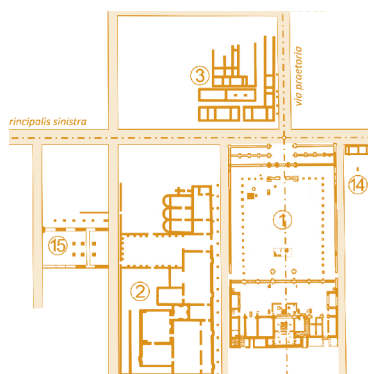


The defenses of the Roman legionary fortress at Novae (Lower Moesia) and coin finds from the “*Per lineam munitionum*” project: numismatic and archaeological interpretation



Abstract: This paper presents the results of archaeological work carried out between 2005–2016, within the framework of a post-excavation project, “*Per lineam munitionum*”, on the fortification system of the Roman legionary fortress and the late Roman and early Byzantine town of Novae. The research concentrated generally on completing and recording old trenches, as well as recording remains of the original building substance, stratigraphy and other archaeological remains using modern technologies and precise geodetic equipment. The archaeological data and stratigraphical observations were compared with the numismatic findings in an effort to improve the final interpretation and the reconstruction of the main construction phases.

Keywords: Roman fortifications, legionary fortress, numismatics, coins, Novae, Lower Moesia

Systematic and methodical archaeological research conducted at the site of a Roman legionary fortress in Novae began with an agreement on cooperation between the Bulgarian Academy of Science and the University of Warsaw, which led to the establishing of a Bulgarian–Polish Archaeological Expedition in 1960. The first excavation campaign took place that year (Majewski et al. 1962). The

Piotr Jaworski¹
Piotr Zakrzewski²

¹ University of Warsaw, Faculty of Archaeology

² University of Warsaw, Polish Centre of Mediterranean Archaeology

Acknowledgments

This work is dedicated to the late Professor Tadeusz Sarnowski, long-term director of the excavations in Novae—a brilliant researcher, patient teacher and mentor of several generations of archaeologists—who was also the one to suggest the topic for this paper.

fieldwork and research initiated then has continued for 60 years, leading to many important discoveries, that have turned the remains at the site of Novae into one of the better studied legionary camps in the Lower Danube region.

Structures and installations linked to the fortification system at Novae were at the core of the investigations from the start. Over the years, Bulgarian and Polish archaeologists have located and unearthed many components of the stone fortifications built by the First Italica Legion in the Trajanic period, including towers, sections of the defensive wall and remnants of four gates (Sarnowski 2016: 175 and Note 1; Zakrzewski 2017: 7–10) [Fig. 1]. Studies have progressed significantly, but due to obvious differences between past and present methodology, documentation systems and measuring equipment, many questions have been left unanswered. Most of them concerned the elusive remains of the timber-and-earth fortifications built by the *Legio VIII Augusta*, because the stone fortifications were practically superimposed on the older defense ditches, earthen ramparts and wooden towers. Remnants of the earliest fortification system were recorded and documented for the first time by Tadeusz Sarnowski in 1981 on the eastern side of the fortress, in the vicinity of Tower 6 [see Fig. 1]. Similar discoveries were successively made on the western side of the camp [see Fig. 1, Towers 22 and 23], by Kazimierz Lewartowski, Juliusz Ziomecki and Sarnowski (Sarnowski 1981; 1983a; 1983b; 1984; 1990; Lewartowski 1985). Further evidence of the timber-and-earth fortifications was revealed by P. Donevski on the eastern

side of the camp in the 1980s and the 1990s. The results of these excavations were never published and the set of available data is fragmentary.

This unsatisfactory state of research on the fortifications of the legionary fortress at Novae and the need for an improved understanding of their phasing, dating and functioning stood behind the “*Per lineam munitio*” project. Its main goal was to verify the results of earlier research by means of cleaning old trenches in order to prepare state-of-the-art archaeological documentation of the remains and extending them to trace ancient architecture and stratigraphic sequences undisturbed by the previous excavations. Interdisciplinary investigations benefitted from the application of modern methodology and implementation of new technologies and documentation techniques, aimed at enhancing the process of data acquisition and interpretation.

Archaeological excavations conducted between 2005 and 2016 were focused on two sides of the legionary fortress at Novae. On the northern side, the remains of Tower 27 and its immediate surroundings were investigated (1 in Fig. 1), as well as the eastern part of the North Gate (2) and the northeastern corner (3). In the east, the research covered the area of the East Gate (5) and Towers 2 (4), 4 (6) and 5 (7). In the final seasons, excavations were also conducted in the vicinity of Tower 12 (8). Previous interpretations were reevaluated in the course of the work and crucial new information was collected on the construction and development of the fortification system at Novae (Sarnowski, Kovalevskaia, and Kaniszewski 2005; Sar-

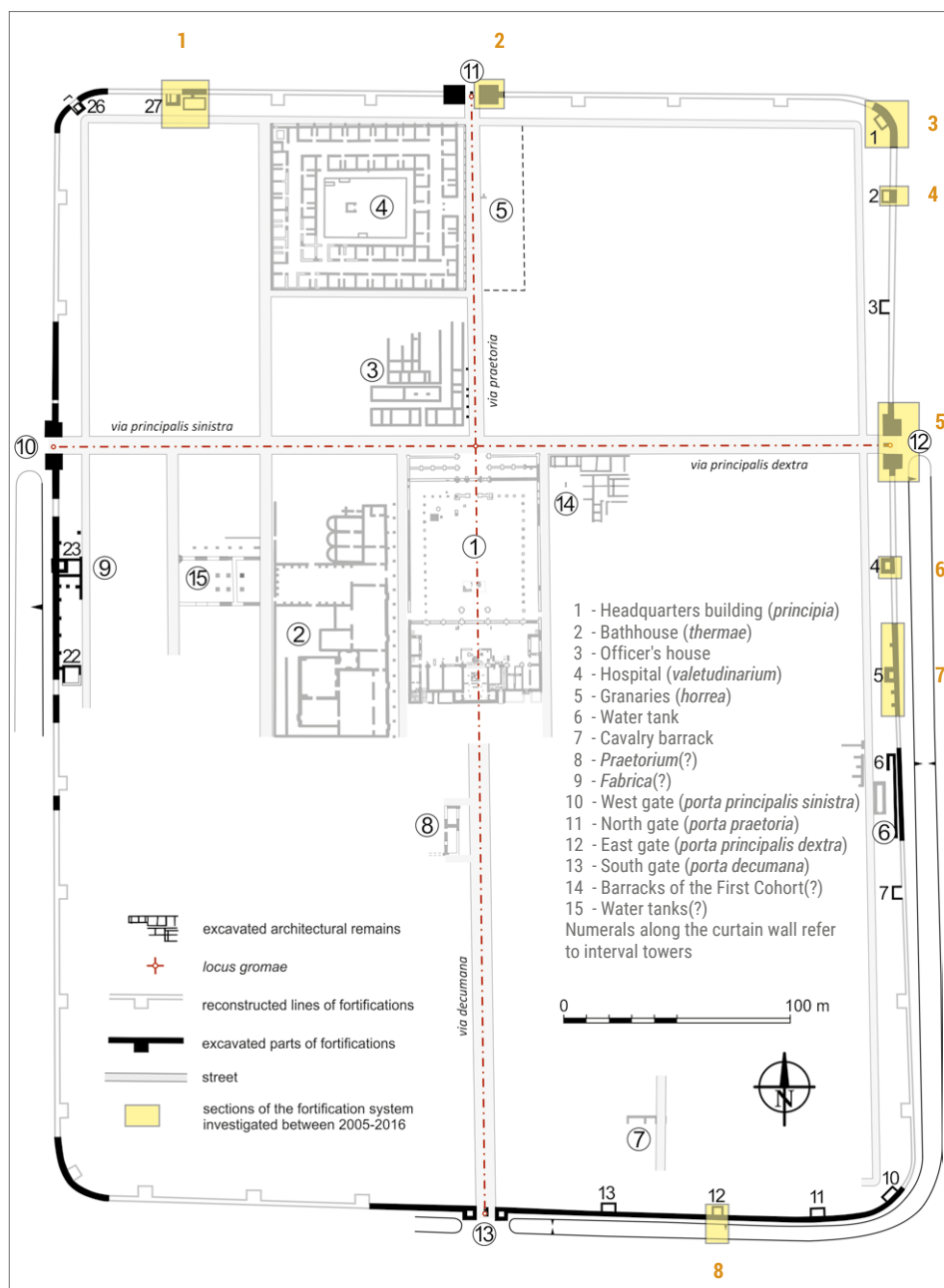


Fig. 1. Novae. Plan of the legionary fortress in the 2nd and 3rd centuries AD; highlighted structures investigated in the course of the "Per lineam munitionum" project, discussed in this article: 1 – Tower 27 and adjacent area; 2 – North Gate (*porta praetoria*); 3 – Northeastern corner tower; 4 – Tower 2; 5 – East Gate (*porta principalis dextra*); 6 – Tower 4; 7 – Tower 5; 8 – Tower 12 (University of Warsaw Faculty of Archaeology, Archaeological Expedition to Novae | T. Sarnowski, J. Kaniszewski, P. Zakrzewski; incorporating drawing by M. Lemke, P. Dyczek and A.B. Biernacki)

nowski, Kovalevskaja, and Tomas 2010; Sarnowski et al. 2014; 2016; Sarnowski 2016; Zakrzewski 2017).

