



## PRELIMINARY REPORT ON THE SEVENTEENTH EXCAVATION SEASON OF THE ARCHAEOLOGICAL EXPEDITION TO WAD BEN NAGA

Pavel Onderka – Vlastimil Vrtal – Gabriela Jungová<sup>1</sup>

**ABSTRACT:** The seventeenth excavation season of the Archaeological Expedition to Wad Ben Naga focused on the continued exploration of the so-called Isis Temple (WBN 300), the Palace of Queen Amanishakheto (WBN 100), and cemetery WBN C260.

**KEY WORDS:** Meroitic archaeology – Sudanese archaeology – Wad Ben Naga

### Introduction

The seventeenth excavation season of the Archaeological Expedition to Wad Ben Naga took place between 2 November and 10 December 2018. The archaeological and conservation works were launched on 5 November 2018 and concluded on 5 December 2018. The season was carried out under the guidelines of “archaeological excavations” as defined by the Antiquities Protection Act of 1999.

The expedition was headed by Pavel Onderka (director), Vlastimil Vrtal (chief archaeologist), and Juweriya Osman (inspector of the National Corporation for Antiquities and Museums). It further consisted of (in alphabetical order) Alexander Gatzsche (conservator), Jiří Honzl (ceramicist), Gabriela Jungová (anthropologist), and Irene Pamer (conservator).

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<sup>1</sup> Contact: Pavel Onderka & Vlastimil Vrtal & Gabriela Jungová, National Museum – Náprstek Museum of Asian, African and American Cultures, Ancient Near East and Africa Collection, Prague, Czech Republic; e-mail: pavel\_onderka@nm.cz, vlastimil\_vrtal@nm.cz, gabriela\_jungova@nm.cz. The article was written within the framework of the project “The Building Program of King Natakamani and Queen Amanitore” supported by the Czech Science Foundation (grant no. 18-00454S). The Archaeological Expedition to Wad Ben Naga wishes to express its sincerest thanks and gratitude to the National Corporation for Antiquities and Museums, namely to Dr. Abdel-Rahman Ali Mohamed, Juweriya Osman Mohamed Zain and Iglal Malik, and Dr. Nasreldin Shulgami, the Honorary Consul-General of the Slovak Republic in the Sudan.

The works of the season focused on [1] the exploration of the Amun temple (or the so-called Isis Temple; WBN 300), including structures located west of the previously excavated Kiosk WBN 390; [2] continued excavations of the Palace of Queen Amanishakheto (WBN 100); [3] the continued exploration of cemetery WBN C260 and conservation works.

### [1] Exploration of the so-called Isis Temple (WBN 300)

The Amun Temple (WBN 300), formerly known as the so-called Isis Temple at Wad Ben Naga, is at the moment the least explored monumental structure at Wad Ben Naga, while its precise location has been currently estimated only based on circumstantial evidence.

In 1844, a part of the structure was explored by the Royal Prussian Expedition led by Karl Richard Lepsius (1810–1884). During their works at kom C, members of the expedition discovered remains of a monumental structure, which they identified as a temple and made a number of finds, out of which three were published in the *Denkmäler aus Aegypten und Aethiopien* (cf. Priese 1984a: 11). A major part of the documentation gathered by Lepsius' team was published in two studies only in 1984 by Karl-Heinz Priese (Priese 1984a; Priese 1984b). The material *inter alia* included a sketch of the part of the temple which was unearthed during their exploratory works (Priese 1984a: 16, Abb. 3). Based on the inscriptions from two bark stands discovered in the temple, an abacus, and another inscription, the construction of the temple was ascribed to King Natakamani and Queen Amanitore (Priese 1984a: 17, Abb. 4a, 4b; Priese 1984b: 348–349, Abb. 1, 2).

Jean Vercoutter in his preliminary report on the Sudanese excavations at Wad Ben Naga identified the structure as a temple dedicated to Isis (Vercoutter 1962: 270). This interpretation, which relied on the epigraphic evidence discovered by the Lepsius expedition, namely the inscriptions from the so-called Altar A, has been challenged in the past.

