



The Timurid Gateway – Excavations in Trench 3

nota bene: In the following, the excavation results and the architectural features will be introduced summarily, while the individual rooms and architectural details are presented in the accompanying schematised 'Room book'.

Archaeological Context

The so-called Tower XVIII is located at the transitional area between the 'upper' citadel in the east and the structures in the west that are mainly built at a much lower position. At this point the outer wall of the citadel, which runs straight from east to west, bends slightly to the northwest (Figs. 306; 311) and, after further changes in direction, leads to the Timurid Tower at its western end (Fig. 306).

As the citadel slope is comparatively steep in this area and in the recent past already large amounts of debris have been removed (Figs. 307; 309), the place offered a good possibility to examine deeper layers of the citadel mound and thus to gain information especially about older periods of the city of Herat. Furthermore, this part of the structure provided the opportunity to investigate a series of ruins protruding from the surface of the slope debris (Fig. 310), which were neither documented nor addressed with even vague interpretations.

Although a part of this architecture was excavated from April to September 1978 by a Unesco team (Trench H), there is only brief mention of these excavations with merely one photograph (Fig. 308).¹ In 1978, apart from a round tower made of fired bricks and large stones, a small 'guard room' was unearthed here (Fig. 308), on the floor of which – according to the photograph – a big stone sphere lay upon the ground, and to its south another room, a 'square domed' room.² The structure was

¹ van Eenhooge 1981, 22.

² van Eenhooge 1981, 22.

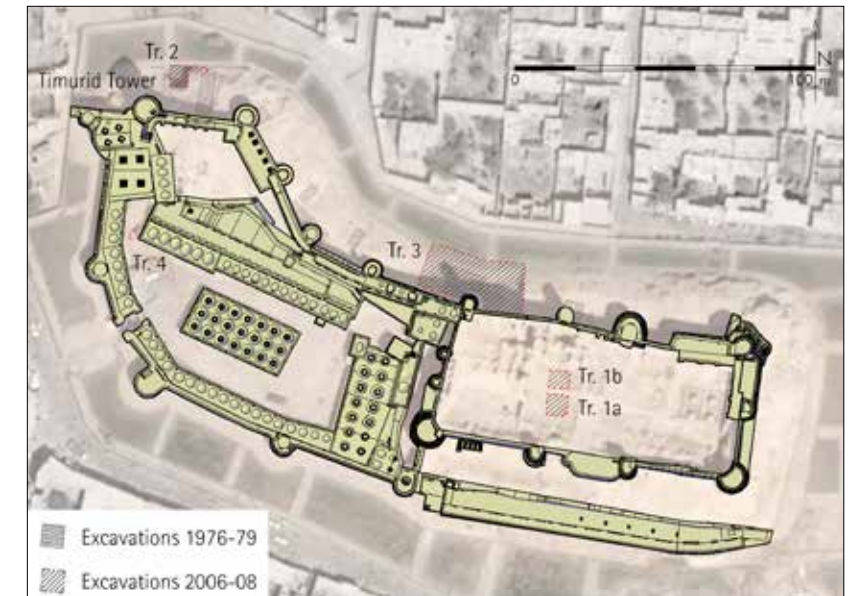


Fig. 306 Schematic plan of the citadel wall, location of excavation trenches

interpreted by the excavator Dirk van Eenhooge as a 'bent entrance' access to the upper citadel, because the walls are located directly north of the aforementioned tower and direct access to the north must thus have been obstructed. He reconstructed the access from the east ('outer gate to the east') into a vaulted entrance building ('inner gate to the south'), leading southwards into the citadel.³ Of particular interest for the history of the citadel is the area below Tower XVIII in view of a coin (dated 887/1482) and fragments of a building inscription 'in white characters on a dark blue background', found there in the surrounding (?) debris.⁴

In the following years additional earth must have been removed in the area around the Unesco trench of 1978 and farther to the east over a total area of 34 m (East–West) x 15 m (North–South); parts of some wall remains must have been unearthed as well, but no information about the precise date, results and documentation of that work is available from the responsible authorities in Herat. According to van Eenhooge⁵, the area unearthed by the Unesco comprises 190 m². However, the total area between the two still perceptible sections in the east and west amounts to significantly more than 400 m².