Several different specialists including numismatists participated in the research in order to examine a comprehensive set of material on the chronology of the fortification system on the one hand, and on the other, to ensure a proper understanding of individual finds. The numismatic

material, which is presented in this paper, was particularly significant for the purpose of a reexamination of standing presuppositions concerning the building sequence of elements of the defense system and adjoining structures. However, the architectural and stratigraphic analyses were not always feasible or informative, either because of disturbed stratigraphy or a scarcity of finds.

NUMISMATIC REMARKS

Numismatic research based on finds from well-researched sites characterized by a high level of monetization, such as the legionary fortress at Novae (Kunisz 1992a; 1992b: 39–40, 134–135, 144; Ciolek 2011; Dimitrov 2011; 2013), entails the necessity to discern the contexts where a sufficiently numerous sequence of coins was deposited in a well-defined, closed stratigraphic context. It should be noted that the chronological structure of all 128 finds from particular sections of the fortifications (see Catalog), reflects only the history of monetary circulation at Novae and does not permit—with certain exceptions discussed in greater detail in the present paper—far-reaching conclusions concerning the dating of construction phases in particular sections of the fortifications [Fig. 2 and Table 1].

The bulk of the discussed coins, except for one Roman denarius (Cat. 9), represent bronze denominations struck mostly in central Roman mints from the beginning of the 1st century AD to the first half of the 5th century AD (123 specimens). The four Byzantine coins are from the 6th century AD. None of the bronze coins from the first half of the 3rd century at-

tested at Novae (eight pieces) was struck in a Roman mint; instead, all were minted in provincial towns of Lower Moesia and Thrace. The coins issued under the Julio-Claudian dynasty were characterised by a significant degree of surface wear caused by prolonged circulation. Their increased influx and circulation, resulting in finds from layers associated with the earlier construction phases at Novae, was most likely due to the arrival and stationing of the *legio VIII Augusta* in the 1st century AD, and subsequently of the *legio I Italica*. Among the sparse coin finds from the 2nd century AD, one should note a bronze coin of Marcus Aurelius minted in Caesarea in Cappadocia in AD 161/162 (Cat. 15), which possibly came to Novae together with Moesian troops returning from the Parthian campaign of Lucius Verus. A significant increase in the number of finds dated to the second half of the 3rd century AD, and to the 5th century AD in particular (approximately two thirds of the total coin assemblage) reflects Empire-wide effects of a sudden depreciation of the Roman currency in the mid-3rd century AD and the resulting intensification of production of billon coins of small denominations.

Table 1. Chronological structure (by emperors' reigns) of 128 coins found along the defenses at Novae in a topographical division: (1) Tower 27 (* indicates coins from a foundation deposit), (2) North Gate, (3) Northeastern corner tower, (4) Tower 2, (5) East Gate, (6) Tower 4, (7) Tower 5, (8) Tower 12

Date	Issuer	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Total
ROMAN COINAGE										
1st–2nd centuries AD	Tiberius	2	–	–	–	–	–	–	1	3
	Gaius	3	–	–	–	–	–	–	–	3
	Claudius	2	–	–	–	–	–	–	–	2
	Vespasian	4	1	–	–	–	–	–	–	5
	Trajan	–	1	–	–	–	–	–	–	1
	Marcus Aurelius	1	–	–	–	–	–	–	–	1
	Uncertain issuers	3	1	–	–	–	–	–	–	4
First half of 3rd century AD	Septimius Severus	–	–	1	–	–	–	–	–	1
	Caracalla	2	–	1	–	–	–	–	–	3
	Macrinus	–	–	–	1	–	–	–	–	1
	Severus Alexander	1	–	–	–	–	–	–	–	1
	Gordian III	–	–	–	–	1	–	–	–	1
	Uncertain issuers	1	–	–	–	–	–	–	–	1
Second half of 3rd century AD	Valerian I	1	–	–	–	–	–	–	–	1
	Gallienus	2	–	–	–	–	–	–	–	2
	Claudius II	2	–	–	1	1	–	–	–	4
	Aurelian	3*	–	–	1	–	–	–	–	4
	Tacitus	1	–	–	1	–	–	–	–	2
	Florianus	–	–	–	–	1	–	–	–	1
	Probus	1+2*	1	–	–	–	–	–	1	5
	Carus	–	–	–	1	–	–	–	–	1
	Diocletian	1	1	–	–	2	–	–	–	4
	Maximian	1	–	–	–	–	–	–	–	1
	Uncertain issuers	2	–	–	–	–	–	–	–	2
4th–5th centuries AD	Galerius	–	–	–	–	1	–	–	–	1
	Licinius I	–	–	–	1	1	–	–	–	2
	Constantine I	3	–	–	–	–	–	1	–	4
	Urbs Roma	–	–	–	–	1	–	–	–	1
	Crispus	–	1	–	–	–	–	–	–	1
	Constantine I (posthumous)	1	–	–	2	–	–	–	–	3
	Constantinus II	–	–	–	–	1	–	–	–	1
	Constans or Constantius II	1	–	–	–	–	–	–	–	1
	Constans	2	–	–	–	–	–	–	–	2
	Constantius II	7	1	1	–	2	–	–	–	11
	Constantius Gallus	2	2	–	–	1	–	–	–	5

Byzantine coins represent the period of “Justinian’s revival” in the history of Novae, when the settlement lost its previous military character.

The inventory of coin finds included in the present study was compiled based on excavation documentation and coin descriptions prepared by Jaworski at the Museum in Švištov (in the case of material

from excavations before 2009) and in the course of particular seasons of fieldwork. The use of metal detectors at the site from a certain moment has significantly increased the number of finds in recent seasons. All of the coins collected within the perimeter of the fortifications should be regarded as stray finds, representing instances of lost property. The only coin

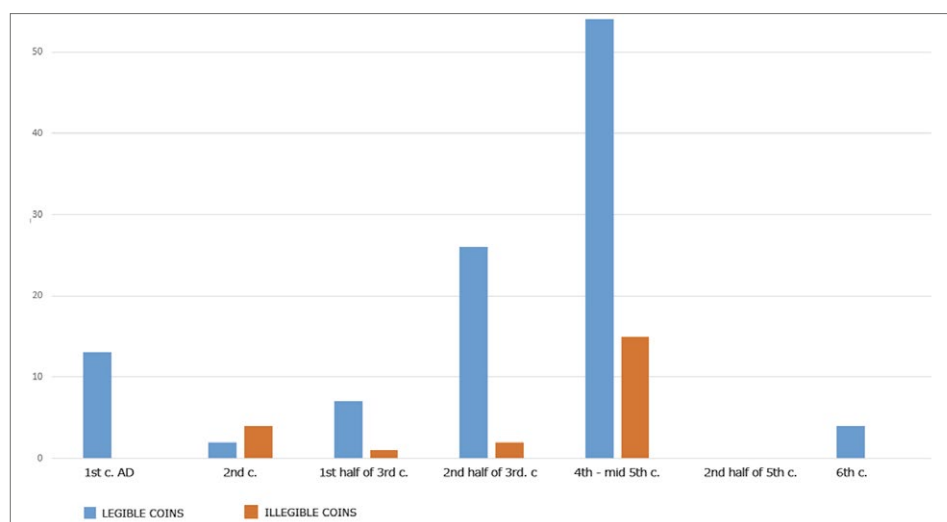


Fig. 2. Chronological structure of coin finds from archaeological investigations along the defenses of the legionary fortress at Novae

Table 1. Continued from the previous page

4th–5th centuries AD (continued)	Julian II	–	1	–	–	2	–	–	–	3
	Valentinian I	2	1	–	–	–	–	–	–	3
	Valens	4	1	–	–	1	–	–	–	6
	Valentinian I or Valens	1	–	–	–	–	–	–	–	1
	Theodosius I	4	1	–	–	2	–	–	–	7
	Arcadius	–	–	–	1	1	–	1	1	4
	Theodosius II	–	–	–	–	1	–	–	–	1
	Uncertain issuers	6	1	–	–	6	–	–	–	13
BYZANTINE COINAGE										
6th century AD	Justin I	–	1	–	–	–	–	–	–	1
	Justinian I	1	1	–	–	–	–	–	–	2
	Maurice Tiberius	–	–	–	1	–	–	–	–	1
Total		69	16	3	10	25	–	2	3	128

assemblage intentionally hoarded, probably about AD 282 or slightly later, was a small foundation deposit of *antoniniani* [see above and *Table 2*] discovered in a structure located in a built-up area, which

directly adjoined the inner side of the north wall of the camp. The *antoniniani* in question were hidden in a small circular container made of lead, the rim of which was partly pushed inside. .