The so-called Isis Temple is traditionally and correctly associated with the kom C. However, the geophysical survey carried at the site during the fifteenth excavation season indicated that the kom C covered more than a single structure (Ullrich *et al.* 2018). The estimation concerning the location of the temple heavily relies on the distribution of tumuli belonging to cemetery WBN C300, located on top of the kom. The absence of tumuli at the northern end of the kom is the first main indication of the so-called Isis Temple's location, while the discovery of Kiosk WBN 390 may be another indication.

The so-called Isis Temple Complex began to be explored in the course of the sixteenth excavation season (Onderka *et al.* 2019: 136–139). The works of the season focused on the frontal parts of the complex, namely on the above-mentioned kiosk WBN 390 located in front of the assumed location of the proper temple, using the data provided by the geophysical survey carried out in Central Wad Ben Naga in the course of the fifteenth excavation season (Ullrich *et al.* 2018).

In the course of the seventeenth season, two squares, namely T61 and T64A<sup>2</sup> located on the northern end of the kom C, were excavated [Fig. 1]. The other two squares, namely T62 and T67, were set to the west of Kiosk WBN 390. No direct or indirect

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<sup>2</sup> The square would be expanded during the eighteenth excavation season.

connection between the temple complexes and the structures discovered in the two squares was ascertained.

#### *Trench 61*

T61 (4.0 m × 10.0 m) was located on the northwest slope of kom C, close to the unpaved road intersecting the site. The square was cleaned up to the level of an assumed ground floor. Several postholes were inserted in the ground floor. No structural features were discovered in the course of excavations. The area of the square seems to represent either the immediate exterior of the temple or less likely the interior of a large room.

#### *Trench T64A*

T64A (5.0 m × 10.0 m) was located on the northern slope of kom C, in the area where geophysical survey indicated existence of a substantial brick structure [Fig. 2; Pl. 1]. The excavations revealed a complex archaeological situation dominated by a massive brick structure (FEA 212; north-south dimension ca. 3.6 m; the west-east dimension may not be determined, as the structure exceeds the borders of the square; however, it is certainly more than 4.5 m long).

The brick structure (FEA 212) was constructed in vertical layers. The core was built of fired and un-fired bricks laid on the long narrow sides. Massive walls with an inner fired brick casing surrounded the core. The northern wall also possessed fired brick casing, covered with a relief-modelled layer of plaster (however, only a single fragment of the modelled casing was preserved still *in situ* on the wall, a fact which actually prevented us from any estimation of the depicted topic). Numerous fragments of the (relief-modelled) lime plaster were discovered to the north of the brick structure. The fragments bore polychrome decoration in red, yellow, blue, black, and white. The eastern and southern walls of the structure were covered by mud plaster and slightly painted, as attested by some fragments of preserved polychrome decoration.

The northwest corner of the structure was expanded into a door jamb built of fired bricks with plaster casing. The doorway (which continues behind the borders of the trench) was paved with a sandstone block.

Numerous special-shaped bricks which once formed a cavetto cornice were discovered to the north and south of the structure. They either adorned the top of the structure itself or originated from the architrave of the door. Two blocks forming one corner of the cavetto cornice were discovered in the northwest corner of the square. In the southwest corner of the trench, four collapsed large sandstone rectangular blocks (FEA 211) which once likely formed jambs of a doorway or a pillar were discovered. In the southeast corner fragments of sandstone column drums bearing relief decoration were found. The biggest preserved fragment bears a depiction of an offering king [Pl. 2].

#### *Interpretation*

Based on the sketch from the Lepsius Expedition and parallels in the then known Amun temples of Natakamani and Amanitore, and above all the Amun Temple at Naga, Priese carried out an attempt to reconstruct the ground plan of the Amun temple at Wad Ben Naga (cf. above). However, the archaeological situation recorded in T64A does not correspond to the suggested reconstruction.