³ van Eenhooge 1981, 22. The assumption that the citadel was accessed via a bent passage way – in ground plan – (as claimed by van Eenhooge), could be verified by the excavations, but the orientation and the actual number of rooms suggested by van Eenhooge were clarified and completed, see also pp. 373–374.

⁴ van Eenhooge 1981, 22 Fig. 59; see Trench 3, Small Finds and Pottery, pp. 480–482.

⁵ van Eenhooge 1981, 14.



Fig. 307 Surroundings of Trench 3 before beginning of the excavation in 2007



Fig. 309 Northern slope of the Citadel mound prior the Unesco restorations of 1976-1979 (Bruno 1976, 16)

This entire area was extensively investigated archaeologically in 2007 and 2008 (Trench 3): The main result of the archaeological work is constituted by the excavation, documentation and partial reconstruction of a large Timurid gate complex. It comprises several central and side rooms, one central and three side entrances as well as two watchtowers, which were originally extensively decorated with coloured glazed bricks. Moreover, there are archaeological remains of a bridge adjoining to the north across a moat. The entire complex encloses several clearly distinguishable phases of change and construction, extending over a period of 500 years from the beginning of the 15th century until recent times.

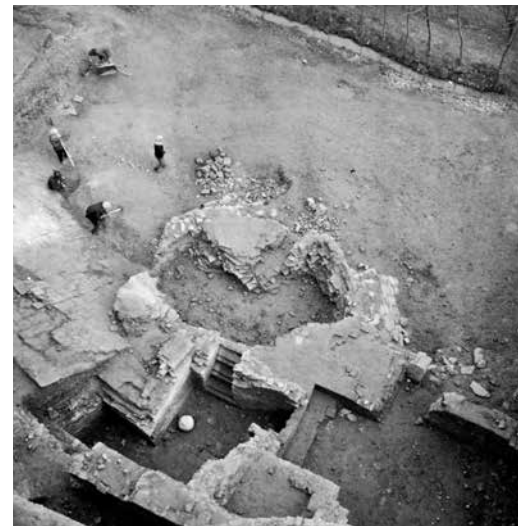


Fig. 308 Unesco excavation 1978, Trench H (van Eenhooge 1981, 90 Fig. 58)

Before the Excavations of 2007 and 2008

At the beginning of the present investigations a number of building structures were well recognisable on the northern slope of the citadel hill near Tower XVIII (Figs. 307; 310): Directly below the tower there is an approx. 2.60 m wide gate with a pointed arch, the opening of which is blocked from the inside with carefully placed, alternating layers of fired bricks set at a slant and large flat stones (Figs. 310; 339; 340). As far as could be discerned only square bricks were employed for this purpose. Two rectangular brick blocks (c. 3.30 x 1.90 m) flanking the gate complex could be identified which were structurally connected northwards with the gate (no joint). They showed remains of architectural elements that can equally be assigned to the gate itself, such as i.e. the base of a vault made from vertically aligned bricks (Figs. 432; 447).

Deposited upon the gate are sloping layers of debris, clay and fired bricks (fragments), and thereupon a huge cylinder built of fired bricks; it has a diameter of approx. 8.80 m, with a maximum height of approx. 2.50 m, and forms the basis of citadel Tower XVIII. The layers of debris between the tower cylinder and underlying architectural remains are a clear indication that the base of the tower was built at a much later date. Directly upon this base rises the presently 17.50 m high Tower XVIII, which with a diameter of approx. 5.30 m is significantly narrower than

the base drum. To the west and east of the gate complex were still remains of the stone and brick glacis known already from Trench 2.⁶

East of the pointed-arch gate, various brick walls could be localised on the slope (Fig. 310), which presumably had not been unearthed prior by the Unesco excavations, for they are not mentioned in the preliminary reports.⁷ Here also smaller restorative measures must have been carried out by the Unesco, which, however, are not immediately apparent as such: one part of the brick wall directly below the broad tower cylinder at the foot of Tower XVIII must have already been reconstructed at that time, because it stands upon a layer of debris, in which remains of plastic foil can be discerned – for the presence of which only Unesco activities in the late 1970s are likely to be responsible.

