

# THE INTERNATIONAL WĀDĪ FARASA PROJECT (IWFP) PRELIMINARY REPORT ON THE 2003 SEASON

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## **I. Introduction and acknowledgments**

The field season 2003 of the International Wādī Farasa Project (IWFP) lasted from August 24th to September 18th. The IWFP 2003 was carried out by the Association for the Understanding of Ancient Cultures (AUAC: [www.home.tiscalinet.ch/iwfp](http://www.home.tiscalinet.ch/iwfp)), based in Basel (Switzerland) and the Palestine Exploration Fund (PEF, London: [www.pef.org.uk](http://www.pef.org.uk)). 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. Fawzi Zayadine ('Amman) and Prof. David Graf (Miami) for their continuous interest in the project. We are very glad to announce that since 2003 Nestlé Pure Life, the bottled water division of Nestlé International S.A., represented in Jordan by Ghadeer Mineral Waters, is sponsoring our project.

The following persons participated in the 2003 season of the IWFP: Stephan G. Schmid, director (Montpellier), André Barmasse, MA (Basel), Caroline Huguenot, MA (Lausanne), Dr. Konstantinos Politis (PEF, London) and Ahmad Jum'a al-Shami, MA (representative of the Department of Antiquities) whose help and advice were much appreciated. Seventeen workmen and one teawoman from the Bdūl tribe were employed. Further, the IWFP 2003 season would not have been possible without the friendly cohabitation in the John Lewis Burckhardt Centre (Nazzal's Camp) with the team from Basel University carrying out the Swiss-Liechtenstein excavations at az-Zanṭūr (الزنتور); the practical advice of Dr. Bernhard Kolb (Basel) considerably advanced our campaign. We would also like to thank IFAPO Amman for lodging the team during its stay at Amman.

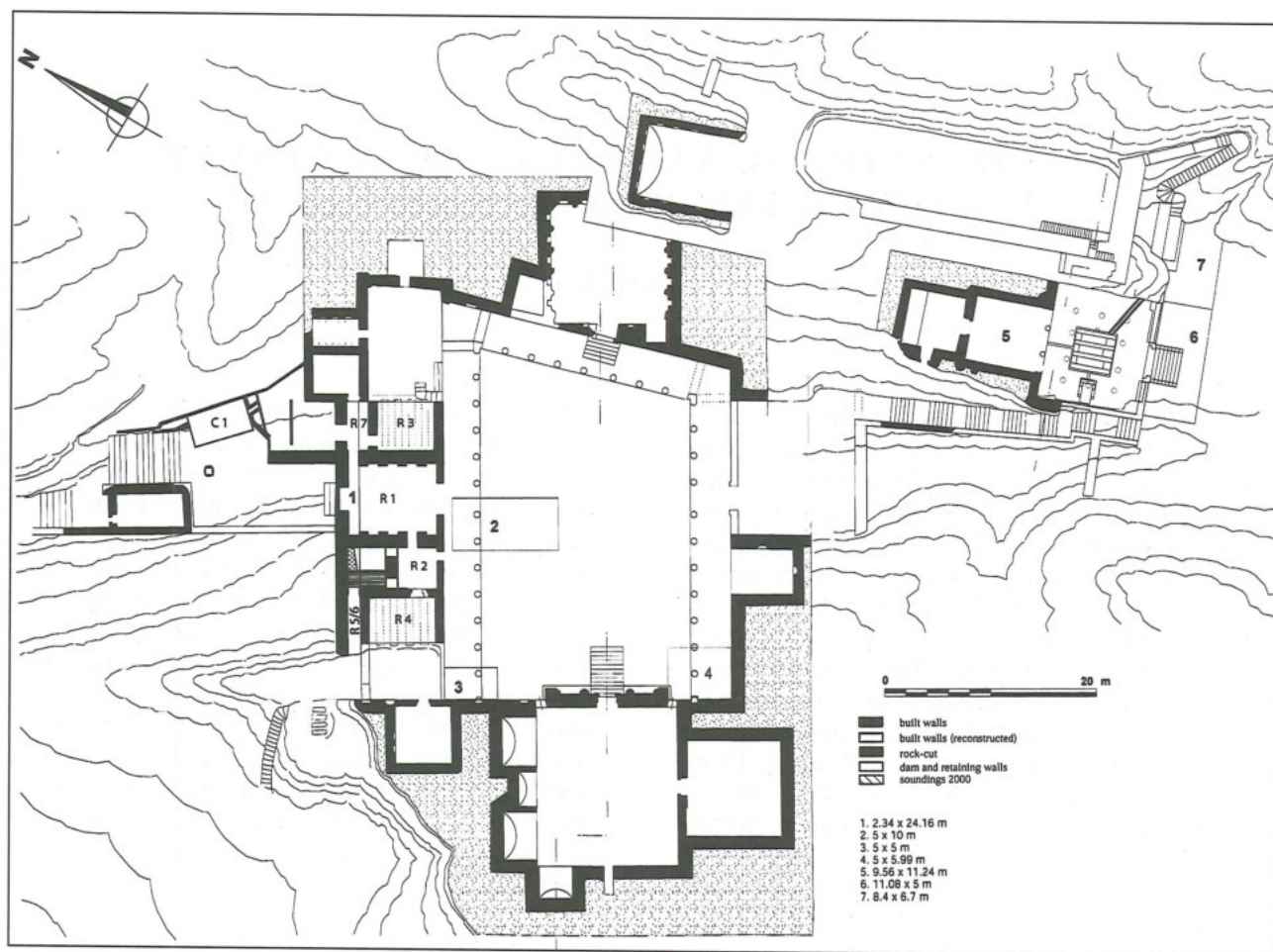
Following the results of the previous seasons (cf. Schmid 2000b; 2001a; 2001b; Schmid and Studer 2002) work on the upper and lower terraces of the Wādī Farasa (وادي فرسة) East continued with the following soundings and trenches (Fig. 1): On the upper terrace work in trenches 5 and 6, containing the so-called Garden Triclinium and the

space in front of it, continued in order to completely clean the entire structure. The second rock cut room of the "triclinium" itself was cleared of remains of its previous use as a stable for sheep and goats (trench 5 on Fig. 1). On the lower terrace, sounding 1 was extended towards the east, west and north, exposing further rooms belonging to the entrance complex (Figs. 1, 2). In addition trench 2 from the 2000 and 2001 seasons was partially reopened and extended towards the east, so that the entire transition from the entrance hall to the N-portico and into the courtyard has been exposed. Further activities included cleaning in front of the complex of the Soldier's Tomb and during these activities a cistern was discovered and partly exposed (C 1 on Fig. 1).