## [2] Exploration of the Palace of Amanishakheto

In the area of the Palace of Queen Amanishakheto (WBN 100), the works focused on the exterior of the building. The exterior ramp to the east of the building was explored and its limits were established (trench T63). Another trench was opened by the southern part of the eastern exterior wall (trench T65), parallel to trench T55 excavated in the autumn season of 2017 (Onderka *et al.* 2018: 141ff), in order to compare the archaeological situation in both trenches. A third trench was opened in the area of the southwestern corner of the palace and a stone and fired brick wall (WBN 172 = WBN<sup>H</sup> 56; cf. Hinkel – Sievertsen 2002: pl. IX.72; Onderka 2016: 131) commencing from it (trench T66). In the continuation of the works of the preceding seasons, the southern part of the eastern exterior wall was documented and conserved with lime capping and rain water outlets. Similar measures were carried out on the excavated part of the exterior ramp.

### *Trench T63*

Trench T63 was set in the area of the eastern exterior ramp (WBN 161–162), with dimensions of 22.0×3.0 m and covering the southern half of the ramp [Fig. 3; Pl. 3]. The trench was twice extended, once to the north (2.2×5.5 m), in order to record the limits of the northern wing of the ramp, and once to the west (1.2×1.0 m), in order to record the western limit of the ramp in room WBN 161. The ramp was previously excavated; the aim of the present excavations was to record the extent of the architectural remains of the ramp and the character of the entry area.

The remains of the ramp (FEAs 220 and 222) were covered with a loose sand (FEA 101) in the most of the trench. To the south, unexcavated debris from the ramp (?) was recorded (FEAs 204 and 206) consisting predominantly of fired brick fragments, some of them plastered. One brick fragment was coated with a plaster with a carinated edge, possibly from the top of a banister; an ascent of 14 ° could be roughly estimated from the orientation of the brick.<sup>3</sup> An iron pin with flattened end (SM18/151) was uncovered under the debris.

The ramp was built directly on levelled bedrock. Levelled bedrock also covered the surrounding space, except for the western part of the trench, in which the bedrock was superimposed by an artificial floor made of mud, pebbles, white stones and mortar (FEA 202). The foundations of the ramp were formed by fired bricks laid on their long sides, both vertically and inclined. The casing consisted of fired bricks coated with lime plaster. On the inside, sandy mudbricks were used. A maximum of six courses of brickwork were preserved. The eastern limit of the southern wing of the ramp was located 18.0 m from the exterior wall of the palace. The limit of the northern wing was excavated at the distance of 20.8 m from the same wall. Despite the bad state of preservation, the difference between the lengths of the two wings of the ramp may have been deliberate, as their terminations were similarly formed by a short section of brickwork with bricks laid on their broad sides. This disposition may point to an asymmetrical entrance to the exterior ramp, either from the south, or from both the south and the east.

The space directly to the east of the ramp was further marked by a notable layer of sandstone split and chips (FEA 221; both violet and whitish sandstone were included). Several fragments of plastered sandstone blocks were retrieved from the area; it was

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<sup>3</sup> Given the length of the ramp, the ascent would situate its termination at the height of ca. 3.4 m.

nevertheless impossible to attribute them to any specific architectural or decorative elements. Thus, it can be only suggested that the material was used relatively extensively in the ramp entry, either for architectural elements or statuary, or both.

#### *Trench T65*

Trench T65 was set to the east of the southern section of the eastern exterior wall of the palace, axially parallel to trench T55 excavated during the fifteenth season (cf. Onderka *et al.* 2018: 141ff). The dimensions of the trench were 12.7×1.5 m. The aim of the excavation in this area was to test for the presence of destruction debris from the eastern exterior wall, and consequently to establish the height of the building in the area and to validate the anticipated presence of a recess in the exterior wall.

