some Nabataean examples. Heart-shaped columns in angles of peristyles can already be found in the palace of Demetrias (Thessaly, Greece) in a building phase that is dated around 200 BC. (Marzolff

1996: especially 158-160; for a concise treaty of heart-shaped columns see Coulton 1966: especially 137-141). From then on this particular detail spreads out rather widely, as may be underlined by analogous structures from the "Palazzo delle colonne" in Ptolemais in the Cyrenaica in modern Lybia (Pesce 1950: pls. I. XI). It is generally believed that this element was taken over from Asia Minor and was especially successful in Ptolemaic architecture (Lauter 1986: 255) and it would be from there on that it found its way into Judaea, where it was especially prominent within building attributed to Herod the Great (Lichtenberger 1999; Schmid 2002B). It is, therefore, not surprising that it is attested on other monuments, surely not related to Herod, such as the so-called complex of Absalom and Josaphat, the monolith of Zacharias and the "pillar" of Absalom, all funeral monuments at Jerusalem (on these and similar monuments see Bonato 1999). The nearest, although not nec-

essarily the closest parallel to the heart-shaped column from the Soldier Tomb complex can be found in front of the so-called Turkmaniya-Tomb, where a similar courtyard can be reconstructed (on this see Schmid 2007A). However, the angular column of the Turkmaniya-Tomb is considerably smaller than the newly discovered one from the Soldier Tomb complex. The basis form of our heart-shaped column is rectangular, measuring 60cm x 60cm, with an additional half-column of 30cm radius added on two sides.

One of the main problems with the reconstruction of the Soldier Tomb complex in previous years used to be precisely this angle between the northern and eastern porticoes of the courtyard. This is due to the initial reconstruction of the complex as proposed by the Deutsch-Türkische Denkmalschutzkommando in 1921 (Bachmann, Watzinger and Wiegand 1921). There, the eastern portico does not form 90° angle with its lateral counterparts from the northern and southern sides, but follows an oblique track (Fig. 1). Since the discovery in 2004 that the porticoes initially were covered by arches (Schmid 2005), this reconstruction became problematic, since the pressure of the arches would have caused major static problems when hitting the angular column in any other than a right angle. Suspicions that the initial plan of the Denkmalschutzkommando probably needed verification and modification were confirmed, when it became clear that the heart-shaped column from the angle of the N- and E-porticos indicated a perfectly right angle, as does the *stylobat* upon which it is built (Fig. 4). Since the Denkmalschutzkommando did not carry out excavations, the plan published in 1921 had to work with the appearing rock, which of course did not form many right angles.



4. Heart-shaped angular column and stylobat (Schmid).

Therefore, the German scholars proposed an oblique E-portico (Fig. 1). However, the sounding in the very corner of the complex showed that the Nabataean builders had constructed a substantial wall in front of the rock in order to outbalance the irregularities of the rock (on top of Fig. 3). This wall stretched also eastwards in front of the huge triclinium BD 235, at least until the main entrance, from where on the rock is very regular and the built wall probably was not needed anymore.

When measuring these new elements as well as those parts of the rock that must have belonged to the initial construction with a total station and putting them into a new plan, it became apparent that the Denkmalschutzkommando must have simplified some elements of the initial plan in order to obtain what they thought to be a coherent picture of the area. The corrected preliminary version of 2009 (Fig. 2) shows that, as a matter of fact, the East-portico is in an almost perfect right angle compared to the North- and South-porticoes. On the contrary, the huge triclinium BD 235 is not, as proposed by the Denkmalschutzkommando, cut out of the rock in a right angle to the courtyard, but considerably turned out of the main axis of the complex.