THE INVESTIGATED STRUCTURES AND THEIR ARCHAEOLOGICAL STRATIFICATION

1. TOWER 27

The most extensive and time-consuming excavation was carried out in the western part of the north curtain wall, namely around Tower 27 [see *Fig. 1*]. Fieldwork started in 1960 with the aim of establishing the outline of the fortifications of the legionary fortress (Parnicki-Pudelko 1962; 1990: 42–44). This particular spot was selected for investigation because of the remains of a solid stone structure at the bottom of a robber's pit, which was most likely dug in modern times to procure building material. The excavations revealed remains of a curtain wall, some 2.40 m wide, with traces of two building phases and a stone tower with inner dimensions of 4.48 m by 3.72 m.

Progressing erosion of the escarpment over the Danube has all but destroyed the northern line of the defenses, leaving only a few sections, including the one around the tower (Dyczek 2008: 254–256; Sarnowski, Kovalevskaja, and Tomas 2010: 170–171). Currently, the northern escarpment drops away steeply, almost vertically, in line with the northern side of the legionary camp, but there is evidence indicating that it used to begin much farther north (Sarnowski, Kovalevskaja, and Tomas 2010: 170–172; Zakrzewski 2017: 10). A digital terrain model of the site and its vicinity

has confirmed this topographical observation (Sarnowski et al. 2014: 77 and *Fig. 2*).

Excavations in this area were resumed in 2006 and continued intermittently until 2014 (Sarnowski, Kovalevskaja, and Tomas 2010: 162–170; Sarnowski et al. 2016: 187–188). The architectural remains in the trench were cleaned and documented and the trench was extended, including several test pits. The first and the largest of them, test trench A, measuring 14 m by 5 m, ran from the fortifications towards the center of the camp, sectioning the entire width of the *intervallum* and the *via sagularis*. Test trench B, 10.0 m by 1.70 m, was opened 7 m farther east with the aim of investigating the curtain wall extension and the area directly in front of the line of fortifications. Test trench C was dug in the western part of the area, along the line of the south wall of the tower. Additionally, a small test trench D was opened in the final season of the investigations, aimed at determining the location of a wooden tower [*Fig. 3*].

Structures belonging to the fortification system of the legionary fortress and the late antique town at Novae, as well as remains of other structures and installations located in the vicinity, were thoroughly investigated. Most importantly, three main construction phases along

with a few subphases (IA–B, IIA–C, III) were distinguished, reflected in the history of the site (Sarnowski, Kovalevskaja, and Tomas 2010: 162–172).

Phase I A

The earliest traces of the fortification system were represented by timber-and-earth defenses dated to the pre-Flavian period, built by the *legio VIII Augusta*. A V-shaped ditch (*fossa*), measuring 4.20 m in width [Figs 3, 4:2], and originally up to 2 m deep, was discovered in test trench B excavated directly outside a late retaining wall. A thin layer of silt attested at the bottom of the ditch [Fig. 4:j?] yielded only a small fragment of a South Gallic terra sigillata vessel (Sarnowski, Kovalevskaja, and Tomas 2010: 164, Note 28) which, coupled with the lack of any indication that the ditch underwent any maintenance, may suggest that it ceased to be used before the change of the garrison at Novae, namely before the arrival of the *legio I Italica*.

An earthen rampart (*vallum*) was located roughly 4 m to the south [Figs 3, 4:3]. The inner slope of the rampart was uncovered in trenches A and C. It was preserved to a height of 2.65 m, and its minimum width was 1.75 m. Later changes in the defense system, especially the construction of the stone wall, prevented the original width of the rampart to be determined; Neither could the presence of a berm be confirmed. A ramp was built parallel to the rampart; a section of it, 1.40 m long, was unearthed in trench A [Figs 3, 4:4]. Both structures were constructed of compact yellow and brown loess with intermittent layers of burning indicating that fire-hardening may have been a means of consolidating

the structure. Two square features (30 x 30 cm) were also discovered [Figs 3, 4:1]. Based on parallels from other parts of the site, the features were interpreted as internal post holes of a wooden tower from the earliest phase (Sarnowski 2016: 179).

These were the only documented traces of the earliest defense installations on the northern side of the legionary fortress.

Phase I B

The next construction phase of the fortifications in this area, dated to the Flavian period, was related to the arrival of the First Italic legion about AD 72 (Sarnowski et al. 2014: 81–83). It seems that the first building activity comprised large-scale earthworks covering the entire width of the *intervallum*. By adding large amounts of pale yellow and brown loess [Fig. 4:j], the walking level was raised by approximately 2 m, effectively covering the ramp (Sarnowski, Kovalevskaja, and Tomas 2010: 165–166, Notes 30 and 31). At the same time, a retaining wall was built, probably to increase ground stability at the northern end of the *via sagularis* in operation at the time. The retaining wall, preserved only as a ‘ghost wall’ [Fig. 4:10a], was 1.20 m wide and 1.00 m deep. Two poorly preserved foundation walls of legionary barracks belonging to the same phase were found at the southern end of test trench A. They were constructed of mid-sized stones and broken roof tiles bonded in loess mortar (Sarnowski, Kovalevskaja, and Tomas 2010: 166).

A group of four coins of Vespasian and a total of seven coins of his predecessors come from this sector of the fortifications. Although the influx of coins

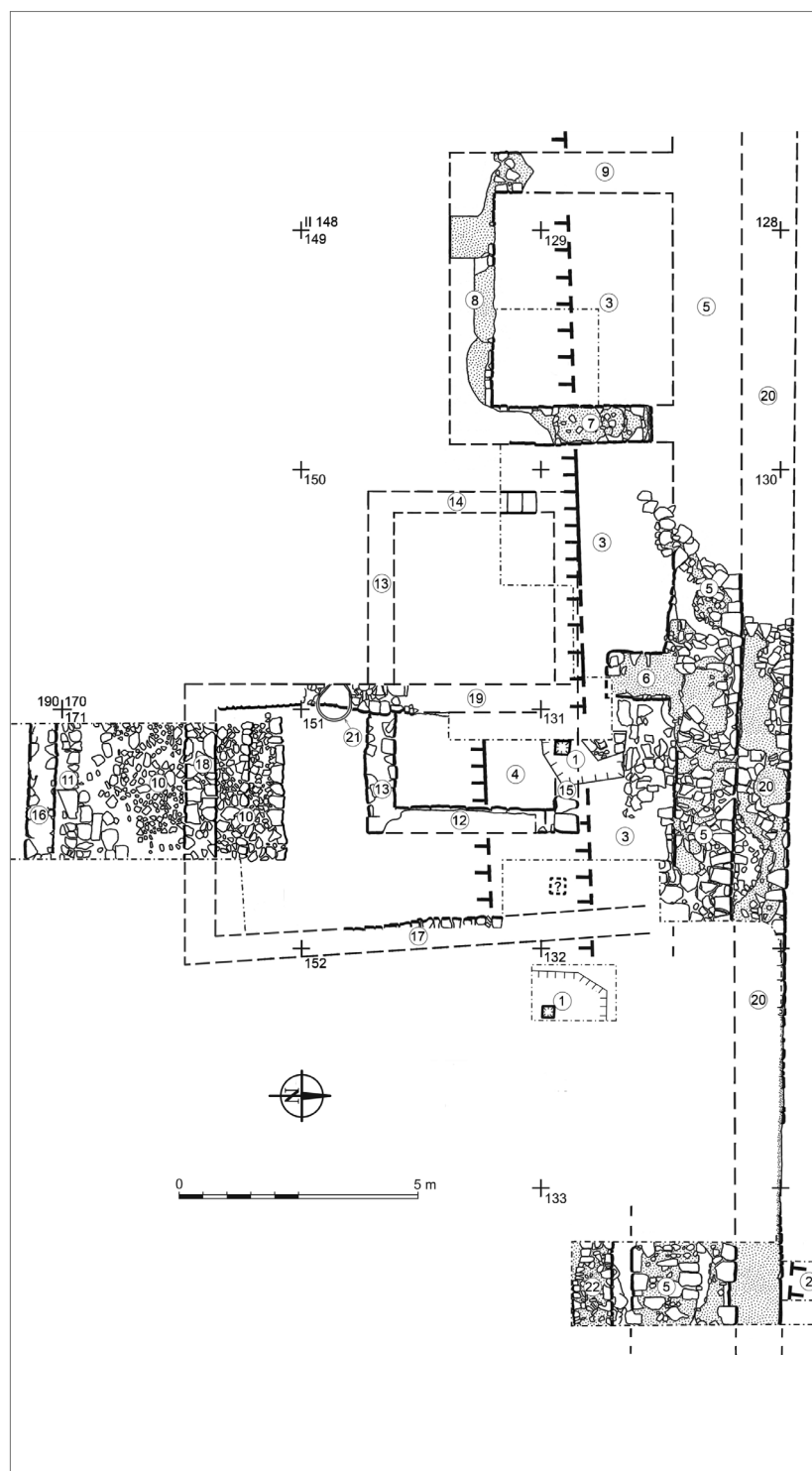


Fig. 3. Area around tower 27 [for the location, see No. 1 in Fig. 1]: 1 – post holes, 2 – Flavian ditch, 3 – rampart, 4 – ramp, 5 – Trajanic curtain wall, 6 – internal counterfort wall, 7–9 – walls of tower 27, 10 – via sagularis, 11 – sewer, 12–15 – walls of rectangular structure, 16 – north wall of centurial barracks, 17–19 – loess-bonded walls of a later building, 20 – late retaining wall, 21 – pottery kiln (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan A. Tomas, L. Kovalevskaia and P. Zakrzewski)