Only little fired brick debris (FEA 223) was recorded in the trench. The debris was mixed with a layer of loose sand (FEA 101). The layer was overlying a floor made of white stones, pebbles and mud (FEA 207), which was disturbed by a bedrock outcrop, as well as by a shallow pit, ca 1.9 m wide and transecting the trench. Notably, a levelled layer of pure mud (FEA 208) was situated at the bottom of the pit. The pit itself was filled with sand, pebbles and sandstone chips (FEA 224); the latter originated from the pit's perimeter. Paint-stained pottery and mother-of-pearl shell (SM18/279), clearly used as a palette, were retrieved from the fill. The purpose of the pit is unclear, though the related small finds might indicate its relation to building activity.

A fragment of a complex sandstone architectural element (S940) with lime coating, possibly a column capital, was found on the surface in the close vicinity of the trench and documented.

#### *Trench T66*

Trench T66 [Fig. 4; Pl. 4] was set in the area of the southwestern corner of the palace. The trench consisted of two parts; the eastern part had dimensions of 3.0×9.0 m and covered the area immediately to the west of the exterior wall of the palace and a section of wall WBN 172; the western part had dimensions of 14.0×3.0 metres and covered the open space further to the west. An extension was later added in the south (1.0×2.0 m) in order to document the thickness of wall WBN 172 and locate the position of the corner of the palace.

The aim of excavations in the given area was to establish the stratigraphic relation of wall WBN 172 and the palace, to test for the presence of destruction debris from the exterior wall of the palace (similarly to trenches T55 and T65), and to examine a linear feature, detected by a geophysical survey and parallel to the palace's exterior wall in the distance of ca. 15.0 m (cf. Ullrich *et al.* 2018: 128, pl. 6). The trench was excavated with the help of the stratigraphic method (if applicable) or mechanical layers of 0.2/0.05 m, leaving reference baulks for reviewing the stratigraphy.

The trench was dominated by the western exterior wall of the palace (FEA 227) and wall WBN 172 (FEA 226) commencing from it towards the so-called Isis Temple Complex (WBN 300). The exterior wall was built of fired bricks for casing and mudbricks for the core. The foundations on the western face consisted of bricks laid on their long sides, mostly vertically and resting directly on bedrock, although bricks laid on their broad sides were used as well. Unlike on the southern and eastern side, no protruding foundation platform was employed. In the southwestern corner, a brick laid on its broad side was used in the foundations.

Wall WBN 172 was built of large coarse-grained granite stones of local origin and fired bricks. The latter material was used in the upper section of the northern face, and

judging from random occurrence of plaster on the bricks, it was recycled from an older structure. The wall was ca. 1.2 m thick in its upper part. The presence of plaster coating on the face of the exterior wall of the palace covered by wall WBN 172 indicated that the latter wall was built later than the palace. This conclusion was further supported by a circular pit partly underlying wall WBN 172, in which a cavetto cornice brick was found, clearly originating from the palace. Similar to wall WBN 171 (cf. Onderka *et al.* 2015: 98), wall WBN 172 was thus likely built only at the time of the gradual disintegration of the palace. The finding of the brick as well as numerous detached decorated plasters in the wider area also indicated the presence of a cavetto cornice at the crown of the exterior wall in the SW-corner.

The space immediately to the west of the exterior wall was marked by extensive evidence of economic activity. Post-excavation debris of loose sand, mud and fired brick fragments (FEA 210) covered a compact layer of muddy soil (FEA 212), representing trampled floor deposits from a long-term occupation, which were directly overlying the bedrock. A number of vessel emplacements filled with ash and charcoal, and ash conglomerations uncovered in the area indicated the preparation of foodstuffs, and so did numerous finds of quernstone and pounders (SM18/226–230, 243–4, 251–2, 256–9, 261, 265, and 268) [cf. Fig. 4, red and green]. Among other finds retrieved from the strata that hinted at the character of occupation, there were faience and bone beads (SM18/199, 234), faience vessel (SM18/225), clay lump (SM18/262), weight (SM18/264) and iron nail (SM18/267). The occupation can be dated only preliminarily to a rather late date: some of the ovens clearly respected wall WBN 172 and traces of fire from oven FEA 215 could be detected directly on the wall.