Within the substantial wall, a small water basin measuring about 1m<sup>2</sup> was incorporated (top centre on Fig. 3). This water basin – or a similar structure – was already suspected since 2000 when some initial observations and thoughts about the water management system of the Soldier Tomb complex were realised (Schmid 2001; on the water management of Wādī Farasa in a wider frame see Schmid 2008). Since the rock carved remains of what must have been a clay pipe pasted with mortar onto the still visible rock carvings indicated the existence of a water installation on that spot. The discovery of the basin was thus not really a surprise. According to the finds of several ashlar with integrated space for a water pipe, the last meters of that water channel leading vertically into the basin were built upon the substantial wall in front of the rock mentioned above. The basin itself was plastered with the typical Nabataean hydraulic mortar using small pieces of pottery in order to improve its hydraulic qualities. On the bottom inside the basin as well as in front of it rather substantial amounts of pottery and glass were found. As

on other occasions, for instance in *loci* related to the small rock-cut *triclinium* on the western rock-plateau of the complex (on this see Schmid 2009), the total absence of fine ware pottery is striking. Cooking pots, *amphorae* and jugs of coarse ware pottery were by far the most prominent finds. An explanation of this phenomenon can probably be found in the chronology of these finds. As indicated by the shapes of the pottery and by the important number of so-called Petraean-Early-Byzantine lamps (Grawehr 2006: 340-349), these *loci* must belong to the latest period of use of the complex, shortly before the devastating earthquake of AD 363. This chronology and the rather important presence of glass fragments could indicate that during the late Roman period the most important category of fine ware, that is drinking cups, were replaced by glass cups and beakers (on this see some reflections in Keller 2006: 127-130, 176-179).

The water basin is so far the first clearly recognisable point of access to water within the entire complex of the Soldier Tomb and is immediately next to the rock-cut room, which was partially excavated in 2006. Since the only structural remains within the excavated part of that rock-cut room were a *ṭābūn*, we proposed to interpret it as a kitchen (Schmid 2007B: 143-144). The pottery types found around the *ṭābūn* correspond to the ones mentioned above and coming from the water basin. Therefore, the *ṭābūn* also belongs to the late Roman period. Although there were no indications as for the use of the rock-cut room during Nabataean times, its position next to the water basin on the one hand and the neighbourhood of the huge *triclinium* could indicate a similar function in order to prepare food and drinks for the people feasting in the banqueting hall BD 235, an activity that surely would justify the presence of a comfortable water supply.

In the area of the N-corner, the floor slabs were posed on a small bed of samaga directly upon the carefully cut rock, as indicated by fine lines on the rock. The lines obviously corresponding to the dimensions of the different rows of slabs (Figs. 5, 6). As observed on several previous occasions, most of the slabs already were missing when the architecture of the complex collapsed in AD 363. During this year's campaign some further elements came to light that



5. N-portico from W (Schmid).



6. Rock cuttings for floor slabs in N-portico (Schmid).

can sharpen the picture of the last years of our complex. From the rock-cut room a layer of fat, gray ashes is spreading out into the N-portico, surely corresponding to the successive cleaning of the *ṭābūn*'s ashes. Where the floor slabs still were in situ, the ashy layer is directly posited on the slabs. However, where the slabs already were missing, the ashes lay directly on the rock. The collapsed architectural members fell upon

the ash as well as a next layer composed of sandy earth (**Fig. 7**). In other words, despite partial plundering of the complex, it was still in use – at least partially – since the *tābūn* obviously was still functioning.

#### Courtyard

In order to continue the cleaning of the important surface of the courtyard, a 5m square adjacent to the one excavated in 2001 (Schmid 2002A) was opened. Here too, the floor slabs themselves were missing but their foundation layer consisting of smaller fragments of slabs and stones filled with samaga – clay containing earth – was discovered (**Fig. 8**). Within the samaga, a substantial amount of Nabataean pottery was found, including several fragments of at least three painted cups (**Figs. 9, 10**). All of