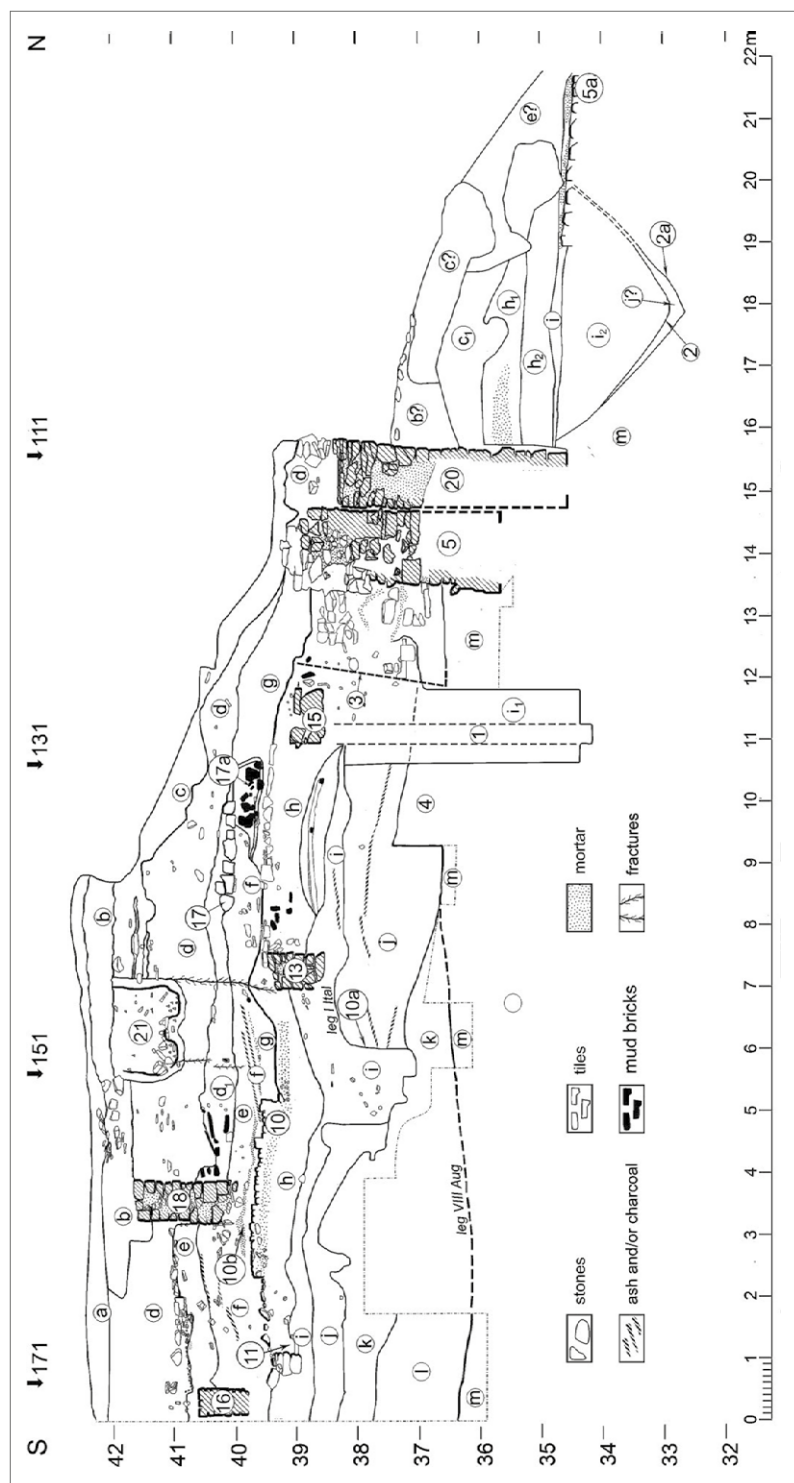


Fig. 4. Tower 27, trench A section: 1 – post holes, 2 – Flavian ditch, 2a – pre-Flavian ditch, 3 – rampart, 4 – ramp, 5 – Trajanic curtain wall, 5a – soil reinforcing stones, 10 – via sagularis, 10a – ghost wall(?), 10b – post-Trajanic via sagularis, 11 – sewer, 13, 15 – walls of rectangular structure, 16 – north wall of centurial barracks, 17–18 – loess-bonded walls of a later building, 17a – oven, 20 – late retaining wall, 21 – pottery kiln (for a description of the layers, see Sarnowski, Kovalevskaia, and Tomas 2010: 164, Fig. 11) (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae I drawing A. Tomas, P. Zakrzewski)

preceding Nero's reign may be associated with the oldest building phase (Phase IA), it cannot be excluded that their deposition took place in the Flavian period (Phase IB), when the changes within the fortifications were introduced by the First Italic legion.

Phase II A

More significant changes were introduced in the fortification system around Tower 27 in the beginning of the 2nd century AD, under Trajan and Hadrian. In this period, the timber-and-earth fortifications were replaced with stone structures (IGL Novae 52; Sarnowski 2018). The main element of the new defences was a stone wall [Figs 3, 4:5], 1.30 m wide, built of rubble and mid-sized irregular chunks of sandstone, only partly dressed, bonded with mortar. The foundations, which reached a depth of 1.40 m, were bonded in a sandy-orange mortar, whereas a white mortar, composed of lime and river gravel, was used in the higher parts. A plinth was discovered on the outer side of the wall, raised some 0.80 m and projecting 0.20 m from the wall face (Parnicki-Pudelko 1962: 128, 132, Fig. 119). The wall leaned against a vertical slope cut into the front of an earthen rampart. For additional support of the structure and the stability of levelling layers in the *intervallum*, perpendicular counterforts were added, measuring 1.20 m in length and 0.90 m in width [Fig. 3:6]. Three such counterforts were observed at regular intervals in the excavation of 1960 (Parnicki-Pudelko 1962). This design was used also in other sections of the legionary fortress.

An extension of the defensive wall was revealed in the southern part of test

trench B. It was aligned with the outer face of the defense wall, but it was much wider, measuring 2.20 m. The reason behind this difference was not established within the small confines of the trench. Differences in the width of the curtain wall were noted also on other sides of the camp, and they may have been caused by different factors (Sarnowski 2016: 185). It is plausible that the stone wall and the tower walls [Fig. 3:7–9] were built simultaneously, as indicated by the construction technique and building materials. Despite the fact that the tower was set on foundations reaching a depth of 2.60 m, it was largely destroyed, most likely by erosion of the escarpment over the Danube. The same happened to the section of the curtain wall adjoining it. There appears to have been a slight change of orientation compared to the older defense line (Sarnowski, Kovalevskaja, and Tomas 2010: 164, Note 27).

The above construction efforts were preceded by earthworks in front of the fortifications and in the *intervallum*. The soil from the cutting of the rampart was most likely used to backfill the ditch [Fig. 4:2i], which was apparently not included in the construction plan of the stone fortifications. The backfilling appears to have been motivated by the need to ensure appropriate bearing capacity for the defense wall. No additional structures, like retaining walls, for stabilizing the ground were found, apart from a paving made of irregular stones, laid directly on top of the backfilled ditch, some 5 m to the north of the wall [Fig. 4:5a]. The rest of the earthworks consisted of adding subsequent levelling layers [Fig. 4:h–i] in the *intervallum* (Sarnowski, Kovalevskaja, and Tomas 2010: 167).

Other structures built in this phase include a stone wall uncovered in the southern part of the trench [Figs 3, 4:16], which was most likely a legionary barrack wall. North of the wall, a drainage ditch [Figs 3, 4:11] was unearthed; the ditch removed waste and excess water from the *via sagularis*. The street, 3.60 m wide, was set on a ballast of hard beaten sand mixed with pink mortar and was paved with small stones.

A very different kind of structure was revealed in the northern part of the *intervallum*. It was a poorly preserved rectangular construction measuring 4.70 m by 7.10 m. The four walls [Figs 3:12–15] had very shallow foundations made of irregular stones bonded in lime-loess mortar. In two cases [Fig. 3:12, 14], the upper parts of the walls had been made of sun-dried loess bricks (Sarnowski, Kovalevskaja, and Tomas 2010: Pl. XXIV.4). The exploration of the inside of the structure revealed several thin layers of hard beaten soil covered with roof-tile fragments and large slabs of sandstone. Perhaps the structure functioned as a platform for heavy projectile engines (Sarnowski, Kovalevskaja, and Tomas 2010: 167, Note 53). A similar structure, preliminarily identified as a tower, was discovered on the western side of the fortifications [see Fig. 1]. Although it is difficult to ascertain the function of this structure, it is possible to link it with many similar examples, also unidentified, uncovered within the *intervallum* at other Roman legionary fortresses (Sarnowski, Kovalevskaja, and Tomas 2010: 167, Note 52).