The area further west was covered by a levelled floor of mud, white stones and pebbles (FEA 225), directly overlying the bedrock. By the northern limit of the trench, the floor was cut by a deep pit (FEA 233), lined with stones and filled with several consecutive layers of refuse material (FEA 228), mainly ash, potsherds, animal bones and quernstone fragments (SM18/280–1). The material from the floor and bedrock excavated during the digging of the pit (FEA 211) was scattered around and cut by several shallow circular pits (FEAs 219, 229, and 230) [cf. Fig. 4, yellow], disturbing also the floor. The circular pits were filled with sand and covered by notable heaps of fired brick fragments; a piece of textile was further found in one of them. The purpose of these circular installations is unclear; similar features were nevertheless uncovered also in trenches T20, T35 and T55 previously (cf. Onderka *et al.* 2015: 98, fig. 4; Onderka *et al.* 2017: 118).

#### *Exterior wall WBN 139/141/142*

A section of the eastern and southern exterior wall of the palace was cleaned from post-excavation debris and documented, spanning the area between the south-east corner and the entrance to room WBN 142. The wall was constructed from silty (lower section) and sandy (upper section) mudbricks for the core and fired bricks for the casing. The wall stood on a protruding foundation platform formed by bricks laid on their long (1 course) and broad sides (2 courses). In the southeast corner, the foundations were formed by a fired brick laid on its broad side; similarly to the situation in the southwest.

Near the entrance to room WBN 142, remains of a double torus moulding were uncovered *in situ* (cf. Hinkel – Sievertsen 2002: Pl. IX.75, “Detail D”; Onderka *et al.* 2018:



141) [Pl. 5]. Traces of polychrome decoration in red and yellow were noted on lime plaster coating, which allowed tentative reconstruction of the original decoration of the architectural element.

The top of the wall was consolidated and covered with a transition layer and lime capping, while water outlets were installed to facilitate draining of rainwater.

#### *Spoil heap*

A spoil heap to the south of the Palace of Amanishakheto, originating in the 1959/1960 excavations of the structure, was used as a source of material for filling trench T67 following its excavation. A significant, statistically relevant sample of pottery finds was retrieved from the spoil heap. Besides pottery, a number of other artefacts were also retrieved from the spoil heap, namely clay marble (SM18/253), glass “eye”-bead (SM18/254), granite celt (SM18/255), clay lumps with traces of a sharp tool (SM18/263) and tubular faience bead (SM18/266).

#### *Conclusion*

The excavations in the exterior of the Palace of Amanishakheto failed in detecting the remains of destruction debris from the exterior wall analogous to the one excavated in trench T55. Nevertheless, the uncovered remains allowed the identification of several features pertaining to the architecture of the structure, such as a possible asymmetrical entrance to the exterior ramp, the decoration of a double torus moulding in the eastern exterior wall, and the presence of a cavetto cornice in the area of the SW-corner of the building. The chronological position of wall WBN 172 in relation to the palace was established, confirming previous conclusions concerning its twin wall WBN 171. Evidence of economic activity in the open space surrounding the structure was recorded, potentially reflecting a modification of the purpose and use of the area in the structure’s later history.

### **[3] Continued exploration of the cemetery WBN C260**

Cemetery WBN C260 began to be explored in the course of the sixteenth excavation season. In the course of the excavations it became apparent that the cemetery exceeded the limits of trench T56 (Onderka *et al.* 2019: 139).

T67 (5.0 m × 4.0 m) was set between the trench with Kiosk 390 and T62. Its main objective was to proceed with the exploration of cemetery WBN C260. Further two graves were discovered in the trench, including the burial of a pregnant woman (with foetus; WBN C269). Within the framework of the season, the anthropological examination proceeded with human remains retrieved from the cemetery.