7. Bedrock, ashy layer and architectural remains in N-portico (Schmid).

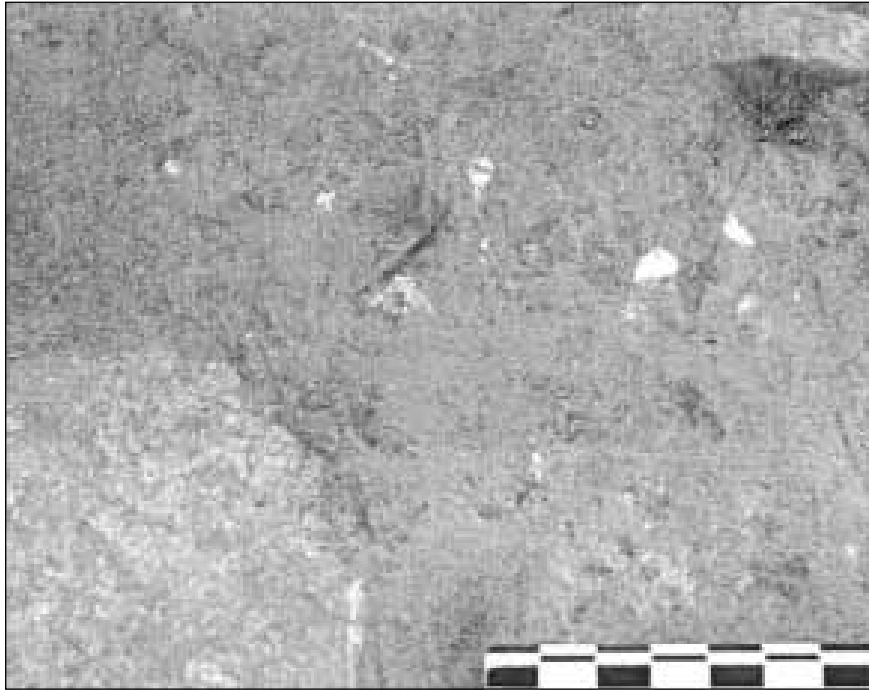


8. Sounding in the courtyard with foundations for floor slabs (Schmid).

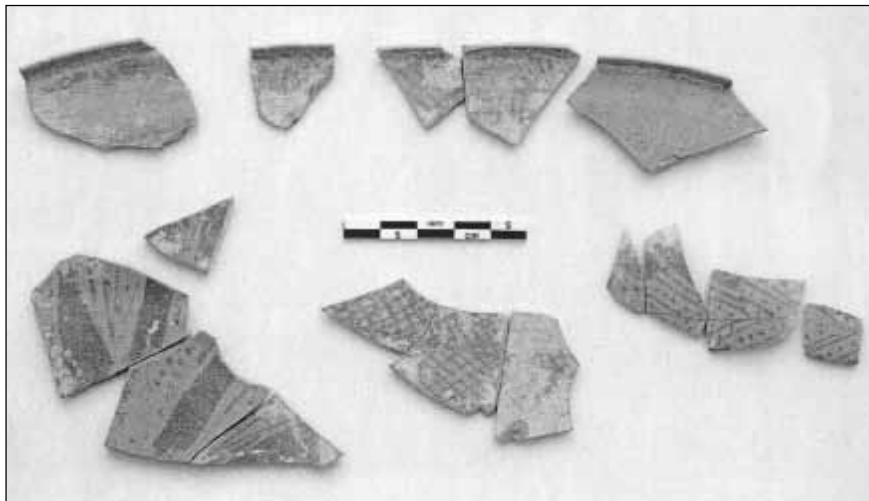
the pottery belongs to phase 3a of Nabataean pottery (according to Schmid 2000), dating from AD 20 to AD 70/80 and, therefore, confirming the *terminus ad* or *post quem* for the construction of the complex we had from previous comparable soundings.