It is symptomatic that the period of Trajan's and Hadrian's reigns, marked by an abundance of evidence of building activity in the western part of the northern wall

at Novae is not reflected in the monetary finds. Not a single coin that could be dated with reasonable certainty was assigned to the first half of the 2nd century. The second half of the 2nd century was also quite sparsely represented (a single coin of Marcus Aurelius struck in distant Caesarea in Cappadocia, Cat. 15), as was also the first half of the 3rd century (three specimens). It is possible that the absence of coins of Trajan and Hadrian, as well as the poor representation of coins of their successors was due to the far-reaching changes dating to Phase II B (*terminus post quem* AD 282, see information on the foundation deposit comprising coins of Aurelian and Probus), or earlier (Severan period?), which necessitated the removal of some deposits of the Nerva–Antonine period.

Phase II B

In the 3rd century AD, the walking level of the *intervallum* was raised some 0.60 m, thus covering the upper surface of the ramp [Fig. 4:g], while the *via sagularis* was overlaid with a layer of sand and mortar, most likely for renovation purposes [Fig. 4:10b]. Archaeological evidence recorded in the southern part of trench A suggests that some unspecified disaster took place in the second half of the 3rd century AD. In the excavated area inside the centurial barracks, above a level of prolonged habitation, there was a thick layer of crushed roof tiles. It corresponded to numerous traces of burning and charred material discovered over the entire area north of the barrack wall [Fig. 4:f].

The area affected by destruction was later covered with a layer of dirty earth with remnants of building ceramics

[Fig. 4:e]. Directly on top of this layer were three walls outlining a spacious structure [Figs 3, 4:17–19]. They were constructed of mid-sized stones bonded with loess mortar and probably supported a super-structure of dried bricks.

The foundations of the south wall yielded a foundation deposit (Inv. No. 123/09w) comprising five billion *antoniniani* of Aurelian, minted at Mediolanum and Cyzicus (Cat. 36*–38*), and of Probus, struck in the Siscia mint (Cat. 45*, 46*), placed in a small, circular lead container [Fig. 5]. The issue date of the youngest editions of coins represented in the deposit could not be established, hence the end of Probus' reign, that is AD 282, was assumed as a *terminus post quem* for the hoard [Table 2]. Two semicircular installations related to production activities were found inside the structure. Their foundations were made of well-fitted stones supporting thin 3–6 cm clay walls (Sarnowski, Kovalevskaja, and Tomas 2010: 168, Note 60). South of the area, where the ground was levelled at almost 41 m a.s.l., there was a thin layer of hard beaten sand mixed with pink mortar. Stones were laid on top of this bedding [Fig. 4:e/d], creating a sort of street paving that was 3 m wide.

A series of stray coin finds (11 specimens) associated with Phase II B can be dated from approximately the mid-3rd century (Valerian I) to the period of the Tetrarchy (perhaps even until the beginning of the 4th century). However, it is difficult to formulate any definite conclusions based on such sparse and accidental finds.



Fig. 5. Foundation deposit in a lead container (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | photo P. Jaworski)

Table 2. Coins from a foundation deposit found in the foundations of a structure dated to the fourth quarter of the 3rd century AD

Cat. No.	Emperor	Date	Legend on reverse	Mint	RIC
36*	Aurelian	270–275	FIDES MILITVM	Mediolanum	V.1, 126
37*	Aurelian	270–275	CONCORD MILIT	Cyzicus	V.1, 342
38*	Aurelian	270–275	RESTITVT ORBIS	Cyzicus	V.1, 348
45*	Probus	276–282	CONCORDIA MILIT	Siscia	V.2, 632
46*	Probus	276–282	ADVENTVS PROBI AVG	Siscia	V.2, 651

Phase II C

Extensive construction took place in the area in the first half of the 5th century AD and consisted mainly of a retaining wall, 1.10 m wide, built fronting the defense wall [Figs 3, 4:20]. The new wall was constructed of mid-sized stones bonded in grey mortar mixed with crushed ceramics. Traces of the same mortar were attested on the top and in some other sections of a 2nd-century wall, indicating that it had undergone restoration at the same time. A contemporaneous layer documented in the *intervallum* seems to be represented by a deposit of yellow-grey loess, which yielded numerous artifacts (Sarnowski, Kovalevskaja, and Tomas 2010: 169).

Phase II C was represented by a considerable group of Late Roman coins (33 specimens in total) dating from Constantine I to Theodosius I, with predominant monetary finds of Constantine I (three specimens), Constantius II and Gallus (nine specimens), Valentinian I and Valens (seven specimens) and Theodosius I (four specimens). The prevalence of such finds is not surprising because it reflects the general chronological structure of coins unearthed at Novae, characterised by a large representation of Late Roman small change, especially of the second half of the 4th century (beginning with Constantius II).

Phase III

The final activity in the investigated area was evidenced by a single pottery kiln [Figs 3, 4:21], measuring 1.20 m in width, dated to the 6th century AD. At that moment, Novae was already a full-fledged late antique town. A single find of a *foliis* of Justinianus I (Cat. No. 128) can also be associated with this phase.

2. NORTH GATE

Establishing the approximate location of the North Gate (*porta praetoria*) became possible first in the early 1970s, following extensive research conducted in the area of the West Gate (*porta principalis sinistra*) and the South Gate (*porta decumana*) (Zakrzewski 2017: 7–10). The positive identification of these structures permitted the *locus gromae* to be located, defining the central axes of the legionary fortress at Novae. The four main streets were aligned with these axes: *via principalis dextra* and *sinistra*, as well as *via praetoria* and *via decumana* [see Fig. 1].

Excavations between 1970 and 1974 revealed fragments of the gate with a wide passage, a short section of the *via praetoria* and a sewer running underneath it (Ziemiński 1973; 1975; Czerniak 1977; Parnicki-Pudelko 1990: 42–44) [Fig. 6:4–5]. The uncovered structures were very poorly preserved, destroyed extensively by soil erosion, and the work was made difficult by the steep slope of the escarpment and the generally difficult terrain. Investigations were resumed because the earlier results were far from satisfactory and both the architecture and the chronology of the gate were still not properly understood. Over four seasons of fieldwork (2011–2014) the previously unexplored eastern part of the structure was uncovered, clearing the remains of one of two massive platforms, measuring 8.00 m by 8.50 m [Fig. 6:2]. The platforms were separated by a passage over 7 m wide. The research also enabled an architectural analysis and reconstruction of the main components of the gate (Sarnowski and Tomas 2011; Sarnowski et al. 2012; 2013; 2014; 2016; Zakrzewski 2017: 10–13).

For the most part, the eastern platform was founded on a flat surface created by extensive levelling works, cut in a very compact layer of culturally sterile dark orange clay [Fig. 7]. Its southern fragment was situated on a raised terrace. The difference in foundation levels of the two parts reached 1.50 m, perhaps in order to better stabilize the structure and to prevent it from sliding down the slope of the escarpment.

The lower part of the foundations was constructed of irregular sandstone slabs bonded in brown-grey loess mixed with limestone. The upper part of the structure, ranging from approximately 0.50 m to 1.00 m in thickness, was built of sandstone slabs almost twice as large, bonded in abundantly applied white-

grey mortar. Dressed stone blocks (for instance, 80 x 100 x 70 cm) were laid on top of this. They either composed the outer face of the platform or the plinth of the tower, which could have taken up the entire space of the platform. A test trench opened next to the eastern side of the platform also revealed two plinths [Fig. 7: sections I–II].

According to the architectural and archaeological analyses, the platform underwent certain structural modifications, but the only unequivocal evidence of such a transformation in late antiquity was attested in the curtain wall located in the eastern part of the platform [Fig. 6:3]. In the course of extensive remodelling of the lower part of the tower structure, a small section of the

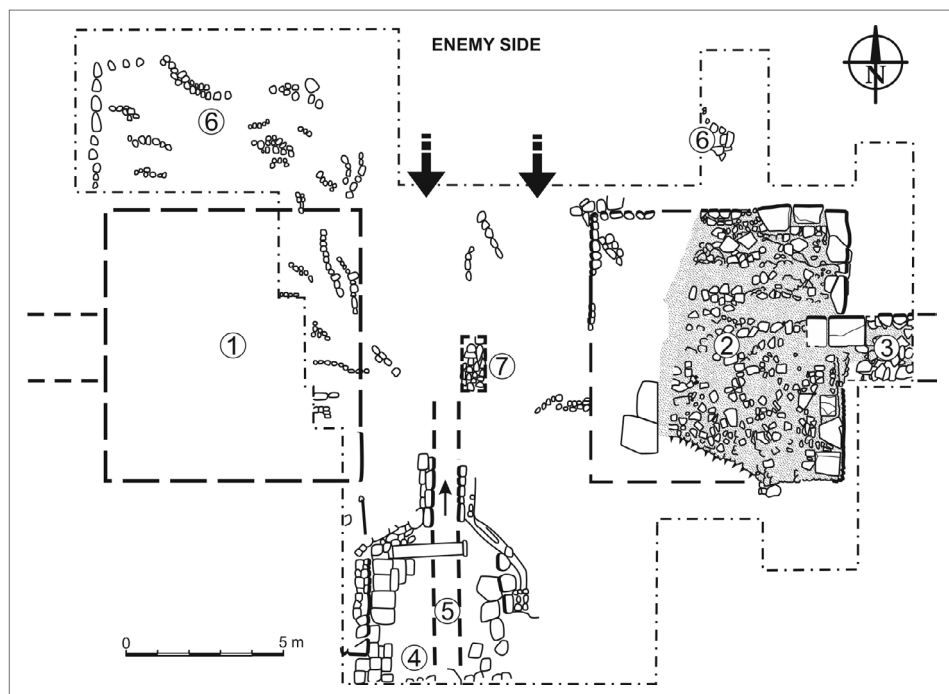


Fig. 6. North Gate [for the location, see No. 2 in Fig. 1] (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan P. Zakrzewski)

defense wall was apparently dismantled and then rebuilt using squared blocks of limestone [Fig. 7: section III]. The original width was at least 2 m judging by the preserved northern face of the curtain wall. It is also likely that at some point in time the surface of the platform was extended northwards by about 2.50 m.