By contrast, in 2007 practically nothing could be seen of the features from the Unesco excavation in 'Trench H' (Fig. 308) any more. Only the lateral boundaries of the excavated area, the 4 m high, *in situ* section in the east of the area as well as a significantly flatter section in the west were still discernible (Figs. 307, 311; 382; 383); thereby, these profiles were not changed or enlarged in the following years.

Objectives of the Excavation

In addition to the original aims of the excavations in 2007 and 2008: the investigation of the deeper layers of the Herat citadel mound, the opportunity presented itself to answer questions that were still open, and to re-examine as well as to expand the interpretation of the architectural features of 1978. During the Unesco excavations, van Eenhooge had unearthed parts of a tower built of fired bricks and areas of the same stone glacis in 1978, which he had encountered also in other sections at the northern slope of the complex.⁸ His comments on the chronological relations of glacis, the gate complex and the citadel did not, even in his time, meet current

6 Cf. pp 322–325 (Trench 2).

7 Bruno 1976; van Eenhooge 1981.

8 Cf. pp. 322–325. In the course of the Unesco excavations the glacis had been partially unearthed in various places in the northwest of the citadel (Trenches A, B, E–K [van Eenhooge 1981, 20]).



Fig. 310 Trench 3 before beginning of the excavation 2008, visible structures on the surface of the slope, i. e. a blocked pointed-arch gate and base drum of Tower XVIII; from north

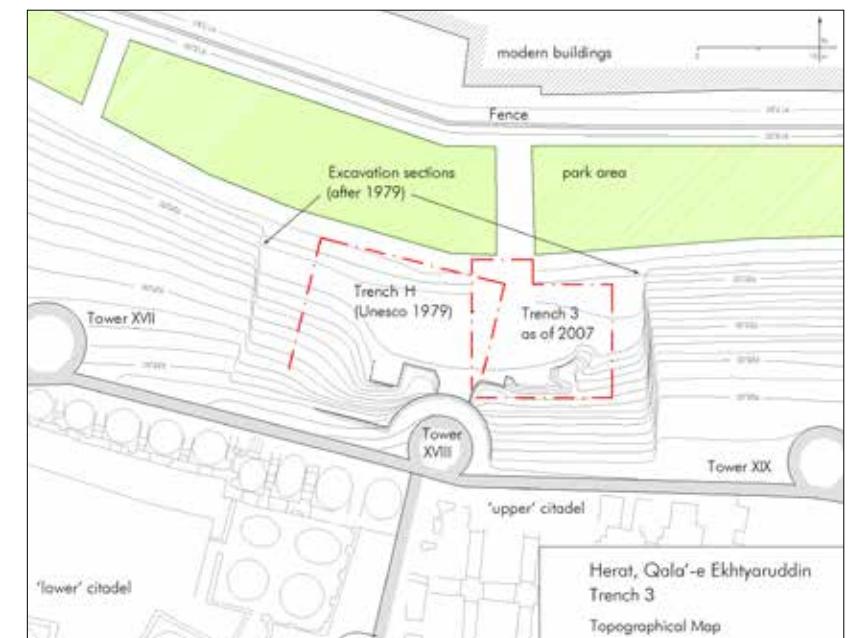


Fig. 311 Trench 3, Topographic map: location of excavation areas (cp. Fig. 306)

archaeological standards⁹ and should now be questioned more thoroughly. In detail, the problematic aspects to be addressed are as follows:

- determination of the chronological relation of the glacis to the other building structures above and upon the slope of the citadel, especially the gate complex (both architectural features are mentioned but not comprehensively investigated);

9 Thus, the synchrony of tower and glacis, which is based on the statement 'the stone glacis ends directly against the western side of the complex' (van Eenhooge 1981, 22), was not proven by a superficial exposure of the structures. Vertical trial trenches had already revealed evidently in 1976/77 that the glacis must have been constructed at a significantly later date than the gate complex.