## **II. Lower Terrace**

While cleaning an area just to the north of the Soldier Tomb complex to prepare it for storing the stone blocks exposed during excavation, a rather big cistern was discovered (C 1 on Fig. 1; Figs. 3, 4), measuring 5.2m x 3.4m and 2.20m in depth. Following this discovery, the storing of the stone blocks was moved elsewhere and investigation of the cistern started. The cistern initially was covered with four arches and slabs, some of the slabs still being *in situ* on the southern corner (Fig. 3 bottom left). Contrary to the cistern in front of the "Garden Triclinium" where the arches were entirely constructed on one side and inset on the other (cf. Schmid 2001b; Schmid and Studer 2002), in the newly discovered cistern the arches were inset on both sides into spaces cut into the rock (Fig. 4). In order to clarify the stratigraphy in the cistern, only one third of it was excavated this year while the remaining part shall be exposed in a forthcoming season. On the upper levels of the cistern fill huge blocks of stone clearly indicated a violent destruction of the covering and the arches (Fig. 3). Until about 30cm above the ground of the cistern the pottery from all strata showed a mixed composition, containing a wide range from Nabataean





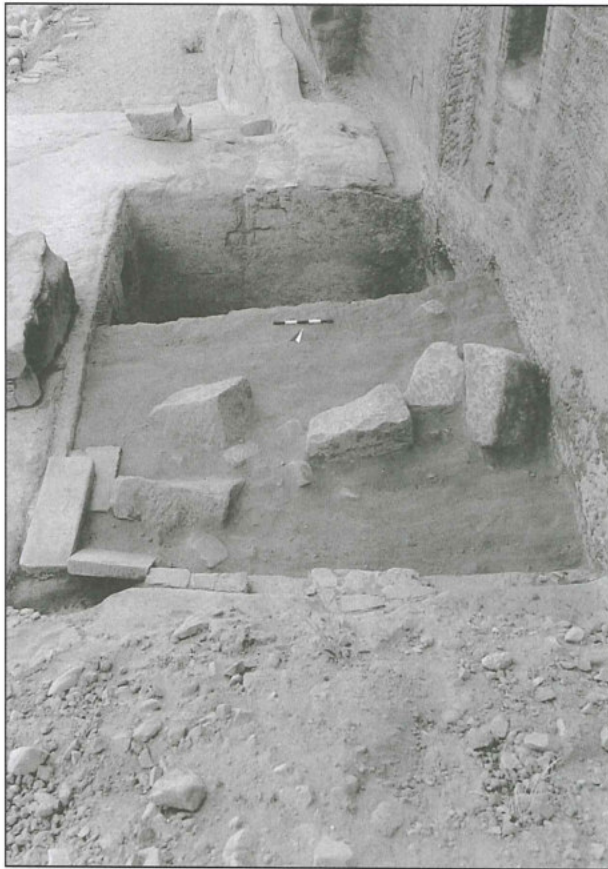
1. Wādi Farasa East, general plan (A. Barmasse and S. Fachard after Bachmann, Watzinger and Wiegand 1921).



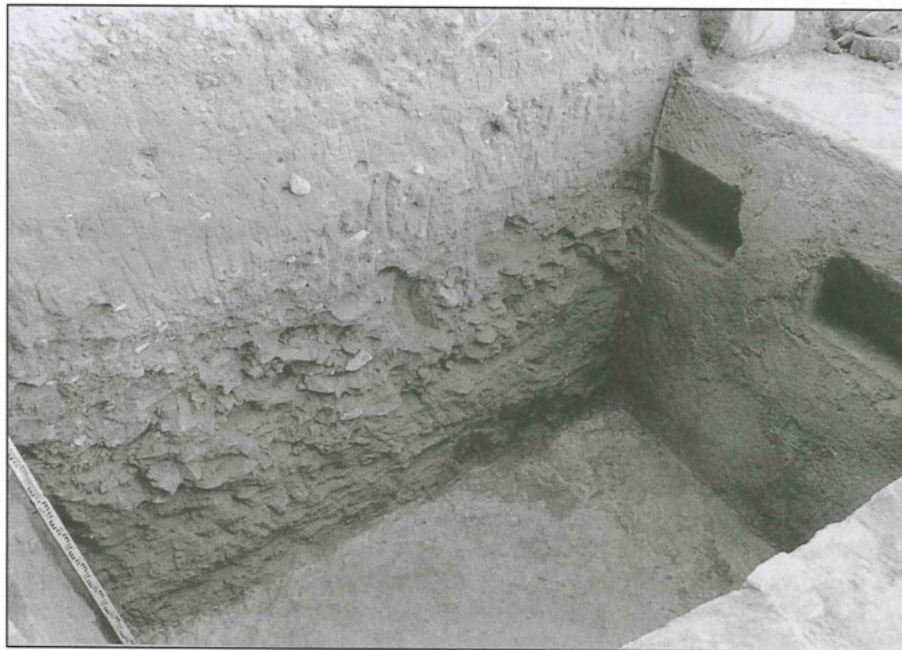
2. Wādi Farasa East, lower terrace. General view from S (Schmid).



to Medieval pottery. On the other hand, the pottery from the last layer, measuring about 30cm in thickness, contained exclusively Nabataean pottery from the first century AD. Interestingly, the bottom



