

New York University
Excavations at Amheida 2010
Preliminary Report

The 2010 excavation season started on the 23rd of January and continued until the 20th of February. The main goals of this season were to investigate the two streets running east and west of a 4th century AD dwelling (B1 in area 2.1), and to start new excavations in the area of building 6 located north-west of B1 and characterized by the presence of a series of columns (area 2.2). Area 2.1 has been under excavation since 2004.

Other parts of the project were a geological surface survey in the whole archaeological zone, an implementation of the existing topographic records, and the reproduction inside the B1 replica of the painted decoration of two rooms excavated in B1. Finally, the decorated temple blocks found during the 2004-2009 seasons have been reorganized inside the block house according to their chronology.

The 2009 team consisted of Roger Bagnall (director, papyrologist); Paola Davoli (archaeological field director); Olaf Kaper (associate director for Egyptology); Mirjam Bruineberg, Roberta Casagrande-Kim, Valentina Liuzzi, Ellen Morris, Sander Mueskens, Silvia Prell, Adam Prins, and Darryl Wilkinson (archaeologists); Clementina Caputo, Andrea Myers, and Irene Soto (ceramicists); Angela Cervi, Elvira Pisanello, and Jennifer Thum (registrars); Fabrizio Pavia and Silvia Maggioni (topographers); Rodney Ast and Raffaella Cribiore (papyrologists); Bruno Bazzani (computer systems manager and photographer); Katherine Adelsberger (geologist); Pamela Crabtree, Salima Ikram, and Douglas Campana (paleozoologists); Ashraf Senussi (pottery draftsman); Susanna McFadden, Delphine Renaut, and Helen Whitehouse (art historians); Martin Hense and Dorothea Schulz (artist); Sanchita Balachandran, Basem Fathy, and Mohamed Ahmed Sayeed (conservators); and Ashraf Barakat (assistant to the director). Our SCA inspector was Hany Awad Allah.

Area 2.1 - Street 2

Paola Davoli and Mirjam Bruineberg

During the 2010 season, a trench of 16 by 7 meters was investigated in the north-south oriented street running in front of the eastern entrance of building B1 (figs. 3, 4). Excavation in this trench was already started in 2009 at its northern part. The boundaries of the trench correspond to the remains of a wide doorway closing the street to the north, a series of walls along the east side of

the street, and an east-west oriented wall to the south. Two central pillars (F301 and F302) divide the excavation trench into two areas. The complex stratigraphy can be distinguished into an upper and a lower part (fig. 8). Only the lower part, consisting of dumped layers, is present in both the northern and the southern area. These layers originate from a destruction phase preceding the building of the house of Serenos (B1). On the other hand, the upper part consisting of floor layers in phase with building B1 differs in the two abovementioned areas (fig. 6).

In the area north of the two pillars the stratigraphy was excavated to reach the level of the *gebel*. In 2009 a big collapse from a flat roof covering this part of the street was removed. The underlying stratigraphy, 1.45m deep, was investigated this year. It was composed of one floor level on the top (F313) and 5 layers of dumped material below. The dumped material consists of mud brick debris, fragments of wall plaster, mortar, ash, some baked brick fragments, and a large quantity of potsherds among which were about 150 Greek ostraca. The foundation trench of the eastern perimeter wall of B1 was cut into these layers down to the *gebel*.

South of the two pillars the *gebel* was reached in two test trenches that share an identical stratigraphy at the lower elevations.. The latest upper floor was the same as the one investigated at the northern area (F313). However, below this floor three other mud floors (F314, F324, and F326) and several walking surfaces on sand (DSU364) were found. These floors refer to different phases of use. The latest two floors (F313 and F314) were present on the whole southern area, which was probably unroofed and closed off to the south (F319 and F321). Floor FSU314 covered a razed sigma feature (F323), probably a *triclinium* surrounding what could possibly be interpreted as a table (F325) (fig. 7), that is in phase with floor F324 and DSU364. At present it is not clear whether the surrounding features, as for example the two above mentioned pillars, were built concomitantly with the sigma feature or at an earlier time. It is certain that floor FSU326, on which the sigma feature was built, was laid out at the same time the entrance to Room 6 was blocked off (F322)..

The evidence collected during the excavation indicates that Street 2 functioned as a private passageway rather than a public road.

Area 2.1 - Street 3

Paola Davoli and Silvia Prell

Street 3 runs north-south along the west side of building B1 (figs. 3, 4). The goal was to gain a better understanding of the ways in which inhabitants of Trimithis moved around in the city, entering and leaving their homes.

The street alongside B1 is about 15 m long and 1.9 m wide; a door in room 12 provides access from the street to Serenos' house. The northern part of the street, north of the door, was

already partially cleaned in 2007 while excavating room 13. The reason for this was that the vault of room 13 turned out to be partially collapsed inside the street. Part the sand, which had accumulated more or less up to the preserved tops of the walls, was removed.

In the south, about 3 m of sand had to be removed, until finally the first archaeological layers were reached.

The investigation was extended beyond building B1 until the east-west running wall F341, obviously blocking the street. This blocking wall seemed to be associated with the building south of B1, labeled B7. This decision turned out to be most productive, as the entrance to building B7 was discovered, together with another door in the wall enclosing the street to the west. The latter is situated slightly more to the south and leads to a not-yet investigated building west of the street. In the area where the two doors are located, the western wall of the street is set back to the west, widening the street to a width of 2.28 m.

The most striking discovery in the very south were the remains of a vault (F344) (fig. 10) south of both doors, which was attached to the two enclosing walls (F341 and F343) and also to the blocking wall F342. The middle part is not preserved, but the eastern and western parts of the vault, still mud-plastered on the inside, are in good condition. As the northern face of the vault also turned out to be plastered with mud, one can be sure that the vault roofed an area of no more than 2.20 m south of the doors until the blocking wall.