Fig. 312a Trench 3 (2007), excavation area at the start of the 2007 campaign



Fig. 312b Trench 3 (2007), excavation area at the end of the 2007 campaign

- examination of the interrelationship of architecture on the slope, that is, the relation of the walls that were already visible before the excavation, the lower cylinder of Tower XVIII, and the unearthed tower with its adjacent rooms in the north of the investigated area as well as further recognisable, yet at that time still unidentified architectural structures;
- exposure of more extensive areas of the (expected) stone glacis in order to gain a better impression of the building situation in an important architectural phase of the citadel (not to the east, as here up to 4 m high layers of debris and soil are deposited on the glacis and their exposure could, for conservational reasons, turn out to be counterproductive);

- documentation of the structures unearthed by van Eenhooge, as the documentation of this excavation was not accessible in Herat nor in Kabul and not even upon repeated request in Turin.

In the course of the investigations of 2007 and 2008 cracks were detected in Tower XVIII, which were most probably caused by the questionable position of the tower on sloping layers of debris, presumably also because of the reduction of the stability of the citadel slope as a result of the excavations of 1978 and the extensive removal of debris following thereafter. As a result the aims of the present excavation were considerably expanded (Fig. 311), or rather supplemented, by the survey documentation of the area, in which urgent construction measures were taken to stabilise the citadel slope.

With that the most important aim of the excavation became to investigate, document and secure the structures located there as thoroughly and accurately as possible, and in this way to achieve an as detailed a reconstruction of the architecture as possible.

This reconstruction not only primarily serves the purpose of restoring the former construction phases, but of consolidating an abandoned and weakened area, as well as preserving the citadel wall located above.

Execution of the Excavation

Trench 3 was begun on August 8th, 2007, as a 2 x 7 m extensive trial trench (Fig. 312a), directly northeast of the structures that were partially unearthed by the Unesco, but not documented at the 'planum' level (Figs. 308; 311).

The first excavation results comprised the uncovering of structures on the slope as far down as the level of the present-day plants around the citadel. In this process a homogeneous section was documented, whose uppermost layer consists of recent fill material (primarily plastic waste), and which is 10 to 40 cm in thickness, depending on the location.

Below that stratum - following the grade of the hillside section - layers of collapsed structures consisting of loose and compact clay with numerous brick and ceramic fragments were detected. These layers seem to correspond



Fig. 313 Trench 3 (2007), eastern tower with stone facing of the foundation; from north

to those above the architectural context as described by van Eenhooge, from which the fragment of a monumental inscription related to the construction of the citadel¹⁰ as well as the coin dated 1482 emerged at that time.

Extensive architectural contexts (Figs. 312-314) were soon found only 20 cm to 30 cm below the rubble layers, which, together with on the surface visible and then cleaned architectural remains, could be identified as another large tower. In the following this tower will be referred to as 'eastern tower', and to the already known 'Unesco tower' as the 'western tower'.

Due to the expanse of the architectural context, the excavation area was extended to the size of 11 x 11 m, so that the eastern tower could be unearthed in its total dimensions (Figs. 312b-314).



Fig. 314 Trench 3 (2007), eastern tower, in the deep-sounding: remains of a bridge abutment (on the bottom of the trench), in the foreground: Room 1 with sheroid limestone object; from north

¹⁰ van Eenhooge 1981, Fig. 59. - See Fig. 554 on p. 482.



Fig. 315 Trench 3 (2008), excavated architecture, general view from above; from south (assembled photo)



Fig. 316 Trench 3 (2008), excavated architecture, drawing of the general ground plan

The 2007-section of Trench 3 (Figs. 312a+b) was dug in altogether 10 levels including a deep trial sondage, reaching down to the absolute level of 914.35 m (Figs. 313; 314), that is, c. 3 m below the terrain surrounding the citadel. The finds that came to light were retrieved according to their stratigraphical position and documented. After three weeks the excavation work was finished on September 4th, 2007 and the unearthed architectural remains were three-dimensionally measured, photographed and drawn stone by stone.