#### Entrance to the Huge Triclinium

As in 2007, the entrance area to the huge *triclinium* BD 235 of the Soldier Tomb complex was again the objective of investigations in 2009. Although the area of the *triclinium* was cleaned in the 1930s by the then Department of Antiquities of Transjordan (Horsfield 1938: 40 with notes 5, 7, Horsfield 1939: 93), important information as for the different phases of use of the structure were obtained. Already in 2007 we observed that the easternmost of the three entrances to the *triclinium* was blocked by a careful setting of stones perfectly corresponding to the outer rock-cut wall of the *triclinium*. In front of the rock-cut outer wall of the *triclinium*, a massive, podium-like structure was observed. In order to gain a better understanding of that structure, the sounding was enlarged including one half of the central main entrance to the *triclinium*. The structure in front of the *triclinium* does indeed continue until the main entrance, where it forms an angle and an outer doorway, as is clearly visible on Figures 11 and 12. When the podium-like structure was erected the main entrance to the *triclinium* had two successive doorways and thresholds. The structure is built



9. Samaga with pottery indicated by flesh (Schmid).



10. Nabataean painted pottery from samaga in courtyard (Schmid).

from massive stones and although the somewhat careless construction it is extremely massive, mainly due to the abundant use of hydraulic mortar. Contrary to the hydraulic mortar from the small basin in the N-portico (cf. above), the hydraulic mortar from the *triclinium* area made abundant use of charcoal and ashes resulting in a clearly distinguishable gray colour (**Fig. 11**). As had been widely observed on other occasions, this characteristic hydraulic mortar is not used in the Petra area before roughly AD 100 (Graf, Schmid and Ronza 2007). The same succession of clearly distinguishable two phases was observed on the floor of the main entrance



11. Central and lateral entrance to huge triclinium (Schmid).

(Fig. 12). Initially, rows of oblique floor slabs were covering the entrance area. In a later phase the level in front of the threshold was raised and the second (= outer threshold) was introduced as mentioned above. The new floor slabs are posed in a 45° angle in relation to the earlier ones. As was revealed by a small sounding, the slabs of the second phase are bedded into exactly the same grayish hydraulic mortar, which contains charcoal. Therefore, the new floor slabs, the introduction of two successive doors and the massive podium in front of the *triclinium* BD 235 as well as the blocking of the lateral doorways are contemporary and do not occur before circa AD 100.

Compared with similar observations made elsewhere, i.e. changes occurring to the complex of the Soldier Tomb around AD 100, we can deduce that some major changes happened in that period. Of course, one is tempted to think about the Roman annexation in AD 106 that could have resulted – within others – in a new ownership of the complex. In the case of the entrance area to the huge *triclinium* BD 235, the motifs of the changes described above may go beyond simple fashion related to a new owner. The massive construction, the double doorway and especially the abundant use of hydraulic mortar could well suggest a reaction to problems related to flash floods penetrating the complex during the rain seasons. Therefore, the podium-like structure and the double doorways are to be understood as an attempt to prevent water from flooding the rock-cut room.

When installing the double doorway around AD 100, the original threshold of the Nabataean period must have been replaced as indicated by a



12. Inner and outer doorway to huge *triclinium* with floor-slabs (Schmid).

small stretch with a secondary fill behind the inner threshold of the second phase. As a matter of fact, this stretch does exactly correspond to the rock-cut traces of the lintel approximately three and a half meters higher (Fig. 13). The fill from the small stretch corresponding to the original threshold was excavated and it contained Nabataean pottery belonging to phase 3a (according to Schmid 2000) and, therefore, providing a *terminus post quem* in the late first century AD for the second phase with the two doorways.