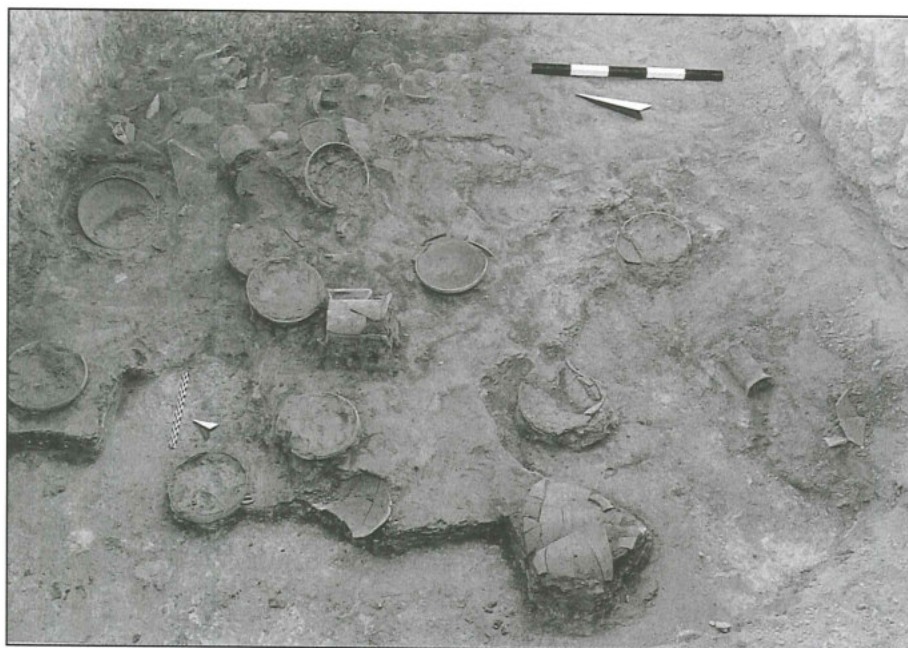
3. Wādī Farasa East, lower terrace. Cistern north of the complex from S (Schmid).



4. Wādī Farasa East, lower terrace. Cistern north of the complex from NE (Schmid).

of the cistern was literally covered with fractured but complete pottery (**Fig. 5**), indicating that all this pottery must have been intact when it was thrown into the cistern. The collected ensemble strongly suggests one of pottery belonging to a household: cooking pots, jugs, jars, flasks and a vast majority of fine ware bowls and plates (**Fig. 6**). Interestingly, on more than one dozen plain plates of Nabataean fine ware collected so far comes only one complete painted specimen (beneath the small arrow on (**Fig. 5**, top left on **Fig. 6**). This bowl belongs to type E 18a 187 and to phase 3a according to the typology and chronology established for az-Zanṭūr (Schmid 2000a: chap. V. 2. 26). Phase 3a running from ca. 25 to 75 AD, this bowl is also the earliest specimen from that layer while some other painted sherds belong to phase 3b, ranging from ca. 75 to 100 AD. The unpainted pottery belongs to phases 3a and 3b without further specification possible and, therefore, to a span of time from ca. AD 20 to AD 100. The complete pottery from the ground of the cistern was found stuck in a very compact layer of clay containing earth, surely being the result of a silting process and, therefore, indicating that the pottery was thrown in the cistern when the latter still was working as such. This raises of course the question why several dozen complete vessels may have been thrown in a still working cistern. As far as the provenience of the pottery is concerned, the cleaning of the area surrounding the cistern showed that similar but broken pottery is found in a layer coming from higher up the S of the cistern. Together with the pottery important amounts of bones were found in-





5. Wādī Farasa East, lower terrace. Cistern north of the complex with pottery *in situ* (Schmid).



6. Nabataean pottery from cistern on Figs. 2 and 3 (Schmid).

side the cistern, some of them belonging to a rather big animal, probably a camel. Most interestingly, the detailed statistic analysis of different bone material from all over the Petra area by Dr. Jacqueline Studer (Geneva) showed that the camel was exclusively consumed during the Nabataean and Roman periods, while in later periods it disappeared from the local menu (J. Studer in Frösén *et al.* 2001: 385). It would seem, then, that our cistern deposit represents the remains of a feast that took part on the lower terrace of the Wādī Farasa East, once again stressing the multifunctionality of that complex. One can only guess as to whether that pottery was used in the triclinium opposite the Sol-

dier's Tomb. A further speculation is related to the rounded stones found together with the pottery (Fig. 6 bottom left). These could indeed be sling stones for small catapults and, therefore, indicating a violent destruction of the complex or some parts of it (on the functioning and equipment of catapults in a wider context see Baatz 1994). Since the pottery from the ground of the cistern includes the last quarter of the first century AD as is specified by the painted sherds, one could be tempted to evoke the Roman annexation of the Nabataean kingdom in AD 106, especially since other contexts could be related to that event by previous research (Schmid 2000a: 139-146; 1997). However, in other contexts



probably related to the Roman annexation, pottery from phase 3c, being produced from the early second century AD onwards, was already present. Since the cistern under investigation has not yet been fully excavated we should remain cautious about final interpretations. In any case, as will become clear with results obtained from the western sector of the entrance complex, the structure of the Soldier's Tomb was not only in use in the second century AD but even saw an enlargement (cf. *infra*).

In 2001 and 2002 we exposed the main entrance to the complex of the "Soldier Tomb", consisting of a huge entrance hall (room 1; cf. **Figs. 1, 2**) immediately upon the huge terrace wall as well as the adjacent room 2 (cf. **Figs. 1, 2**). The complete clearing of the huge entrance hall (room 1) revealed also a small door in its NE corner, clearly leading to a very small corridor or staircase. This room, temporarily numbered as room 7, apparently had the function of giving access from the main entrance hall to several lateral units as it shows four doors in total (**Fig. 7**; cf. **Figs. 1, 2**). The room itself measures 4.30m x 2.15m and once was covered with high quality floor slabs, some of them

still being *in situ* on the eastern part of the room (**Fig. 7**). In the eastern wall of room 7 a door still standing upright for more than two meters opens to a next room completely filled with debris (**Fig. 7** background). Interestingly, a small door in the northern wall of room 7 gives access to a next room that, therefore, projects from the northern limit of the complex indicated by the huge main wall (on this wall cf. Schmid 2001b). These two rooms to the north and to the east of room 7 shall be exposed in a subsequent season. In the southern wall of room 7 another door opens towards room 3, partially cut into the rock (**Figs. 8, 9**). Room 3 measures 4m x 6.5m and once was covered by four vaulted arches as is indicated by the respective rock cuttings in its eastern wall and the two pillars positioned towards the western wall (left on **Figs. 8, 9**). In the western part of the room, that was exposed this year, a rock cut channel runs in a S-N direction but was never completely finished as shown in **Fig. 8**. During the later reuse of the room the channel was filled in and covered in a somewhat hasty manner (**Fig. 9**). Other than not yet