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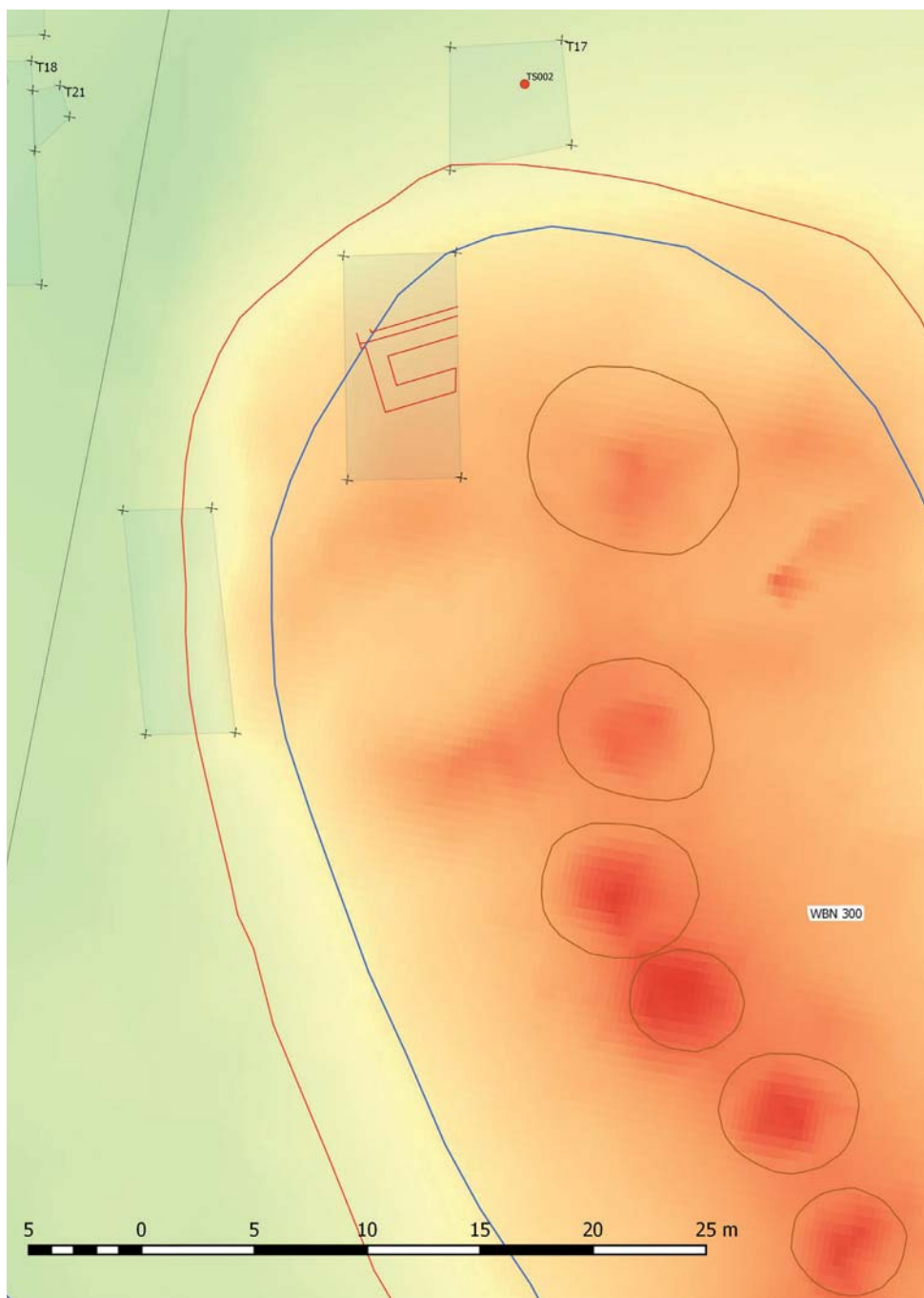


Fig. 1 Northern end of kom C with with the designation of the excavated area (Illustration: Vlastimil Vrtal).