The first and also latest floor in the north of the street was discovered at a height of 137.15 m asl (fig. 9) and consists of a compressed layer of mud. Near the entrance to room 12, an iron ring plated with gold-leaf was found (fig. 11). A second and earliest floor, also consisting of compressed mud, was found underneath the first one.

A mud-brick collapse was discovered in the middle of the street, blocking the street from east to west. It turned out to be the collapse of a door regulating the access between the southern and the northern parts of the street. The eastern doorjamb (F345), sitting partly on a threshold made of mud-bricks (F350), consists of a pilaster, made of very sandy bricks. The doorjamb shows a cut-out on the south-western corner, which forms the doorstep. It is still preserved from the bottom up to a height of 95 cm. The original height of doorjamb and door can be reconstructed with the help of several indications to a height of 1.6 m. The western jamb was formed by a wooden plank which left its impression on the mud plaster of the western wall. Two holes on the opposite walls and on top of the jambs indicate the original presence of a wooden lintel. The mud brick threshold is very worn. Considering all this information, a door approximately 1.20 m wide and with a height of 1.60 m can be reconstructed, which opened to the south.

The upper floor F347 abutted the threshold from the north and was not found to the south of it. There only the earliest floor F349 was present. This circumstance provides us with the

information that the earlier floor F349 can be considered the original floor of the street, before the access was restricted by means of the door.

The presence of a flat roof on the central portion of this street is attested by four beam-holes, two of them in the western wall F340 and other two on the opposite eastern wall F72/76. Together with a wooden vertical pole set in the middle of the street and the mud-brick lintel above the door closing the street to the south, they most likely supported a flat ceiling consisting of organic material. It is to be noted that the space in front of the door to room 12 as well as the space in front of the door to the B7 was uncovered.

A trench of 3.50 m length was opened in the street to clarify the layers underneath the floors and the foundations of the walls. Directly under the earliest floor a layer of mixed rubble was found, which consisted of pockets of gray and black ash and mud-brick debris. It was on top of a mud-brick debris layer. The foundation of the west wall of Serenos' house was formed of seven mud brick courses. The foundation trench was clearly visible and was cut in a 75 cm thick layer of compressed mud, which might be a leveling layer to even out the difference of about 45 cm between the gebel in the east of B1 to the gebel in the west.

A totally different situation is observable for the wall F340, enclosing the street to the west and belonging to a different complex. First of all, a strange feature, FSU 351, was unearthed attached to the foundation of the wall; no satisfactory explanation has yet been found for this feature. For the wall itself, at least six slightly protruding foundation courses can be determined. All in all, the excavation of Street 3 added more information about daily life in the town. First planned as a north-south running alley, connecting the southern buildings to the northern ones, it was soon annexed by the abutting owners and turned into a more private space, which e.g. still finds its comparison in the nearby Islamic town of El-Qasr.

Area 2.2 – Building 6

Paola Davoli and Roberta Casagrande-Kim

Building 6, located in Area 2 north-west of Building 4, was probably composed of 10 rooms of different sizes and planimetry. The excavation started in rooms 24, 26, and 27, all filled up to the top of the remaining walls (3.00 m high) with clean wind-blown sand (DSU 2, 8, and 16). The walls and columns of these rooms are well preserved to a considerable height and are covered by a thick layer of undecorated mud plaster (fig. 5).

The main central room, R24 (north-south: 9.10 m; east-west: 11.70 m), is characterized by the presence of 6 columns arranged in two alignments (fig. 12), one running north-south and the other east-west, one engaged semi-column, and two benches along the west and the south-west

walls. It was accessible by an entrance located at the north-west corner, and had two additional open passages connecting it toward the north and the south with rooms 26 and 27. Considerable remains of a roof collapse (DSU 11, 12, and 13) were found on the entire surface of the floor (F30). This collapse was composed of complete and fragmentary baked bricks, baked column quarters, drums, portions of column shafts, thick plaster fragments (some painted in red hues), a few charred palm beam remains, and mud impressions of wooden planks. In the burnt and compacted sand in which the collapse was embedded, over 3.800 iron nails (complete or fragmentary) were spread throughout the central area of the room bounded by the columns. Their pattern of distribution proves that they were used to connect the beams and planks of the roof. The roof, at least in this central part, was composed of a series of long beams (probably resting on the columns) connected by shorter half or quarter palm trunks onto which was laid a thick layer of painted plaster functioning as the facing surface. Plaster and nails were absent in the two narrow strips between the columns and the perimetral walls on the west and south sides, suggesting that these two areas must have been covered differently. The collapse rested for the most part directly on top of the latest mud floor level (F30) which in turn rested upon an earlier floor in white lime plaster (F31), apart from an area at the eastern third of the room. Here, 2 wooden elongated beams, 4 rectangular planks, and 2 wooden panels left their impressions on the sand (the original wood composing them being completely decayed). The two panels (130 x 100 cm ca.), probably functioning as screening walls, were decorated by a series of hexagons punctuated by iron nails, their heads shaped as studs (fig. 14).

Two baked brick walls constitute the south-east corner of R24. F24 (running north-south) opens toward the east with a door. The stone lintel of this door turned out to be a reused block, possibly from the temple or a tomb of the XXVI dynasty (fig. 13).

The other two excavated rooms, R26 and R27, are located respectively north and south of room 24 along a central N-S axis.

Room 27 (north-south: 3.15 m, east-west: 6.10 m) was excavated to a depth of 3.20 m, from the surface to the very top of a collapse layer. It will be investigated further in following seasons.