7. Lower terrace, room 7 from W (Schmid).



8. Lower terrace, room 3 from S with water channel cleaned (Schmid).





9. Lower terrace, room 3 from S with water channel filled (Schmid).



10. Lower terrace, room 3, Nabataean pottery and lamp from channel fill (Schmid).

cleaned and identified coins, Nabataean pottery and a fragment of a lamp were found in the channel fill (**Fig. 10**). The pottery belongs to phase 3b of Nabataean fine ware, that is the last quarter of the first century AD (Schmid 2000a: 28f. 38), whilst the lamp is from the so-called Negev 1a type, produced during most of the first century AD (I. Zanoni in Bignasca, A. *et al.* 1996: 314-316; new research by M. Grawehr shows that Negev 1a lamps do continue well into the second half of the first century AD, pers. comm.). The latest phase of use of room 3 can be dated to the Medieval period as Medieval pottery was found directly on the rock that apparently served as the floor level during that period. Also the stone built walls of the room were partially rebuilt in the Medieval period as is indicated by their low quality technique. However, in the Nabataean period the room must have been covered with floor slabs about 30cm higher than the actual rock level as is indicated by the original threshold of the door leading to room 7 (top on **Figs. 8, 9**). The Medieval reuse of that area corresponds well to the observations already made for room 1 during our 2002 season (cf. Schmid and

Studer 2002) and on other occasions during this year's excavation (cf. below).

The rooms to the east of the structures so far exposed (cf. **Fig. 1** and background on **Fig. 7**), as well as rock cuttings for stairs visible in the rock higher up, clearly indicate that the entrance pavilion to the Soldier's Tomb complex had two storeys and, therefore, must have been a massive and truly impressive construction.

On the other side of the entrance complex room 4 was exposed (**Fig. 11**, cf. **Figs. 1, 2**). Room 4 measures 4.0m x 6.40m and is built in a very similar technique as room 3, i.e. one wall (here the western one) is cut into the rock and the room was once covered with four vaulted arches. In contrast to room 3, in room 4 about three quarters of the original floor slabs are still *in situ* (**Fig. 11**). However, as became clear at several points including the missing parts where the bedding of the floor slabs was visible, the actual state of the floor corresponds to a later phase of our complex. As a matter of fact, beneath the western part of room 4 runs an important rock cut water canalisation, the same that is clearly visible on the outside of the main re-





11. Lower terrace, room 4 from S (Schmid).

taining wall of our complex (Schmid 2001b). A small sounding at a location towards the western limit of room 4, where the floor slabs were missing, showed that this canalisation was filled in with

massive stones and smaller elements in order to establish the actual floor level of room 4 (Fig. 12). The fill also contained architectural elements, some of them even showing plaster of wall paintings. The slabs were bedded into a layer containing lime mortar, a very unusual technique in Nabataean times, as we already observed last year in room 2 (cf. Schmid and Studer 2002). The pottery of that fill beneath the floor slabs belonged to the early second century AD, showing the characteristic late Nabataean painting styles (phases 3c and 4 according to Schmid 2000a: chap. IV. 1.; IV. 5.; XII.). Within the finds from that fill is an almost complete lamp with a barely visible *ovulus* decoration on its shoulder (Fig. 13). Similar lamps were found in the Petra theatre, more specifically in a context dated by the excavator to the first years after the Roman annexation (Hammond 1965: 65



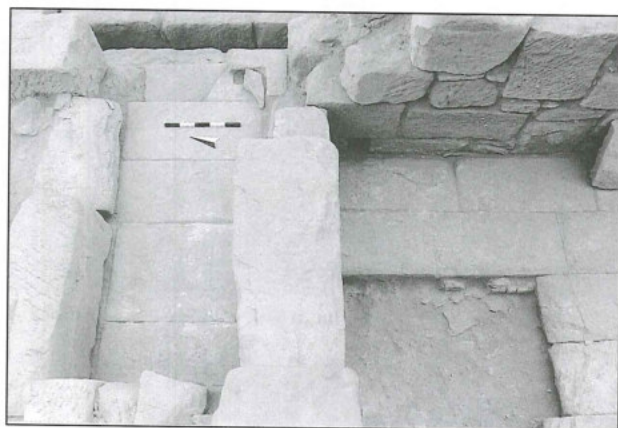
13. Lower terrace, room 4, lamp with *ovulus* decoration from fill (Schmid).



12. Lower terrace, room 4, fill beneath floor slabs (Schmid).



[period Ic]. 80) and in tomb 64b opposite the Khazna, apparently belonging to the second century AD (Zayadine 1982: 371f. nos. 3. 8 pl. 122). A precision of the chronology of this type will be possible with the publication of the finds from az-Zanṭūr, where more than 40 examples were found, clearly indicating the main production of these lamps in the late first and second century AD<sup>1</sup>. The filling in of the water canalisation and the bedding of the floor slabs of room 4 can, therefore, be dated to a period after the Roman annexation of Nabataea in AD 106. As the main parts of the Soldier's Tomb complex were constructed around the middle of the first century AD, the question raises whether room 4 had a Nabataean predecessor or not. An answer to that question would be all the more important as it would help to clarify the picture of the outer façade of the entire complex (cf. on this Schmid 2001b; Schmid and Studer 2002). Probably to the same period, i.e. the early second century AD, belongs the construction a small room 5/6 to the S of room 4 (Figs. 14, 15). Related to the



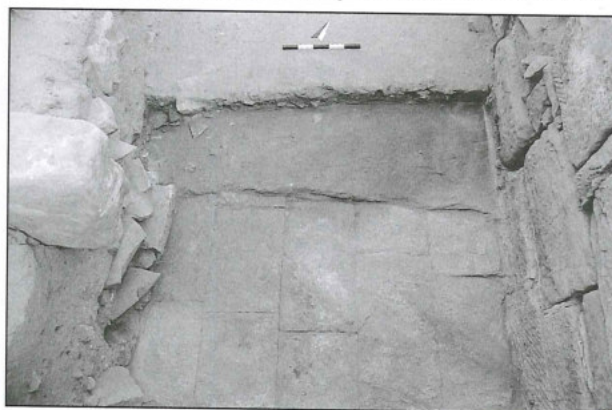
14. Lower terrace, room 4 (right) and small room 5/6 to the S of it (left) (Schmid).