A long test trench opened on the outer side of the platform yielded no evidence of a defense ditch. The ditch may have ran further north, but it is also possible that the lay of the land at that time was a sufficient obstacle for potential enemies. The uncovered architectural remains in the form of a short wall made of small, roughly dressed stones could correspond to similar discoveries made

in the northwestern part of the area investigated in the 1970s [Fig. 6:6]. Perhaps these were the composite elements of some kind of retaining wall that had the purpose of preventing a landslide.

Investigations of the North Gate yielded 16 coin finds, which could be divided into four chronological groups: 1) coins from the second half of the 1st to the first half of the 2nd century (Vespasian–Trajan, three specimens); 2) coins from the second half of the 3rd century (Probus–Diocletian, two specimens); 3) late Roman coins (post 337–Theodosius I, nine specimens), 4) Byzantine coins (Justin I–Justinianus I, two specimens). Although this chronological structure seems to correspond to phas-

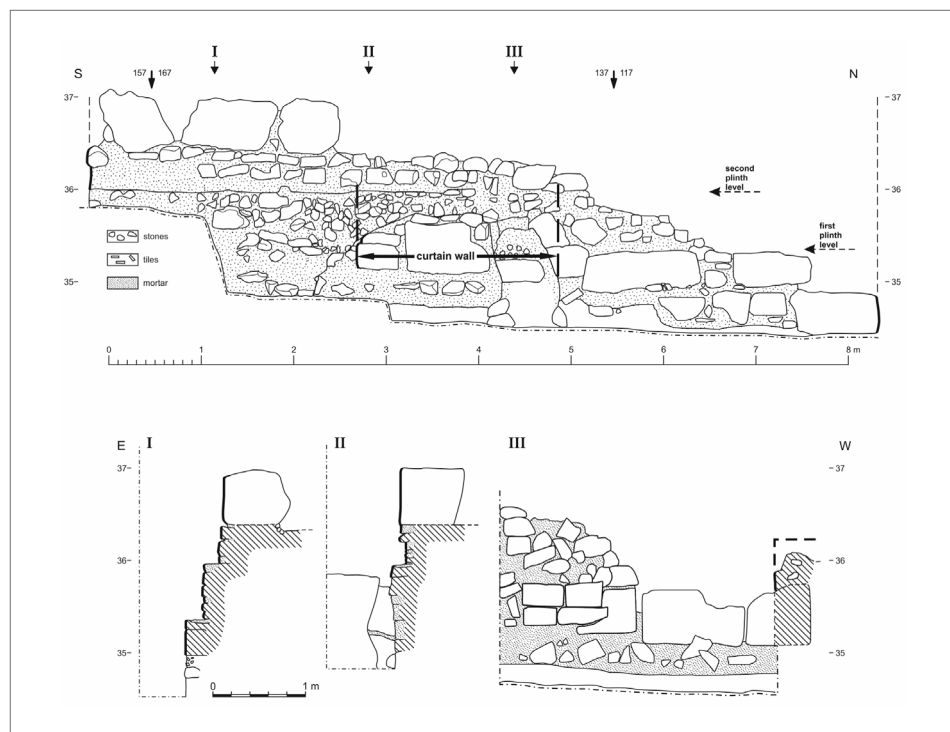


Fig. 7. North Gate: top, facing of the east platform; bottom, sections I, II and III (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | drawing P. Zakrzewski)

es recorded in the western part of the northern fortifications of the camp (see above), it should be pointed out that, in the case of the North Gate, the finds were few and mostly stray.

This building phase of the North Gate, which is on record, evidently commenced in the second half of the 4th century AD. The gate functioned in unchanged form probably until the end of the 6th century AD, a hypothesis also supported by artifacts from the excavations (Sarnowski et al. 2016: 182–183; Zakrzewski 2017: 13). The scope of construction work that was carried out on this structure at this time has obliterated any evidence of the earlier building phases.

3. TOWER 1 (NORTHEASTERN CORNER)

The surroundings of the northeastern corner tower [see Fig. 1:3] were investigated in the late 1970s by the Bulgarian expedition. At the time, the eastern front of the legionary fortress was investigated. In 2005–2006, some 300 m² were cleared of dense plant growth, shrubs and trees in order to document the remains that were uncovered previously. Three test trenches were excavated to reexamine the stratigraphic sequence and the foundation levels of particular structures. A section of the curtain wall 22 m long was uncovered, as well as a rectangular tower (4.15 m by 3.25 m), a large drainage channel, remains of the *via sagularis* and a fragment of an unidentified structure (Sarnowski, Kovalevskaja, and Kaniszewski 2005: 151–152; Sarnowski and Kaniszewski 2007) [Fig. 8].

The curtain wall [Fig. 8:1] revealed numerous traces of superficial destruction, most likely caused by landslides in an-

tiquity. The preserved height of the wall was 1.60 m, yet based on a comparison of uncovered levels of the earliest phase of the *via sagularis* with the original ground level on the outer side of the wall, the actual height of the wall was estimated to be at least 6.50 m. The width of the structure at the foundation level was 3.70 m, but starting from the level of the plinth, it tapered in to just about 2.10 m. The construction technique and building material, consisting of mid-sized, roughly dressed sandstone slabs bonded in lime mortar, corresponded to other curtain wall sections uncovered on all four fronts of the legionary fortress. Only two construction phases were distinguished in the remains, the first one associated with the building of the wall at the beginning of the 2nd century AD and the second corresponding to numerous renovation works taking place in the 6th century AD. At the latter stage, large stone blocks were reused and bonded in grey mortar.

The few coin finds from this area were not very informative in terms of dating the architectural changes. Two provincial coins were issues from the beginning of the 3rd century (Septimius Severus and Caracalla), the third was a bronze of Constantius II.

4. TOWER 2

Archaeological investigations in the north-western corner of the fortifications in the 1970s also encompassed a tower located 27.75 m further south [see Fig. 1]. The structure was uncovered and documented once more in 2006–2007 (Sarnowski, Kovalevskaja, and Tomas 2010: 160–161).

Traces of the earliest camp fortifications at Novae, that is, the timber-and-earth defences, were one of the most

important discoveries made in this area. It was a section of the wall which most likely supported the inner side of a defensive rampart (see Sarnowski 1983a; 1983b). The preserved segment of stone foundations consisted of irregular stones bonded in loess mortar. A foundation trench 0.65–0.75 m wide was revealed in an extension of the trench [Fig. 9:1].

A successive construction phase was represented by a stone tower [Fig. 9:3–5], measuring 4.48 m by 3.72 m, as well as a ‘ghost’ curtain wall that was 1.50 m wide. A test trench extending 8 m east from the original curtain wall line revealed no evidence of a defensive ditch, at least in this section.

In the area of Tower 2, 10 scattered coins were found, among which the most

abundant group was composed of *antoniniani* struck in 268–283 (Claudius II, Aurelian, Tacitus, Carus). The oldest find was a bronze coin of Macrinus, while the youngest one was a 20 *nummi* piece of Maurice Tiberius. Given the sparseness of the material, it was not possible to draw any conclusions regarding the dating of architectural changes in this area.