Room 26 (north-south: 5.00 m, east-west: 5.90 m, 3.15 m preserved height) has three perimetral walls on the west, north, and east sides, and it is open on the south side, where two free-standing columns resting on a short step function as dividers from room 24. The room has three benches along the perimetral walls and was covered by a light jareed roof, the mud impression of which has been found on top of the sand covering the mud floor F21.

Apart from the iron nails, the three rooms yielded very few pottery sherds or other finds. Among these were 3 coins, one ostrakon, and a fragmentary pottery animal figurine.

Topographic Survey

Fabrizio Pavia and Silvia Maggioni

The topographic work carried out during the 2010 season continued on the basis of what was already elaborated in 2009. The survey was conducted using a new polygonal triangulation centered onto 3 fixed points, two of which had been already identified in 2008 (S100) and 2009 (S200). The new fixed point (S300) was placed at the south-west limits of the ancient city.

Topographic assistance in the fieldwork

Following the evolution of the work on the field, daily updates were prepared in Area 2.1 to provide total stationing references (fixed points, and photogrammetry) to assist and facilitate the work of the archaeologists both at the eastern (S2) and western (S3) streets running along the entrances of building B1. The result of the work generated a comprehensive plan of the area reflecting the architectural situation on the ground.

In Area 2.2 the team has worked on mapping in a CAD environment the architectonic features unearthed during the excavation and has provided a complete photogrammetric rendering of the perimeter walls. These data will be re-elaborated into a three-dimensional model of building B6 (fig. 14).

Site survey (figs. 1, 2)

The team continued the surface mapping of the site in an area not yet excavated, measuring approximately 300 m north-south by 170 m east-west. It is located south of Area 4 and is delimited toward the east by a north-south oriented street 4.5 meters wide and toward the west by a large zone covered in sand. Here, the features, buried deep under the sand, are not reachable by a mere surface cleaning.

The map reveals a regular district with a north-south orientation, characterized by dwellings, some of which have two pillars at their center and vaulted rooms still visible on the surface. Notably, a large building occupying at least 800 square meters (32 x 25 meters) has been identified at the north-east corner of the surveyed area. Its plan shows a wide central space or courtyard, the roofing of which was supported by two large columns 1.3 meters in diameter and four pilasters.

Ostraca

Roger S. Bagnall (with contributions from Rodney Ast and Raffaella Cribiore)

The 2010 season produced 160 ostraca, overwhelmingly from Street 2 and a small number from Street 3. The material from Street 2 was concentrated in layers of fill laid down below the first street surface; only a handful of texts come from the period of occupation of House B1. A certain number of the ostraca, mainly from DSU 367, come from a school milieu, most notably a sherd written on both sides with an alphabet and a single hexameter verse aiming to use all of the letters of the alphabet (an equivalent to the English “The quick brown fox jumped over the lazy dog”).

More than half of the ostraca came from a single DSU (368), and this material was composed mainly of tags originally set in mud jar stoppers on the top of wine jars. An unusual number of complete or nearly complete stoppers with the tags still in place were found in this stratigraphic unit along with the other ostraca. These mostly record the name of a well, the name of a person, and a year number. The year numbers ranged from 1 to 17 and may be attributed to the reigns of Diocletian or Constantine, or a combination. It appears likely that none of this material can be dated later than 325 CE. The wells attested are mostly already known from discoveries in previous years; Pmoun Psoi is dominant. From this year’s ostraca we may also surmise that the numerals sometimes present on short tags that lack well names refer to the number of the wine-producing establishment (the *lenos* in Greek) from which the wine came, and the names following the well names probably are those of the proprietor of the *pithos*, or vat.

Although the ostraca from S3 were not numerous, they had a couple of points of interest. One is a receipt signed by Nikokles, a major figure in the receipts and other texts from House B1 in its final phase (ca. 350-370). Another is a short listing of goods, one of them “Ammoniac incense,” the other copper sulphate (chalkanthon), an ingredient in ink.

Egyptology

Olaf E. Kaper

The 2010 season has been devoted to the study of the blocs and fragments with relief decoration found in previous years in the temple enclosure at Amheida, presently stored in the site blocks magazine.

The study of the blocks focused first of all on the assemblage of blocks and fragments into groups, and on identifying joining pieces. As a result, the history of the temple could be reconstructed as follows:

Before the Roman rebuilding of the temple of Thoth there were several chapels alongside each other, probably all dedicated to the same god.

Minor building activities are recorded for Pedubast I, Necho II and Psammetik II. Under Amasis a larger chapel with a vaulted ceiling was built close to the older temple. Under Darius I, a new chapel with a vaulted ceiling was built alongside the chapel of Amasis. This chapel incorporated the blocks of a decorated temple doorway from the time of Psammetik II. The rear wall of the sanctuary of Darius was executed in raised relief with images of the baboon form of Thoth divided over two registers. The remaining walls were cut in sunk relief.

In the Roman period, a new temple was built under the emperor Titus, perhaps with a north-south axis. This building included large-scale reliefs, with some figures life-size. Under Domitian several older buildings within the enclosure were demolished and their stones reused in the construction of a larger sanctuary, facing east. The sanctuary of Titus was incorporated entirely into this new temple. An outer gateway was erected in front of the sanctuary, later supplemented with another doorway of large stones decorated in the second century AD.

As a result of the reconstruction work, several scenes from the different phases of the temple can be reconstructed from their original blocks in the future.

In addition to the work on the temple, a single block with pharaonic relief was found in the excavations this year in Building 6. This block is still included in the walls of the building and it was left in place until the end of the excavations in future seasons. The relief depicts the Seven Hathors, four of which may be seen in the visible portion of the block. It is suspected that a king and the remaining three Hathors are contained on the parts of the reliefs hidden by the masonry of the building. Its date is estimated to be the 26th or 27th Dynasty.