15. Lower terrace, SE corner of room 4 and small room 5/6 to the S of it (Schmid).

area E of it by a small door, this new room (a staircase?) was covered with well-cut floor slabs being on a slightly higher level than the slabs of room 4. The re-use of the rooms and the partial reconstruction of the walls in the Medieval period considerably increase the difficulties in interpreting the relation and the function of the rooms in the western part of the complex. After the construction of room 4 in the early second century AD, it was used for quite a while as is underlined by the thick layer containing ashes and "fat" earth, typical for remains of household activities (Fig. 16). To our knowledge it seems that at least two major rooms – room 2 and room 4 – as well as smaller structures such as room 5/6 were added to the complex in the early second century AD. Although for the time being, it is not clear whether any of these rooms had earlier predecessors, this constellation shows that the complex continued to be in use after the Roman annexation in AD 106 and probably was even enlarged. This can be taken as another element as well as for the importance of the Soldier's Tomb complex as well as for its multipurpose function. There would have been no good reason to take care in that manner about a simple tomb two or more generations after its construction. This as well as the results obtained about the installations on the lower terrace (see below) show that the owner of the entire complex has to be located at the very top of Nabataean society.

Like most of the other rooms room 4 also saw a Medieval reuse which, however, took place on a level about 40cm higher than the floor slabs so that the last layers inside the room remain untouched. From the Medieval layer higher up comes a tombstone with a carved cross, reusing a Nabataean floor slab. With the new tombstone we already have five Medieval funerary stones from the lower

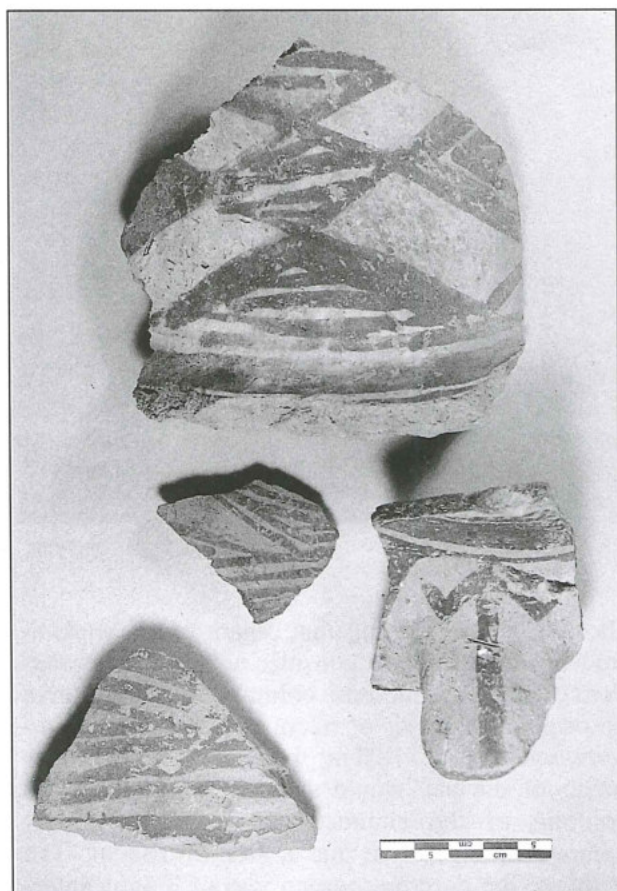


16. Lower terrace, room 4, floor slabs and dark layer of household activities on top (Schmid).

<sup>1</sup> We would like to thank M. Grawehr (Basel) for his comments on the lamp fig. 12 and information about the finds

from az-Zanṭūr. His results will be published in volume III of the Petra az-Zanṭūr series (forthcoming).





17. Lower terrace, room 4, Medieval painted pottery (Schmid).

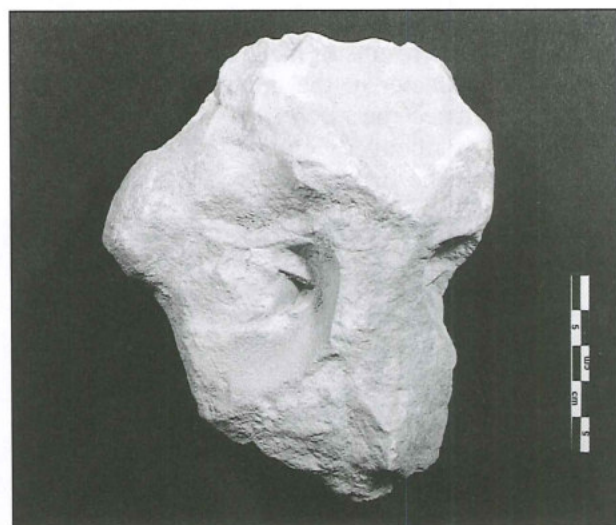
and upper terrace in the Wādī Farasa East (on the others see Schmid 2001b), underlining once more the importance of the Medieval occupation of that part of the city of Petra. The pottery from these Medieval strata does contain the characteristic handmade painted ware (**Fig. 17**) belonging to the 11th to 13th century AD that has been mentioned on previous occasions (Schmid 2000b, 2001b, Schmid and Studer 2002).

From the same Medieval layers comes a fragment of one of the statues on the attica zone of the Soldier's Tomb (**Fig. 18**), identical in technique and material to the ones we found in 2002 just in front of the tomb (Schmid and Studer 2002). The fragment illustrated on **Fig. 18** shows a bended left arm and could belong to the statue on the right side of the tomb. The analysis of the fragments found during the past season further revealed part of a human face from one of the statues (**Fig. 19**). As the block with the head of the central figure, i.e. the so-called soldier, is completely missing, the fragment on **Fig. 19** most probably belongs to one of the lateral statues.