5. EAST GATE

Remains of the East Gate [see Fig. 1:5] were first unearthed in the late 1970s, and the excavations were continued through the early 1990s, uncovering two stone platforms under the towers, in similarity to the North Gate, as well as a section of the curtain wall located north of the gate, and a significant fragment of the

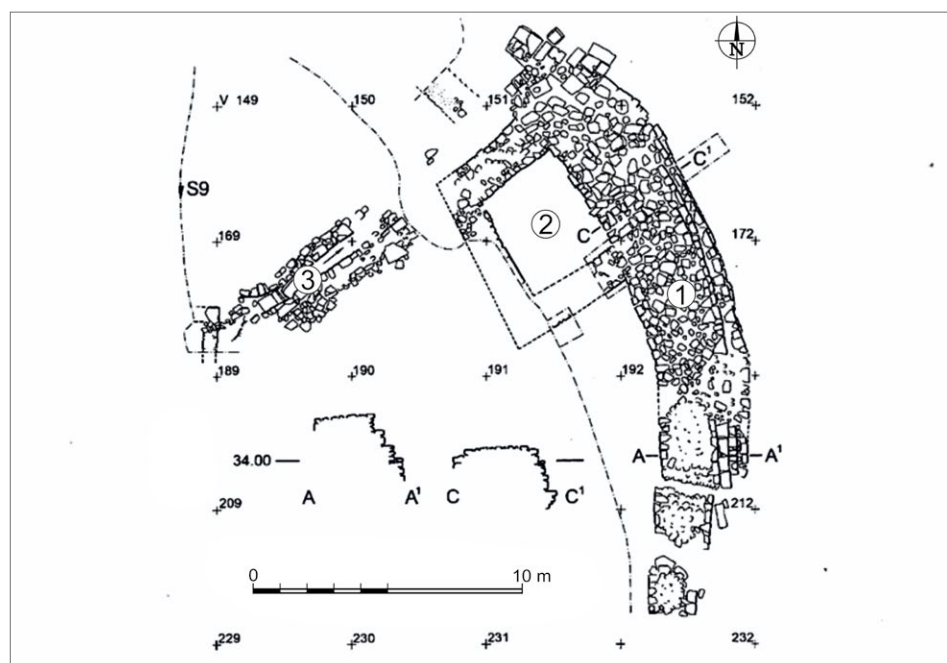


Fig. 8. Northeastern corner tower [for the location, see No. 3 in Fig. 1]: 1 – curtain wall, 2 – Tower 1, 3 – sewer (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan J. Kaniszewski)

via principalis (Čičíkova 1978; 1979; 1981; Čičíkova and Najdenova 1981; Donevski 1989; 1994; 1996) [Fig. 10].

The reinvestigation, which started in 2012, was prompted by the meagre amount of published data and lack of detailed documentation (Sarnowski et al. 2014: 86–89; 2016: 179–182). A detailed site plan was drawn after the site and the architectural remains were cleared. Two test trenches were opened, one located along the outer side of both platforms, and the other cutting across the width of the *via principalis*. The results bore out the findings from previous fieldwork. Two V-shaped ditches [Fig. 10:1] belonging to the timber-and-earth defences built by the Eight Augustan legion were located and identified. The first one was observed in the southern part of the excavated area, some 12 m away from the stone platform. The ditch was 2.40 m wide and 1.40 m

deep. The rounded end of the second ditch was revealed in the second test trench which was opened on the extension of the early ditch almost 28 m to the north, just in front of the northern platform.

Both platforms (northern 7 m by 7 m; southern 8 m by 6 m), as well as a curtain wall fragment (approximately 1.50 m wide) were constructed of mid-sized irregular stones bonded in grey mortar. In the southwestern part of the southern platform, a short wall made of large stone blocks probably supported the stairs leading to the upper level of the tower or the top of the curtain wall. At the southern end of the cleaned area, remains of the lowest level of the curtain wall were revealed; they measured 1.50 m in width and were founded directly on culturally sterile loess [Fig. 10:4]. Evidence of a defense ditch [Fig. 10:5], 1.80 m deep, were recorded more than 5 m further east. The ditch was part of the fortification system built by the First Italic legion.

The test trench located along the road yielded several interesting discoveries concerning the street organisation of the legionary fortress (Sarnowski et al. 2016: 179–182). These included two stone sidewalks flanking the street paved with slabs, a narrow sewer and a wide channel transporting excess water away from the camp.

Probably in the beginning of the 3rd century AD, an 8-m wide double entrance was partly obstructed with massive sandstone slabs placed in the southern passageway, preventing wheeled traffic. These restrictions were most likely linked to the construction of a monumental entrance (*groma*) leading

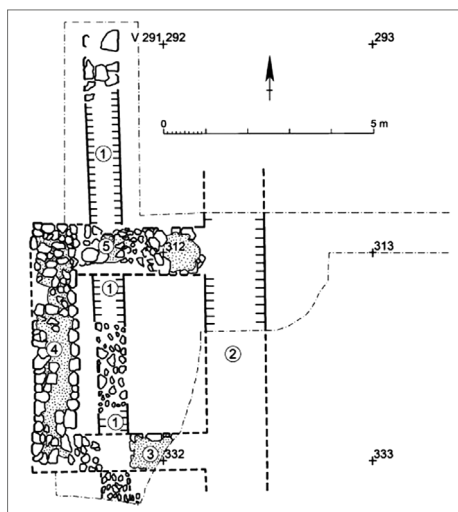


Fig. 9. Tower 2 [for the location see No. 4 in Fig. 1]: 1 – sleeper wall, 2 – remains of a curtain wall, 3–5 – walls of Tower 2 (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan P. Zakrzewski)

to the headquarters (*principia*), which was located at the intersection of the main streets of the legionary fortress (Sarnowski 1995). As the transformation of the legionary fortress into a town started in the 3rd/4th century, and the fortifications expanded eastward, the gate no longer fulfilled its purpose and was dismantled, as was the entire eastern front of the fortifications (see Poulter 2007: 31–39; Lemke 2015).

The group of coin finds from the excavation in the area of the East Gate was relatively numerous, 25 in total, but its usefulness of dating was limited due to the scattering of the finds. There is generally

a lack of coins from periods preceding the reign of Gordian III. Among the four coins dated to the second half of the 3rd century, an *antoninianus* of Florian from AD 276 (Cat. 41) is a relatively rare find. The most numerous group was composed of late Roman coins (20 specimens), with the youngest group consisting of three bronze coins of Theodosius I and Arcadius, as well as the latest specimen struck under Theodosius II (408–450). These coin finds testify to an intensive activity in this area in late antiquity, when the former eastern line of fortifications lost its function due to the eastward expansion of the town of Novae.

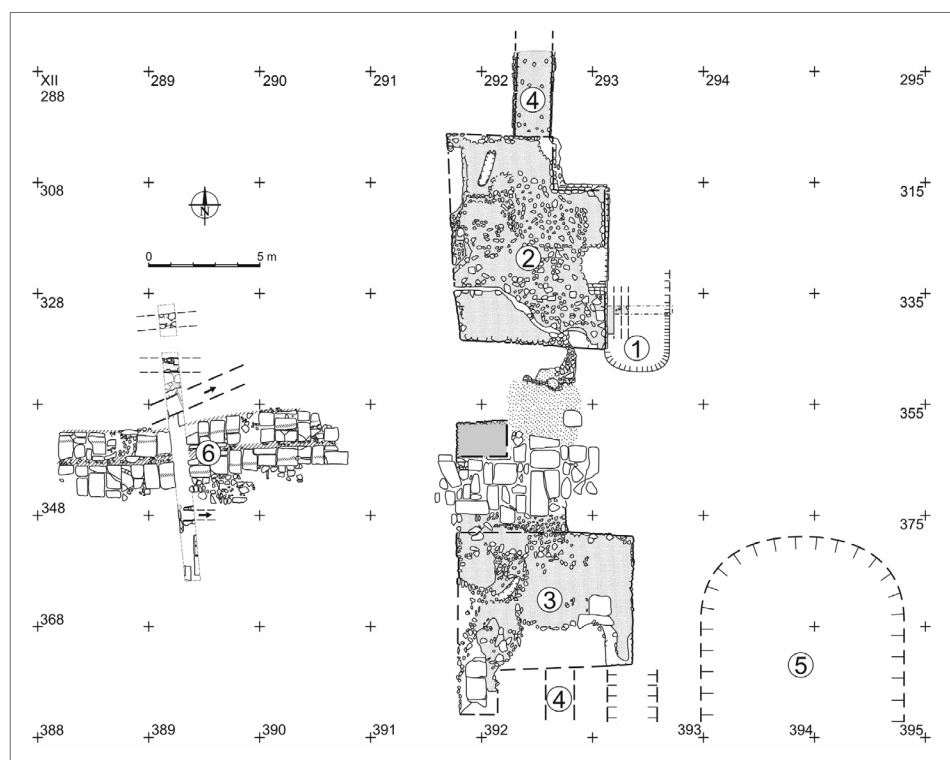


Fig. 10. East Gate [for the location see No. 5 in Fig. 1]: 1 – Neronian ditch, 2– northern platform, 3 – southern platform, 4 – Trajanic wall, 5 – Trajanic ditch, 6: Via principalis dextra (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan P. Zakrzewski)

6. TOWER 4

Over 40 m to the south of the East Gate, there was another stone tower belonging to the fortification system [for the location see Fig. 1:6], which was first investigated in the late 1980s (Sarnowski et al. 2010: 161, Note 16). Similar to the above-discussed cases, the tower, 3.40 m by 3.20 m, and the defense wall, 1.80 m wide, were constructed simultaneously [Fig. 11:5–8].