Geology

Katherine Adelsberger

Investigations into local stratigraphy have revealed evidence for occupation within dune/interdune environments, which likely predate Roman occupation at the site by a significant margin. Although there is evidence for standing freshwater as well as active spring discharge within the local area, preliminary opinions on the age of the pottery found within these deposits suggest that all evidence for surface water found thus far is relevant to periods much older than the Roman period of interest.

One of the more curious aspects of the local stratigraphy is the extent to which we find a regular sequence of dune sands beneath silts, while those silts seem variably disturbed. The variety

of colors found within these silt units is also notable – in the more *in situ* deposits the color is a purplish red, very similar to the color of the local Mut siltstone bedrock. In those areas where these deposits look transported, the color is more frequently a greenish color. This coloration is also seen within the Mut bedrock but only along fissures and within spring mounds, presumably as a result of contact with groundwater. It is therefore possible that the color change supports the idea of water-related transport of these silty deposits, which may correlate with the *in situ* units found elsewhere. This would suggest localized reworking of silt deposits within very limited time frames, so that silt was reworked on the same land surface where it can be found in place.

Regardless of the specific environmental origin of these silt deposits, the regularity of the stratigraphy surrounding the Temple Mound suggests that the visible outcrops are in fact revealing the original stratigraphy of the area. This hypothesis is supported by the fact that excavations found cemented sandstone at an elevation of 135.5 meters above sea level (asl) beneath the Temple Mound, which matches perfectly with the elevations taken on sandstone units southeast of the site. Sandstone beneath silts therefore appears to be the general stratigraphy of the area immediately surrounding the Amheida site proper, though the specific location of interdune freshwater deposits may be localized and difficult to determine without extremely clear stratigraphic exposures.

Overall, the 2010 geologic investigations at Amheida reveal a number of directions for potential future research at the site, and indicate that the work done thus far in the area has been of high quality, providing a useful basis for the current study. Future work will hopefully elucidate sedimentary details in the deposits already examined while expanding the range of geologic investigations into areas farther east and north.

Reconstructing the Villa of Serenus

Dorothea Schulz

In 1979, while surveying the late antique city of Amheida (ancient Trimithis), a team of the Dakhleh Oasis Project discovered the upper part of lavishly decorated walls. The main building, including the decorated rooms, was subsequently excavated in 2004 and 2007 by a team from Columbia University, directed by Roger S. Bagnall (it is now a project of New York University). It turned out to be a fourth century ‘villa’, once occupied by a family of high social status (the owner was a city councilman).

The well-preserved decoration in four of the rooms depicts geometrical patterns as well as figurative scenes. Both the paintings *in situ* and the collected fragments pose considerable conservation problems; the layer of plaster is very thin and extremely fragile. The best way of

conserving this precious building for future generations is refilling it with sand – after extensive documentation.)

Because this unique Villa would be destroyed by being exposed to the public, the plan was made to build a full size reconstruction of the main house. In order to recreate the full splendor of this building the decision was taken to reconstruct the painted decoration as well. The Villa was built by Nicholas Warner and finished in 2009, next to the site of Amheida. By the beginning of this year the decoration team moved in and started with two of the main rooms, the ‘Green Room’ and the ‘Red Room’. The decoration consists mainly of geometrical patterns, including hundreds of circles, heartshaped petals and tens of thousands of dots. The most beautiful part is the border in the Green Room, a wavy band with birds, grapes and flowers (fig. 15).

This season the Green Room was completely decorated and the Red Room is nearly finished as well. The techniques and methods used were similar to the methods of the original artists, using gridlines and compasses for constructing the patterns.

The used colours are modern acrylics, the best quality available (‘Golden Acrylics’).

In the meantime lots of work is done on putting together more of the fragments in order to reconstruct the decoration of the Domed Room. Next year the decorators will move into this central hall of the Villa in to start the intricate and rich decoration there.