We take this opportunity to announce a series of other sculptural finds by the kind permission of



18. Lower terrace, room 4, left arm of statue from Soldier's Tomb (Schmid).



19. Part of the face from a statue from the Soldier's Tomb (Schmid).

Suleiman Farajat from the Petra office of the Department of Antiquities. During the cleaning activities realized by the Department of Antiquities in the frame of a World Bank sponsored project (on this project see also the contribution on the "Renaissance Tomb" in this volume) the cavities in the Wādī Farasa West were cleaned. Inside the triclinium BD 256 (Brünnow – Domaszewski 1904:



279 no. 256) not only the huge installations for the banqueters were found and, therefore, eliminating any doubt as for the use of the room, but also several fragments of limestone sculptures belonging to at least life size statues (Fig. 20). Most of them are fragments of drapery difficult to identify more precisely. However, there are some fragments of cuirasses (Fig. 20 bottom right) as well as a huge fragment of a shoulder wearing a cloak (Fig. 21). Inside the triclinium where the fragments were found there is no space to place life size statues nor is there in the other rock cut installations nearby. It would seem possible then that these fragments belong to the statues in high relief from the Soldier's Tomb in the Wādī Farasa East. However, other sculptural decoration within the installations of the Wādī Farasa East and West should be ruled out *a priori*.

In order to proceed with the cleaning of the central area of the complex, that is the courtyard and the surrounding porticoes, trench 2 was reopened and extended towards East (Fig. 22; cf. Figs. 1, 2). Beside the two columns already exposed in 2000 (cf. Schmid 2000b), a third one was found this year belonging to the main access from the N-portico to the courtyard. As it could be supposed already from the reconstructed plan of the area (cf. Fig. 1), the distance between the two columns forming the entrance is slightly bigger than in the other cases. According to the results of the 2000 and 2003 campaigns, the diameter of the columns is 60cm, the standard distance between the columns (*intercolumnium*) is about 187cm with the bay measuring 247cm. The better preserved column drums



21. Statue fragment from the Wādī Farasa West showing shoulder wearing cloak (Schmid).

showed careful carving that points to the application of stucco. If we consider a layer of approx. 1cm of stucco around the columns this would give an original diameter of 62cm and therefore an *intercolumnium* of 185cm; however the measurements of the bay would still be 247cm. The two columns of the entrance zone show an *intercolumnium* of 224cm and a bay of 284cm. The width of the northern portico was of 3.65m. Interestingly, the water channel exposed last year in room 1 continues straight into the portico (Fig. 22 bottom) but not further into the courtyard. This means that it served to collect and drain the rain water from the roof of the portico, showing once again the technical skill of the Nabataeans.



20. Statue fragments from the Wādī Farasa West (Schmid).





22. Lower terrace, trench 2 from E (Schmid).

### III. Upper Terrace

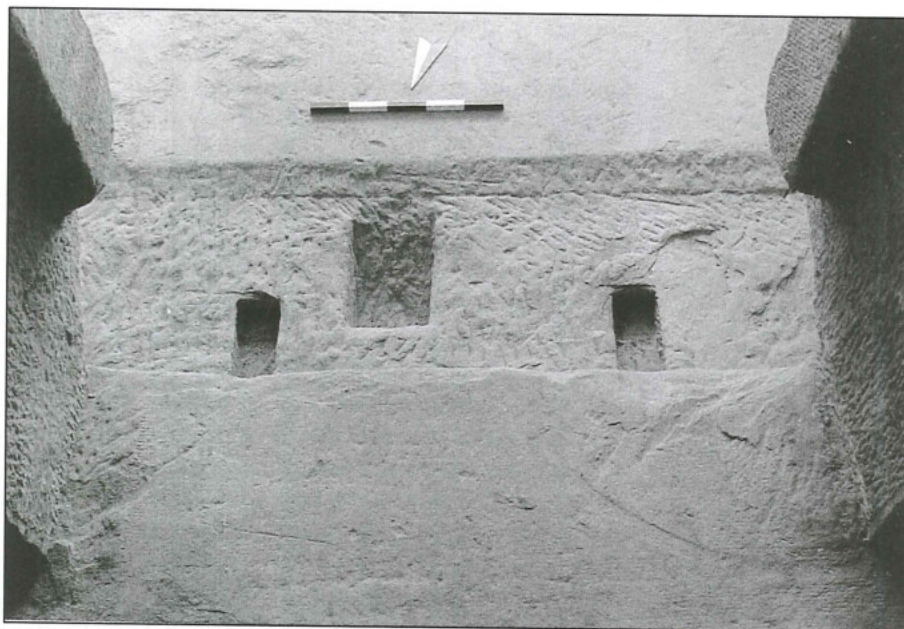
On the upper terrace we cleaned the second rock-cut room of the so-called Garden Triclinium from the remains of its modern occupation so that



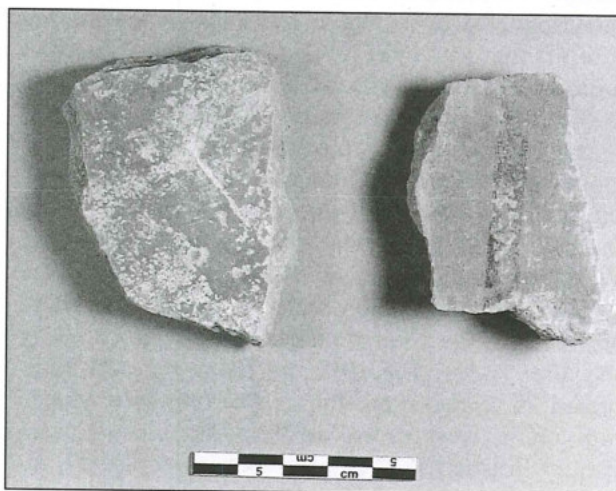
23. Wādi Farasa East, upper terrace. Garden House, second rock-cut room from NW (Schmid).