#### *Southern Portico and Rock-Cut Room*

With the results from the northern corner of the complex and, more specifically with the localisation of the angular column in form of a heart and the corresponding *stylobat*, we found the physical proof for the existence of the eastern portico in front of the *triclinium* BD 235 as well as its exact position and orientation (cf. above). Although there cannot be any reasonable doubt about the existence of the southern portico, physical proof and indications for its



13. Reconstruction of initial Nabataean doorway (Schmid).



precise location and orientation can so far only be given indirectly. In 2001 we put down a small sounding at the presumed emplacement of the rock-cuttings for the first half-column east of the façade of the Soldier Tomb (Schmid 2002A). On this occasion, the badly eroded remains of what must have corresponded to the parallel rock-cuttings from the northern portico west of the façade were discovered. Opposite the façade, that is east of the *triclinium* BD 235, a rock-cutting closely resembling the departing point of an arch – with some modern alterations – was always visible. Therefore, we decided to put down a sounding situated on the virtual line between the presumed rock-cuttings of the first half column of the S-portico and the corresponding last arch on the side of the *triclinium* BD 235. This sounding was put down in front of the rock-cut room in the middle of the S-portico and incorporated half of it (Figs. 14-18). Very soon, massive walls built in front of the rock-cut room started to appear, closely corresponding to the numerous medieval structures from the area of the Soldier Tomb complex, i.e. a careless building technique making extensive reuse of Nabataean architectural elements. The chronology of these structures was confirmed by substantial amounts of hand made pottery, well known from the previously excavated medieval structures from the area (the medieval pottery from the IWFP is studied by Micaela Sinibaldi, MA). The rectangular walls in front of the rock-cut room form a



14. Medieval remains within the S-portico (Schmid).



15. Medieval steps leading towards rock cut room (Schmid).

kind of entrance to the cave (Fig. 14) including a few steps leading downwards into it (Fig. 15), which indicates that the medieval level inside the cave was on a lower level than in front of it.



16. Stratigraphic sequence in the rock cut room (Schmid).



17. Rock cut room with banquets (Schmid).

A series of holes cut into the rock on top of the front of the cave must have corresponded with the walls where the beams for roofing this kind of *antae*-room to the cave must have been fixed. Immediately in front of the cave and its entrance structure, a huge circular structure measuring approximately 2.2m outer diameter started to appear (bottom right on **Fig. 14**). The massive and fine ashy layer inside the round structure in-

dicates its function as *tābūn* or oven.

Following these medieval structures is a massive sequence of very fine sandy layers, which are the result of a long series of subsequent alluvia. These layers correspond to many years of flash floods carrying important quantities of sand with them that created a fill of about three meters in height (**Fig. 16**). Inside the cave, these alluvia directly started upon the rock-cut floor level. On the sides of the rock-cut room, small banquet niches were cut out of the rock. The small depth of these banquet niches, about 50cm was difficult to explain at first sight. However, it was believed that they were originally enlarged by at least one course of stones, as indicated by a few remaining stones visible on Figure 17. This would make them rather comfortable *klinai*, i.e. spaces for reclining banqueters as in the huge *triclinium* BD 235.

In front of the cave, the rock was mostly visible (**Fig. 18**). However, on a better conserved spot, we again found a confirmation for the sophisticated use of bedrock by the Nabataeans, i.e. the built architecture was not directly put on the rock but on an intermediate layer of small flat stones and samaga, exactly as in areas of porticoes and courtyards that were freely built without bedrock as foundation. Even though the foundation stones as well as the original floor slabs were missing in this area, the stretch of the former *stylobat* for the South-portico could be identified. As visible on **Fig. 18**, a stretch of the bedrock measuring exactly 68cm in width was cut away in a different way. The 68cm perfectly correspond to the width of the *stylobat* from the N-portico and the rock-cuttings indicate that ashlar were put on them, forming the *stylobat*



18. S-portico with bedrock, foundations for floor slabs and column drum (Schmid).

in the same way as in the N-portico. Furthermore, the stretch of the *stylobat* lies exactly on the virtual line between the rock cutting for the first arch on the E-wall and the cuttings for the half column on the W-wall (cf. **Fig. 2**). Last but not least, one column drum and two damaged capitals from the S-portico were found in that trench (**Fig. 18**).