Mut, 22 February 2010

Director of the mission

Prof. Roger Bagnall

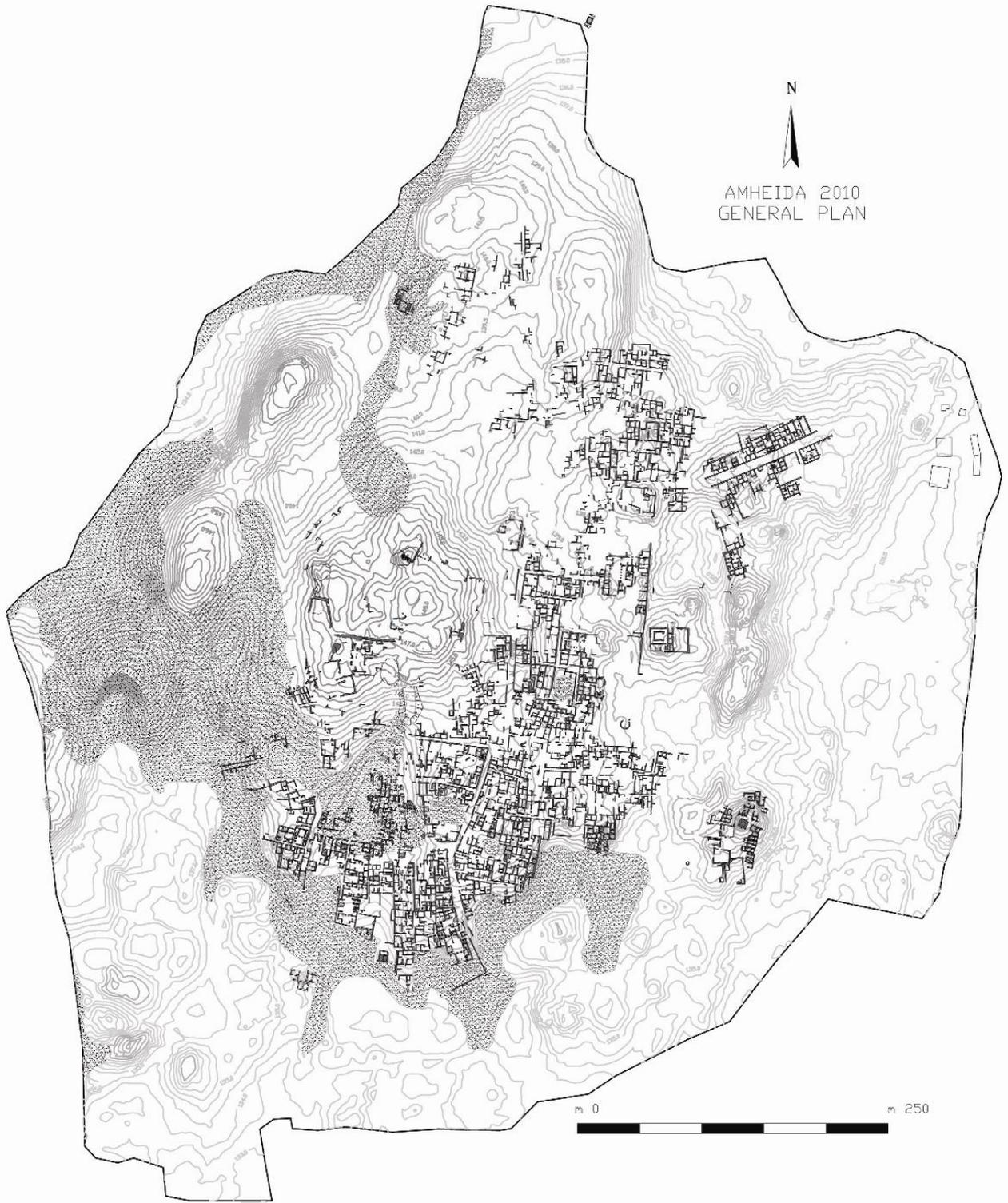


Fig. 1. General plan of Trimithis.

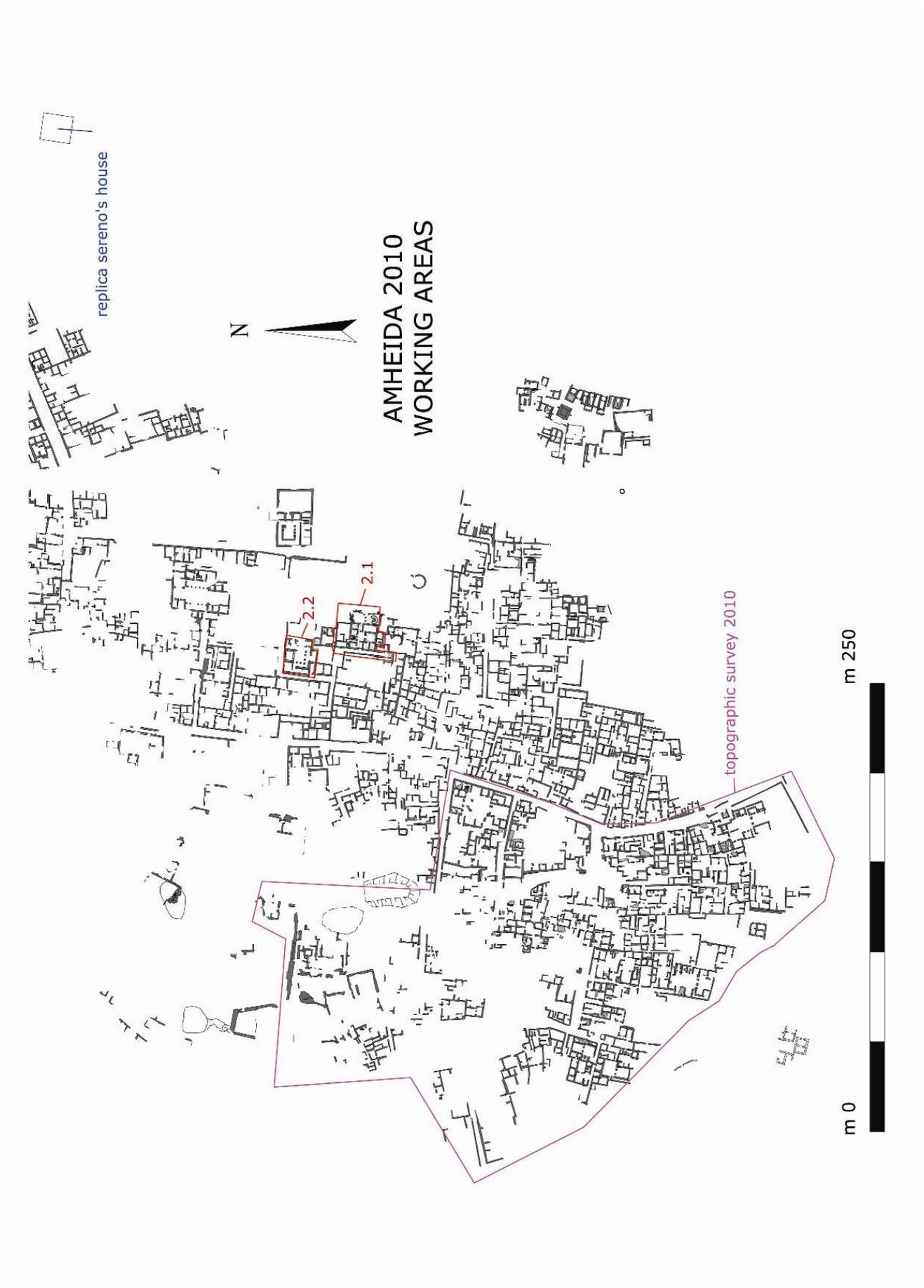


Fig. 2. 2010 excavated and surveyed areas.