Afterwards the area was refilled for safety reasons and the unearthed architectural features were wrapped in a water permeable foil (geotextile) and covered with earth.

In the following year a second campaign was planned to investigate a much larger area and, therefore, was carried out with a greater number of excavation workers.¹¹ Because upon completion of excavation the entire area would be permanently sealed by the construction of a larger supportive structure for the citadel wall, the entire surface of the gate complex had to be uncovered and documented – as far as possible. For this reason the excavation area was extended to the total width of the area from which – subsequent to the Unesco excavations – larger masses of debris/rubble had been removed, ultimately resulting in a total excavation surface of c. 35 x 20 m (700 m²) (Figs. 311; 315–317).

The excavation began on August 9th, 2008, and with duration of seven weeks took considerably longer than the first campaign. Already during the on-going excavation work urgent stabilising measures were begun. These became necessary in the first place because of the instable condition of structural context and layers of debris on the slope. This work continued in the form of temporary and permanent protective measures throughout the duration of excavation.¹²

11 An average of 20 workers with Khair Mohammad, Khairzade representative of the Archaeological Institute in Kabul, and, temporarily, Nik Mohammad as representative of the Department of Monuments and Sites, Herat.

12 See also 'The Timurid Gateway - Reconstruction and Conservation', pp. 621–623; 628–629.

Due to their location on the steep slope, the architectural features were uncovered from south to north, that is, downslope. The areas excavated in 2007 were to be reintegrated in the uncoveries of 2008. In order to protect them from rubble sliding downwards from the ongoing excavations they remained covered – which for the archaeological photo documentation implied rather unusual pictures – with wrapped ruins in the background. However, ultimately the consequence was a better state of preservation of the already known contexts at the end of the whole investigation.

It was decided not to uncover the deep trial trench of 2007 (north and between the two towers) once more, because at a comparatively great effort it did not promise new evidence. In contrast, to both sides (east and west) of the investigation area additional deep trenches were dug in order to document the lower border of the glacis.

Both large sections in the east and west were cleaned, documented and for safety reasons subsequently sloped and staggered, especially the eastern section that had been close to collapse. In the course of the reconstruction and consolidation measures that followed in 2009, the eastern profile was additionally reinforced and provided with a protective layer.¹³

All of the excavated earth was initially deposited near the excavation. After a general consensus had been reached about the necessity of a more extensive constructional measure as reinforcement for the citadel wall, at the request of the Department of Monuments and Sites, Herat, the excavated soil was removed from the site.

The Ground Plan of the Gate Complex

The gate complex displays a conical ground plan (Figs. 315; 316; 318; 319), with the northern outer wall as the base and the two lateral outer walls in the east and west as the flanks. Both northern corners are executed as two large towers. In the south, the complex abuts the citadel wall and Tower XVIII; a separate southern wall was not found in the archaeological context, but must have originally existed.¹⁴ With a thickness of up to 3 m, the lateral outer walls (Figs. 316; 318; 408–416) constitute the mightiest walls of the gate complex; presumably they were also the highest, with a preserved height of more than 7 m (Figs. 320; 409). They do not run parallel to each other, but deviate at an angle of c. 20° from the central axis, thus giving the ground plan of the gate complex a trapezoidal base.

As the alignment of the citadel wall in this area bends towards the north – both lateral walls are likely to originally have approached the outer wall of the citadel at almost right angles. Supposedly the reason for the unusual conical trapezoidal ground plan is precisely this bend in the orientation of the citadel wall (Figs. 318; 319).

The question concerning the extent to which the lateral outer walls of the gate complex were actually structurally connected with the citadel wall or its foundations cannot be answered; namely, no information is available about the foundation depth of the original Timurid citadel wall. That further walls must have existed in the south is most distinctly recognisable on the eastern

13 See also 'Conservation Measures and Reconstruction', pp. 648–650.

14 Cf. p. 425.