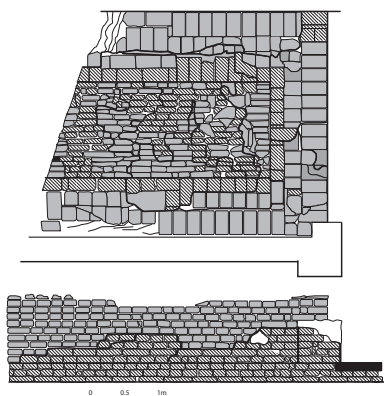


Fig. 2 Brick structure FEA 212  
(Illustration: Pavel Onderka).



Pl. 1 Brick structure FEA 212 (Photo: Pavel Onderka).



Pl. 2 Fragment of a column drum with the depiction of a king performing an offering  
(Photo: Pavel Onderka).

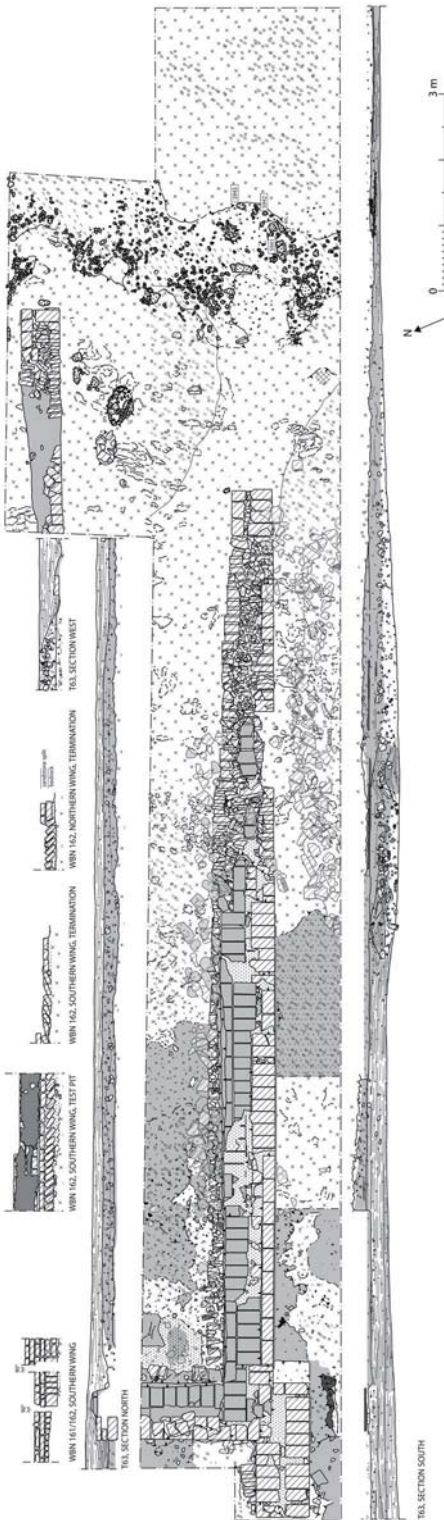


Fig. 3 Trench T63, top plan and sections, at the end of excavations (full ink), overlying strata are shown in light ink (Drawing: Vlastimil Vrtal).



Pl. 3 Trench T63 at the end of excavations, viewed from the east (Photo: Vlastimil Vrtal).