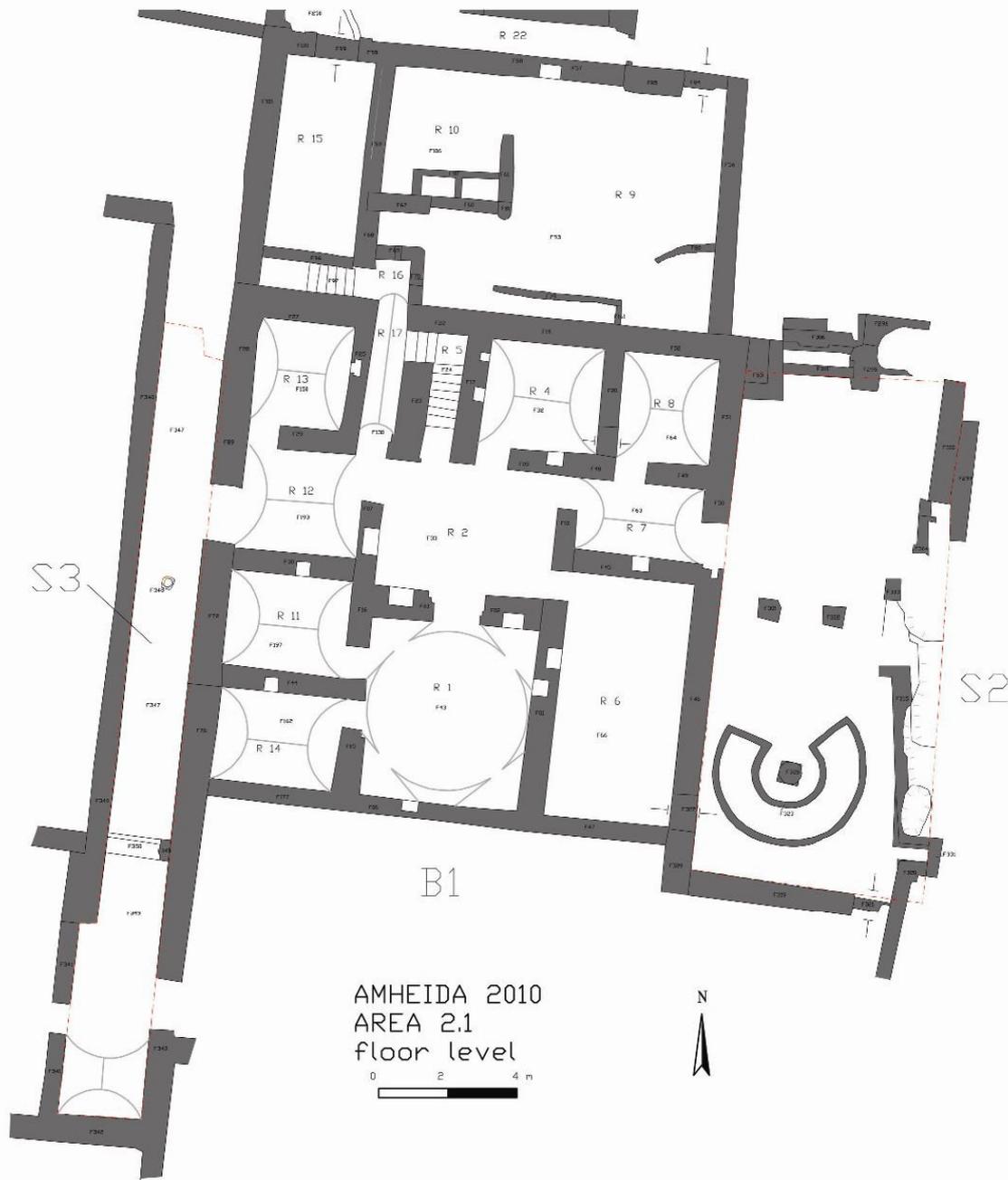
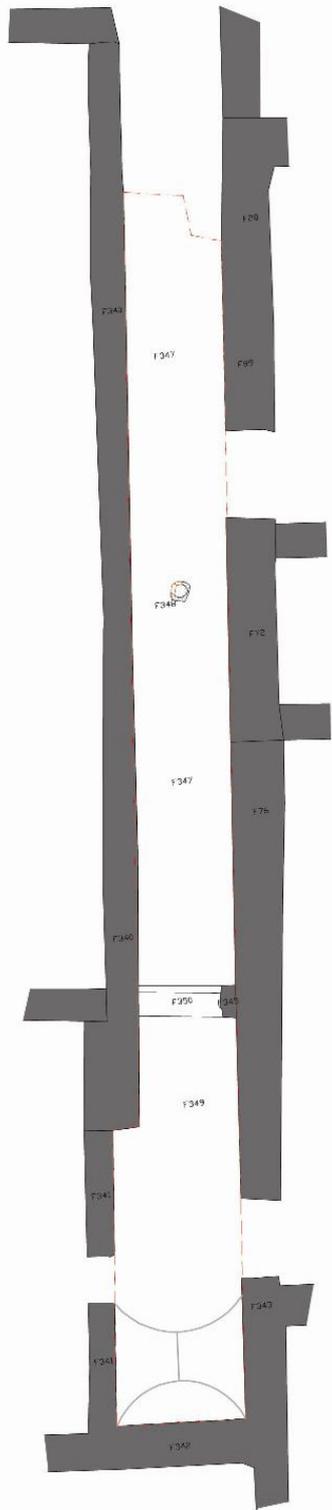


Fig. 3. Plan of area 2.1 with Street 2 to the east and Street 3 to the west.