Therefore, the results from the different trenches in the N- and S-porticoes now allow drawing a more or less exact picture of the main features of the complex of the Soldier Tomb. The courtyard with its porticoes was constructed as an almost exact rectangle – with some alterations due to irregularities in the rock on the W-side where the façade of the Soldier Tomb is situated. The dimensions of the courtyard are 33m x 20.8m, while the N-portico is 3.3 m wide, the E-portico 3.7m and the S-portico 2.9m.

As in the case of the courtyard and the huge triclinium BD 235, it seems as if the Denkmalschutzkommando simplified the relationship between the rock cut room in the S-portico and the courtyard. On the initial plan of 1921 the rock cut room is opening in a perfect right angle towards the portico and the courtyard (**Fig. 1**). In reality however, it is considerably oblique (**Fig. 2**).

### Shaft Graves on Western Outcrop

Following the results of the 2005 excavation of 11 pit graves on the western rocky outcrop of the complex (Schmid and Barmasse 2006;

Schmid *et al.* 2008), we decided to excavate the remaining six comparable structures. Contrary to the previously excavated tombs that were covered by a small layer of sand, the new ones were always visible and were mentioned by the 19th and early 20th century visitors and scholars. Therefore, we had little hope to find undisturbed burials. Indeed, all tombs were previously robbed. Nevertheless, on several occasions enough material remained in order to allow observations as for the chronology of the burials and the funerary practices. Pit graves numbers 12 to 15 are situated within a circular structure opening towards the rocky area that initially formed the upper floor of the huge entrance building to the Soldier Tomb complex (**Fig. 19**). This circular structure must have been an outdoor *stibadium*, i.e. a banqueting installation under the open sky. The construction of four rock-cut pit tombs in the middle of such an installation as well as two more just behind it surely changed the function of the *stibadium* that most likely was out of use when the tombs were constructed. It would therefore, be interesting to obtain precise information as for the date of these tombs, since this would also allow dating the change in function of the initial structure.

The best candidate for that purpose turned out to be pit grave 16. Although disturbed and robbed, some valuable information was obtained. The rock-cut grave shows two shoulders initially thought for posing covering slabs on

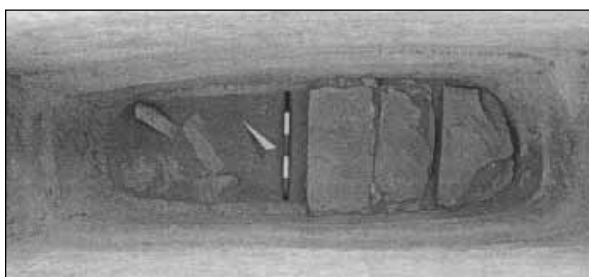


19. Rocky outcrop on western angle of complex with pit graves in circular structure (Schmid).

them. We therefore have to reckon two or three burials within this grave, depending on whether the space above the first shoulder was also used for a burial. While the covering slabs from the first shoulder had completely disappeared, three slabs on the second shoulder were still *in situ* (Fig. 20). Contrary to our expectations, another series of similar slabs were found beneath these slabs (Fig. 21). Between the two slabs a layer of charcoal-containing mortar was found that also held several potsherds. These were identified as Nabataean cooking pots and fine ware of the first and early second century AD. In other words, the first burial of pit grave 16 did not occur before the early second century AD. This corresponds quite well to the chronological information that was obtained from the pit graves 1 to 11 in 2005 that seemed to date from the late first and early second century AD. As for the rock-cut *stibadium*, we would conclude that it went out of use in the early second century AD and must, therefore, pre-date this period. Again, it seems as if quite substantial changes affected the Soldier Tomb complex in the early second century AD, as already pointed out above in the case of the entrance to the *triclinium* BD 235. The parallels between the different similar observations within Wādī Farasa East can also be stretched by another point. The mortar that was used in order to fix the covering slabs in pit grave 16 is exactly the same charcoal-containing hydrau-