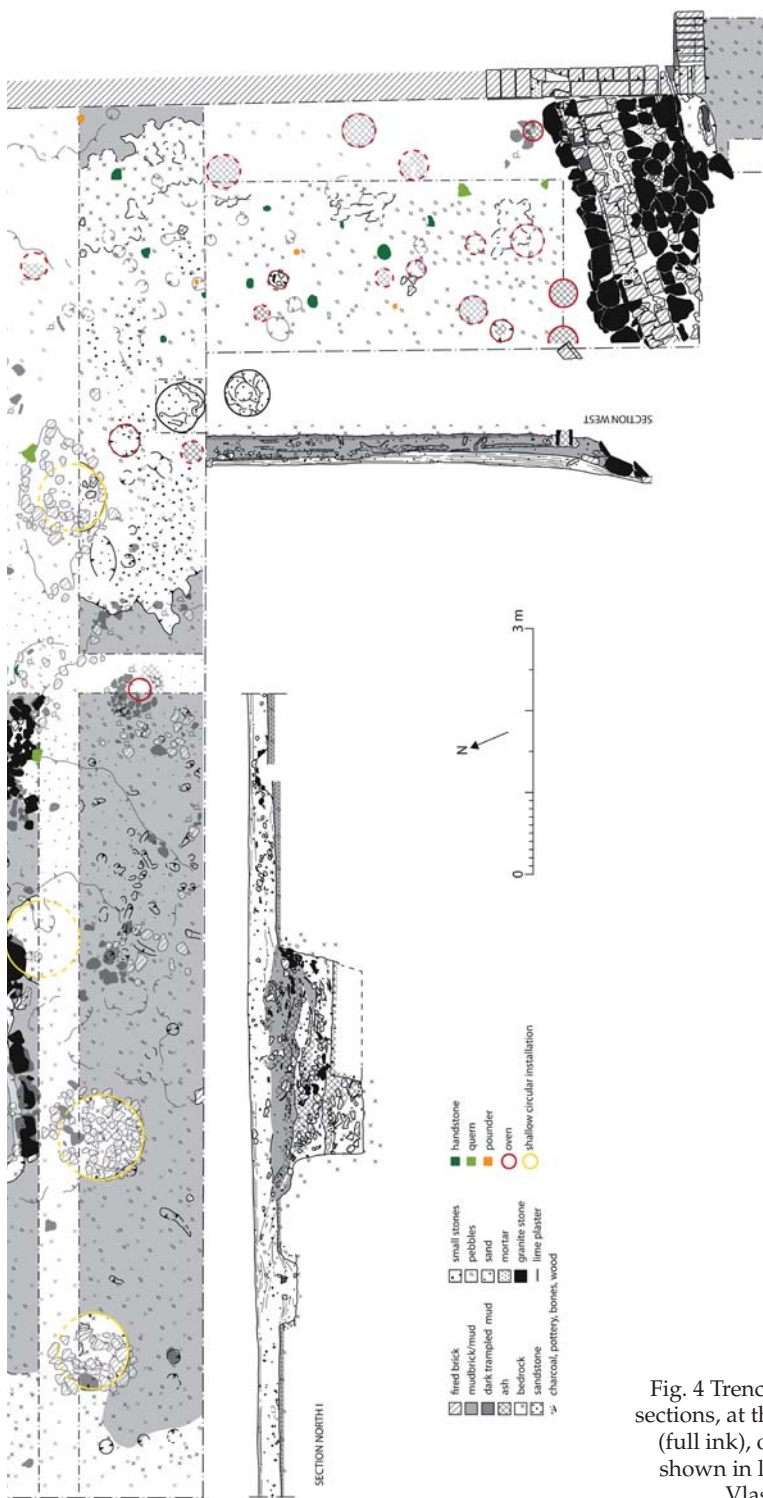


Fig. 4 Trench T66, top plan and sections, at the end of excavations (full ink), overlying strata are shown in light ink (Drawing: Vlastimil Vrtal).





Pl. 5 The southern double torus moulding preserved *in situ* in the eastern exterior wall of the Palace of Amanishakheto (Photo: Vlastimil Vrtal).



Pl. 4 Trench T66 at the end of excavations, viewed from the east (Photo: Vlastimil Vrtal).