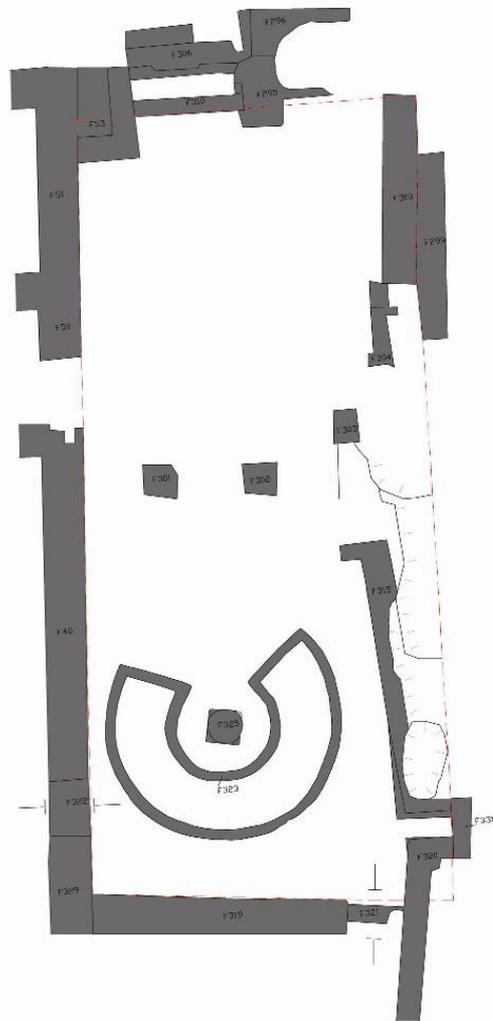
S3



AMHEIDA 2010
AREA 2.1 _ S2, S3
floor level



0 2 4 m



S2

Fig. 4. Detail of Street 2 and Street 3.

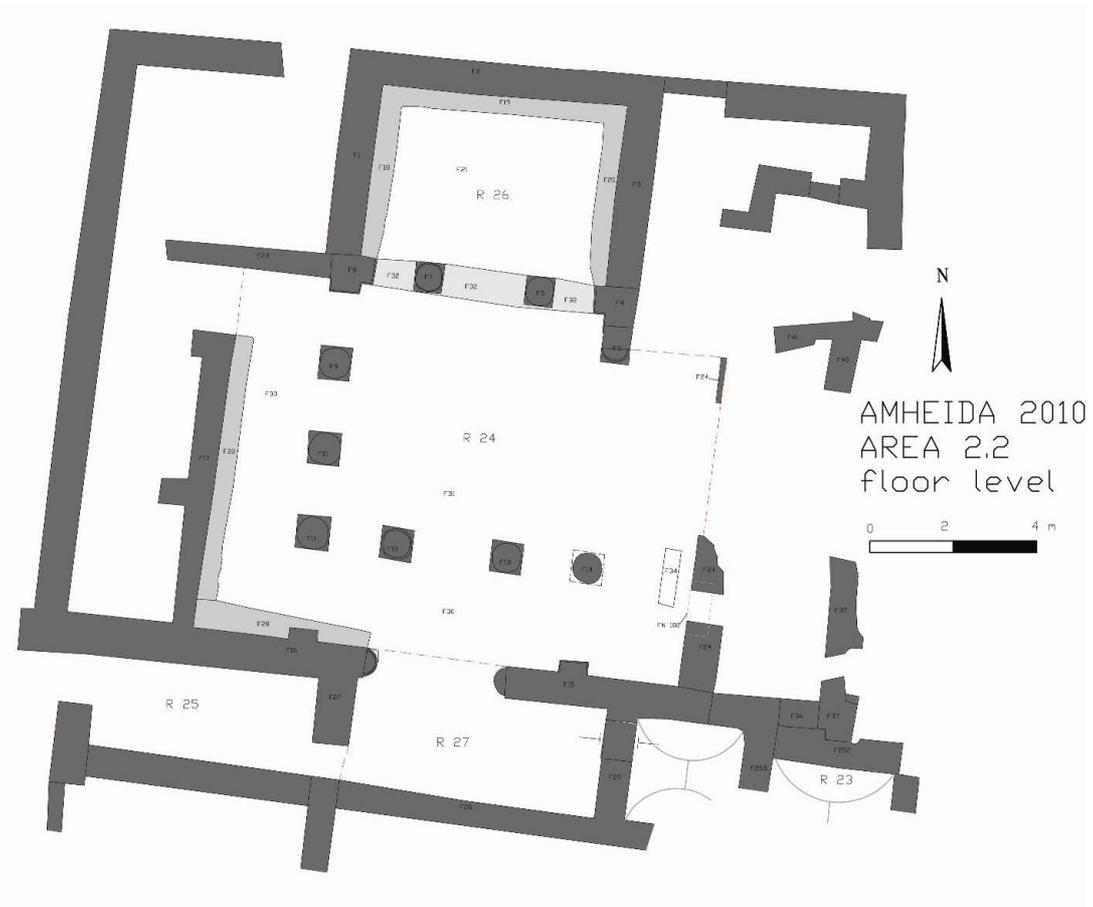


Fig. 5. Area 2.2, Building 6.



Fig. 6. View of Street 2.



Fig. 7. Sigma feature.



Fig. 8. Stratigraphy in Street 2.