the entire monument is now completely cleaned. As with the first room of that structure, the second one did not contain any additional hint as to its original use (Fig. 23). As already indicated in previous years, the absence of *loculi* or other devices for the deposit of sarcophagi or corpses clearly speaks against the use of the structure as a tomb. Further, the sliding traces beyond the threshold of the door that separated the two rooms (Fig. 24) shows that this door was regularly used, another argument for the profane use of the structure. About three quarters of the second room are executed in the best Nabataean carving technique indicating that the room once must have been covered by painted stucco. Some small fragments of painted stucco maybe belonging to the Garden Triclinium were found in the cistern and in debris in front of it (Fig. 25). The last part of the room, however, is done in a much less careful technique (Fig. 26) sharply contrasting with the good carving of the other part. Most probably the enlargement of the room is due to a later reuse of it, as this is another area of massive Medieval occupation (cf. Schmid 2001b; Schmid and Studer 2002). Another explanation, already proposed by Bachmann, Watzinger and Wiegand, would be the assumption of a built wall at the rear of the carefully carved part in order to close the room at that point (Bachmann, Watzinger and Wiegand 1921: 87). Despite the “finish” of most of the walls of the second room and despite the clear traces of use as indicated by the door slides (Fig. 24), the room was not completed in Nabataean times. The window placed high on the western wall of the room was not completely finished as is clearly visible on Fig. 27, al-





24. Wādi Farasa East, upper terrace. Garden House, door between rooms (Schmid).



25. Wādi Farasa East, upper terrace. Fragments of painted wall plaster found in front of the Garden House (Schmid).

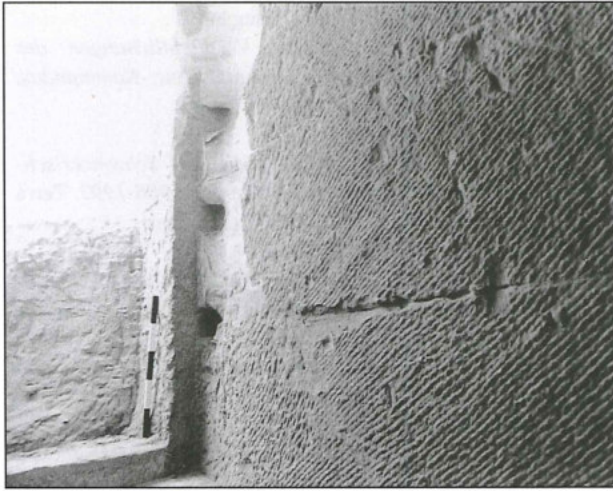
though the side walls as well as the holes for bars were accomplished. The complete cleaning of the structure did not reveal any additional element as for its traditional designation as “temple” or “triclinium”, we are all the more inclined to stick with the interpretation proposed by Bachmann, Watzinger and Wiegand that we developed further since the start of the International Wādi Farasa Project in 1999 and to call that structure the “Garden House” rather than anything else (Bachmann, Watzinger and Wiegand 1921: 85-87; Schmid 2001a; 2001b, Schmid and Studer 2002). With the reconstruction as proposed, that is as a peristyle house with porticoes surrounding the rock-cut cistern in front of the façade, the entire area would become a stringent and well planned installation. The upper storey would allow a smooth circulation



26. Wādi Farasa East, upper terrace. Garden House, second rock-cut room with careless carving in the rear part of the room (Schmid).

from the level of the huge cistern, using the rock-cut staircases in order to join the different areas. As

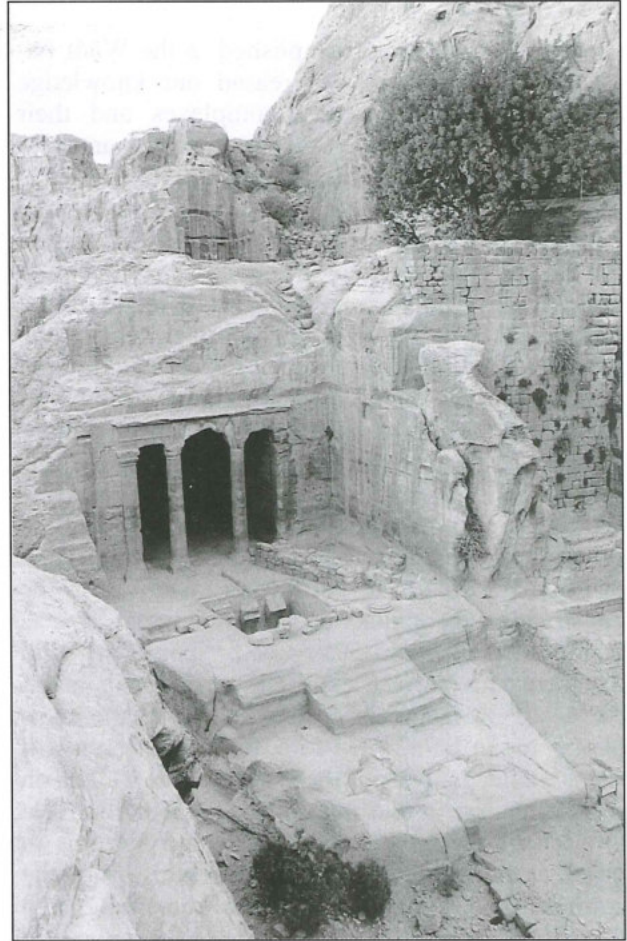




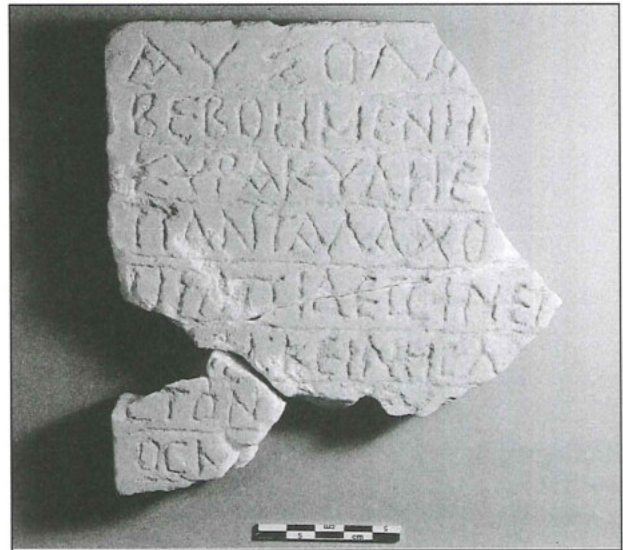
27. Wādī Farasa East, upper terrace. Garden House, window in the second rock-cut room (Schmid).