20. Pit grave 16 with upper covering slabs (Schmid).



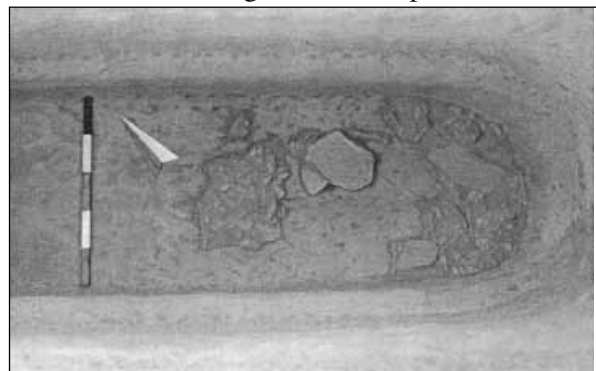
21. Pit grave 16 with lower covering slabs (Schmid).

lic mortar that was used in other pit graves of the small necropolis and also for the construction of the massive structure in front of the huge *triclinium* BD 235 (cf. above). Since we know that this type of mortar was not introduced in Petra before roughly AD 100, we again obtain a chronological confirmation as for the construction of the pit graves. The lowest level within pit grave 16 did contain some human bones that were found in small heaps, probably the result of the plundering (Fig. 22). As observed on several occasions in 2005, the human bones were also mixed with the same mortar that was used for sealing the covering slabs (some reflections on this phenomenon in Schmid *et al.* 2008).

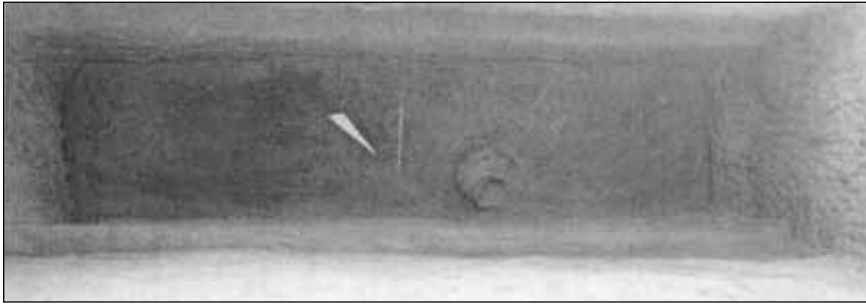
Four of the other five pit graves presented similar situations as did pit grave 16, although they were more seriously damaged by the tomb robbers. Pit grave 15 was the only one to present a different situation. As pit grave 7, excavated in 2005, it apparently was used as a rubbish dump in the medieval period. From top to bottom all layers did contain substantial amounts of pottery belonging to the 11th to 13th century AD (Fig. 23). Towards the bottom of the grave, two completely preserved pots were found (Figs. 24, 25), one of them still conserving its lid.

### Restoration

In a continuous effort to improve the site for the visitors, even if excavation is continuing for several more seasons, we again focussed on the restoration of the huge staircase (R8 on Fig. 2). In Nabataean times, the rock was not directly used but stone slabs were put on the rock in order to form steps. However, beside the first one, all of these steps had disappeared in later times. We started restoring the first steps of the stair-



22. Pit grave 16 with remains of human bones and mortar (Schmid).



23. Pit grave 15 with Medieval pottery (Schmid).



24. Medieval pottery from pit grave 15 (Schmid).



25. Medieval pottery from pit grave 15 (Schmid).

case several years ago and continued this year adding two more massive steps of stones, fixing them with lime mortar imitating the Nabataean technique of mixing small pottery fragments into the mortar in order to improve its hydraulic quality (Fig. 26).

Another attempt of restoration was made in the case of the small water basin found in the N-



26. Restoration in staircase (Schmid).

corner of the complex (cf. above). Here, besides potsherds, ashes were also added to the mortar (Fig. 27).

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27. Restoration of small water basin (Schmid).

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*S.G. Schmid: Wādī Farasa Project 2009*

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