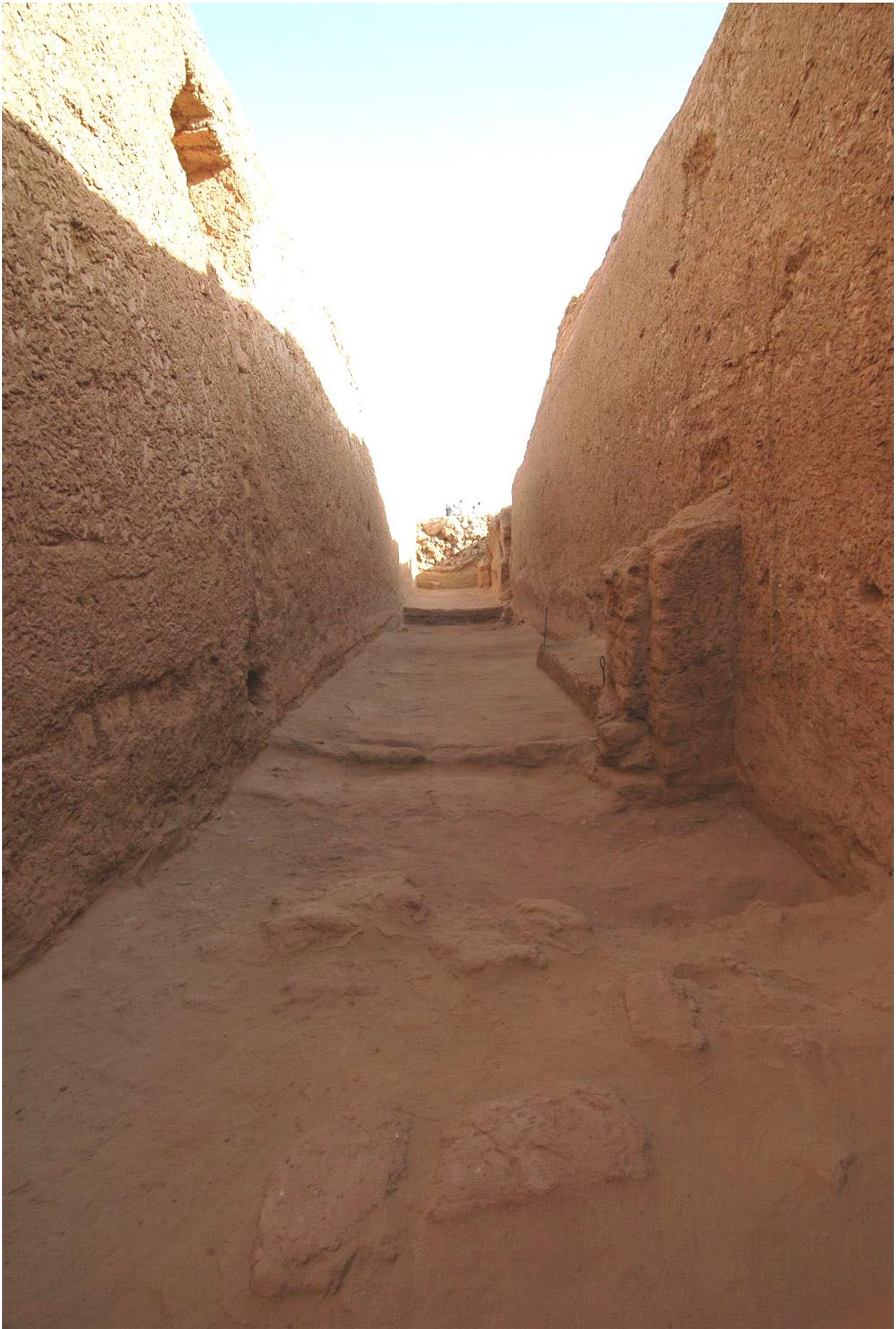


Fig. 9. View of Street 3 (looking north).



Fig. 10. Vaulted ceiling at the south end of Street 3.



Fig. 11. Gold ring found in Street 3.



Fig. 12. Aerial view of Building 6.

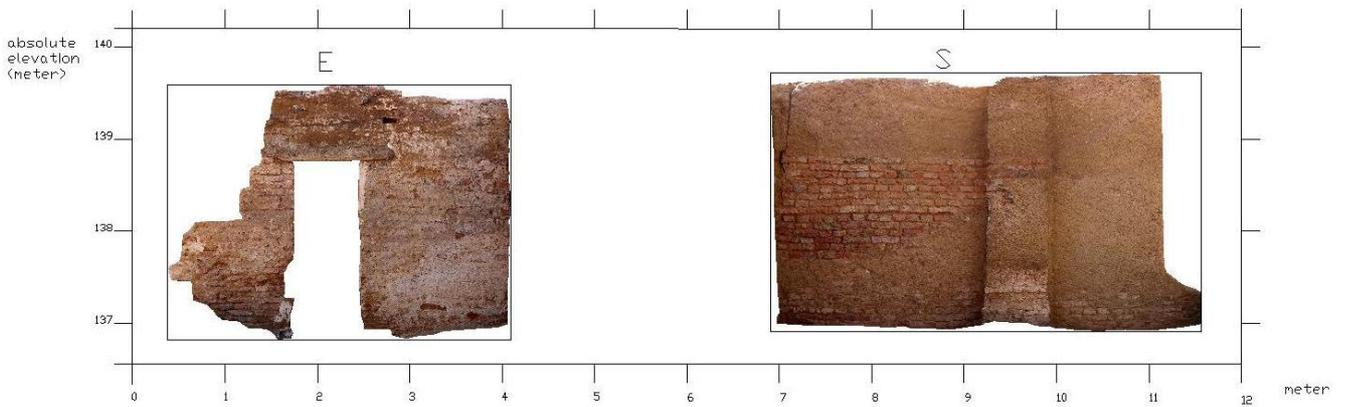


Fig. 13. Photogrammetry of walls F24 and F15.



Fig. 14. Impression on sand of a wooden decorated panel.



Fig. 15. Green room in the villa reconstruction.