already pointed out in last years report and on other occasions (Schmid and Studer 2002; Schmid 2001a), the installation of the “Garden House” all the more turns out to follow in a surprisingly exact way the recommendations for constructing a Greek type peristyle house by the Roman engineer and architect Vitruvius, writing in the time of Augustus (Vitr., de archit. VII 149, 3f.). By the time of Vitruvius and even more by the time of constructing the “Garden House” (mid first century AD), these features had become integral part of luxurious Roman houses as well (see for a case study Dickmann 1997). With the interpretation of a good part of the upper terrace of the Wādī Farasa East as living area, we have of course to ask questions about functional aspects related to the other structures as well as about the relation between the different installations. Since the “Garden House” can be interpreted as a living area requiring regular access by its occupants, this means that they had to cross on a regular base the lower terrace with the Soldier’s Tomb, the triclinium and the courtyard. This is a strong indication that the two terraces belonged to the same overall installation and also to the same owner, no matter whether this was a private, a family or a corporation.

In front of the Garden Triclinium the space of what could be called the podium of the structure was cleaned down to the natural rock (Fig. 28). The rock surface shows traces of stone extracting and quarrying and we can, therefore, presume that the needed building material for the monuments under study was extracted in the immediate neighbourhood. In this area (trench 6 on Fig. 1) a fragmented Greek inscription was found (Fig. 29). According to the shape of the letters the inscription dates to the Byzantine period and may be a funer-



28. Wādī Farasa East, upper terrace. Garden House (left) and huge cistern (right) from SW (Schmid).



29. Greek inscription from space in front of Garden House (Schmid).

ary inscription mentioning the name of the deceased in the first line (Auxola[os]?).



#### IV. Perspectives

The work so far accomplished in the Wādī Farasa East considerably increased our knowledge about Nabataean funerary complexes and their function. As with every year new rooms and elements are discovered, the continuation of the activities of the International Wādī Farasa Project will contribute to some still outstanding answers as to the exact layout of that structure. In forthcoming seasons it would seem reasonable to focus on the eastern parts of the entrance complex and to the courtyard. With the discovery of several additional building phases, involving the main retaining wall as well as the rooms built behind it, special attention shall be devoted to the chronology of the different building phases. The possibility to excavate rooms preserved for almost the entire height of the ground floor such as indicated on the background of Figure 7, should reveal further insight as to the construction techniques and the functional aspects of the different main phases of the complex. With the increasing surface exposed, more details about the water management system related to the complex come to light. Therefore, further research will focus on the analysis of these systems as well as on the evaluation of the possibility for a partial restoration of the basic water evacuation systems in order to protect the rock-cut structures from the springs. The excavation of the remaining two thirds of the cistern north of the main complex (cf. above and C 1 on Fig. 1) shall be completed in a forthcoming season.

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#### Bibliography

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- 1994 *Bauten und Katapulte des römischen Heeres* (Mavors. Roman Army Researches, 11). Stuttgart: Steiner.

- Bachmann, W., Watzinger, C. and Wiegand, T.  
1921 *Petra. Wissenschaftliche Veröffentlichungen des Deutsch-Türkischen Denkmalschutz-Kommandos, Heft 3*. Berlin/Lepizig: De Gruyter.
- Bignasca A. et al.  
1996 *Petra ez Zantur, I. Ergebnisse der Schweizerisch-Liechtensteinischen Ausgrabungen 1988-1992*. Terra archaeologica, II. Mayence: von Zabern
- Brünnnow, R. E. and Domaszewski, A. v.  
1904 *Die Provincia Arabia auf Grund zweier in den Jahren 1897 und 1898 unternommenen Reisen und der Berichte früherer Reisender, 1. Die Römerstrasse von Mâdebâ über Petra und Odruh bis el-Akaba*. Strassburg: Trübner.
- Dickmann, J.-A.  
1997 The Peristyle and the Transformation of Domestic Space in Hellenistic Pompeii. Pp. 121-136 in R. Laurence, A. Wallace-Hadrill (eds.), *Domestic Space in the Roman World: Pompeii and Beyond*. JRA Suppl. 22. Portsmouth.
- Frösén, J. et al.  
2001 The 1998-2000 Finnish Harun Project: Specialized Reports. AD AJ 45: 377-392.
- Hammond, P. C.  
1965 *The Excavation of the Main Theater at Petra, 1961-1962. Final Report*. London: Quaritch.
- Schmid, S.G.  
1997 Nabataean Fine Ware Pottery and the Destructions of Petra in the Late First and Early Second Century A.D. Pp. 413-420 in G. Bisheh, M. Zaghloul and I. Kehrberg (eds.), *SHAJ 6*. Amman: Department of Antiquities.
- 1999 The International Wādī al-Farasa Project (IWFP). Exploration Season 1999, AD AJ 44: 335-354.
- 2000a *Die Feinkeramik der Nabatäer. Typologie, Chronologie und kulturhistorische Hintergründe. Petra - Ez Zantur II 1. Ergebnisse der Schweizerisch-Liechtensteinischen Ausgrabungen* (= Terra archaeologica IV. Monographien der Schweizerisch-Liechtensteinischen Stiftung für Archäologische Forschungen im Ausland [SLSA/FSLA]). Mayence: von Zabern.
- 2000b The International Wādī Farasa Project (IWFP), 2000 Season. AD AJ 45: 343-357.
- 2001a The International Wadi Farasa Project (IWFP). Between Microcosm and Macroplanning – A First Synthesis. *PEQ* 103: 159-197.
- 2001b The International Wādī Farasa Project (IWFP), 2001 Season. AD AJ 46: 257-277.
- Schmid, S.G. and Studer, J.  
2002 The International Wādī Farasa Project (IWFP). 2002 Season. AD AJ 47: 473-488.
- Zayadine, F.  
1982 Recent Excavations at Petra (1979-81). AD AJ 26: 365-393.