During the campaigns of 2008 and 2009 (Sarnowski, Kovalevskaja, and Tomas 2010: 161–162), a detailed plan of the section was drawn up and an old test trench, located to the south of the tower, was extended and excavated down to culturally sterile soil. Two pits of a regular outline were located by the southern end of the trench wall [Fig. 11:1]; they should be associated with the construction of wooden towers of the earliest, pre-Flavian phase of

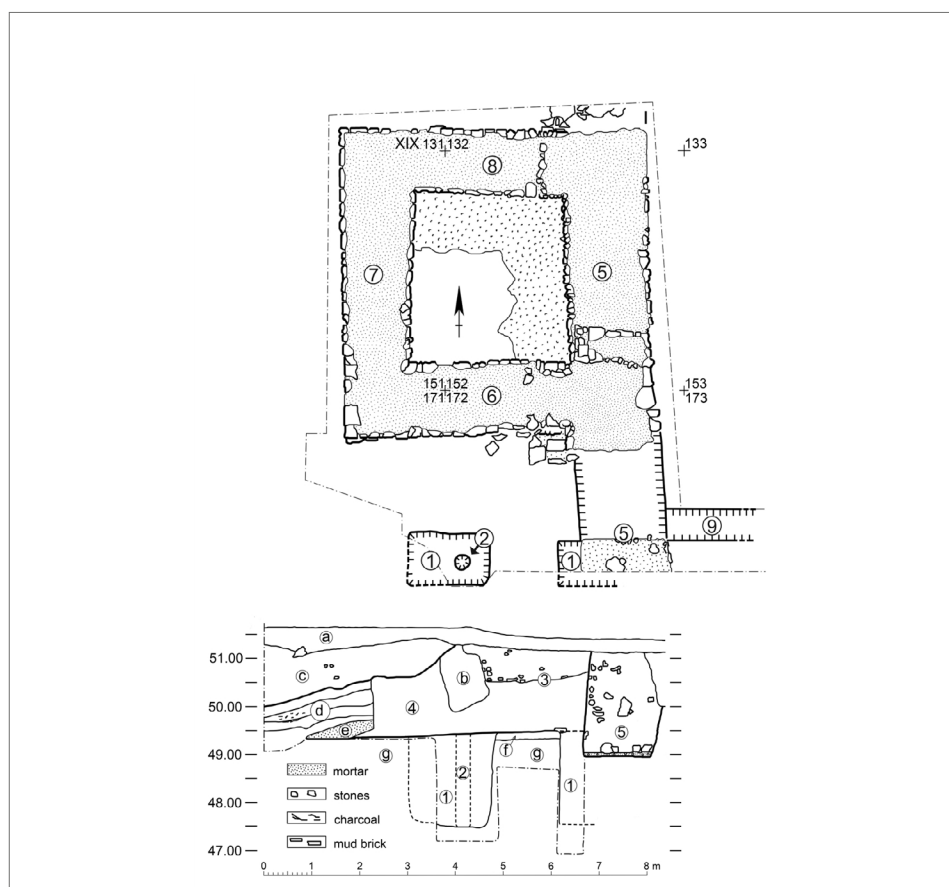


Fig. 11. Tower 4 [for the location see No. 5 in Fig. 1]: top, plan; bottom, southern section (for a description of layers, see Sarnowski, Kovalevskaja, and Tomas 2010: 161, Fig. 9): 1 – pits, 2 – post hole, 3 – rampart, 4 – ramp, 5 – curtain wall, 6–8 – Tower 4 walls, 9 – robber trench (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan T. Sarnowski and P. Zakrzewski)

the fortifications. In both cases it was possible to document the post holes belonging to the wooden tower [Fig. 11:2].

The south trench section revealed traces of a loess ramp [Fig. 11:4], which ran parallel to it in the timber-and-earth phase [Fig. 11:3], as opposed to the period after the construction of the stone fortifications, when the rampart was perpendicular to the curtain wall.

No coin finds were recorded from the vicinity of the tower.

7. TOWER 5

Cleaning and documentation works were also conducted in the area of the next tower in the line of the eastern fortifications, which was uncovered already between the late 1980s and early 1990s (Donevski 1989; 1994; 1996) [Fig. 1:7]. Remains of a rectangular tower (3.05 m by 2.85 m) were uncovered in 2011, along with a 21-m-long section of the curtain wall. The wall, which was 1.50–1.70 m wide, was supported by three perpendicular counterforts [Fig. 12:3].

The only observed traces of earlier construction phases consisted of a very poorly preserved earthen rampart, which seemed to have been unwittingly cut during the previous excavations (Sarnowski et al. 2014: 89).

Only two coins were found, deposited separately, in the area of Tower 5. They were dated to the late Roman period, the reigns of Constantine I and Arcadius, indicating that this area was used in the 4th–5th century AD.

8. TOWER 12

In 2013, the organisation and chronology of the southern front of the fortifications were studied at the location of

Tower 12 lying more than 70 m west of the southeastern corner of the fortress [Fig. 1:8]. The defenses in this area, already uncovered by Polish and Bulgarian archaeologists in the 1960s and the 1980s (Kolkówna 1967; Parnicki-Pudółko 1990: 46; Donevski 1996), were expected to be in good condition, but as it turned out, the earlier excavations had severely disrupted the original stratigraphic sequence around the tower. Moreover, numerous modern robber pits were attested throughout the area (Sarnowski et al. 2016: 183–187).

The area of the tower (3.30 m by 2.15 m) as well as a section of the curtain wall adjoining it was uncovered in the course of three seasons [Figs 13:2–3, 14:2–3]. The initial width of the curtain wall was 1.60 m, but in late antiquity, when the fortifications underwent general modifications, it was thickened by about 1.90 m. Remains of an U-shaped tower of the same period [Fig. 13:6], the dimensions of which were established in a small test trench more than 8 m south of the curtain wall. A long test trench was opened east of the tower in order to properly document the stratigraphic sequence.

Several construction phases were observed in the area, including the earliest one, the timber-and-earth defenses, which consisted of a ditch [Figs 13, 14:1] and a very small fragment of an earthen rampart [Fig. 14:1a]. A pit was discovered next to the rampart [Fig. 14:1b], most likely dug for one of the three internal posts supporting a wooden tower.

As a result of changes in the organisation and the construction of the defense system in the legionary fortress at

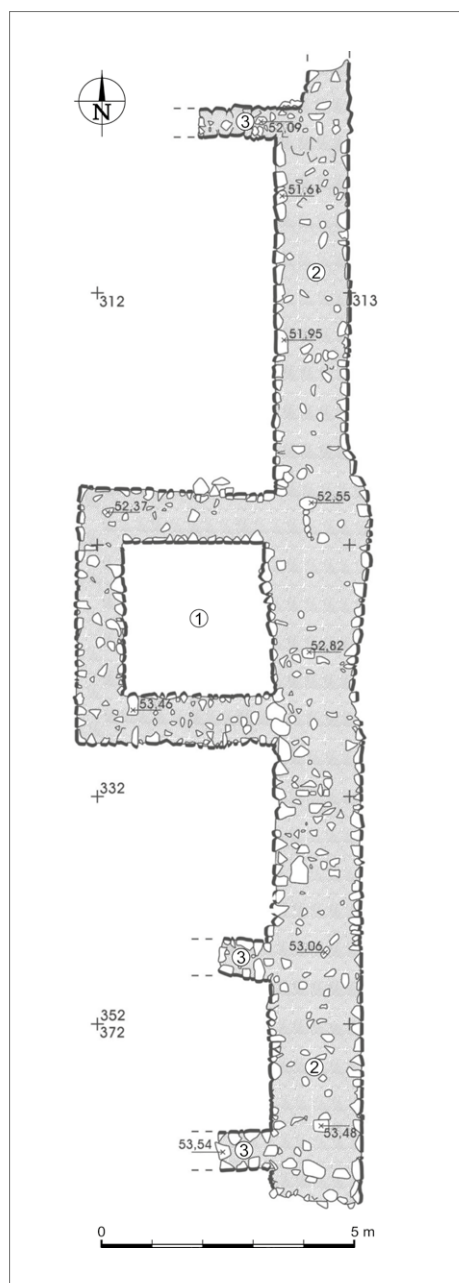


Fig. 12. Tower 5 and section of curtain wall [for the location see No. 7 in Fig. 1]: 1 – Tower 5, 2 – curtain wall, 3 – counterforts (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan A. Tomas, P. Zakrzewski)

the beginning of the 2nd century AD, an earthen rampart was partly dismantled and replaced with a stone wall built at the same time as the rectangular tower [see Fig. 13:2–3]. A new ditch was dug [Figs 13, 14:4], reaching at least 1.50 m in depth. Loess obtained in the course of these works was most likely used for the construction of a ramp. The maximum height of the ramp, equal to the walking level on the top of the wall, could be estimated at 2.20–2.60 m.

The last observed building activity, dated to the beginning of the 4th century AD, was the thickening of the curtain wall on both sides, which also probably led to an increase in its height. A new U-shaped tower, 9.30 m by 8.80 m, was also built, projecting more than 12 m from the fortification line. Its walls were made in the *opus mixtum* technique and had an impressive width of 2.50 m. In order to strengthen the surface around the new tower, the fill of an early ditch was replaced with large reused stone blocks and soil mixed with an abundance of lime mortar [Fig. 11:m]. The tower belonging to an earlier phase was rendered obsolete and therefore dismantled. In its place, a longer ramp with very gentle descent was constructed; it may have been used for pulling up heavy projectile engines.

Three coins were found during the investigations of Tower 12. The oldest specimen was struck under Tiberius and could be associated with the earliest building phases of the 1st or the beginning of the 2nd century. The second half of the 3rd century was represented by an *antoninian* of Probus, while the youngest one was struck under Arcadius.

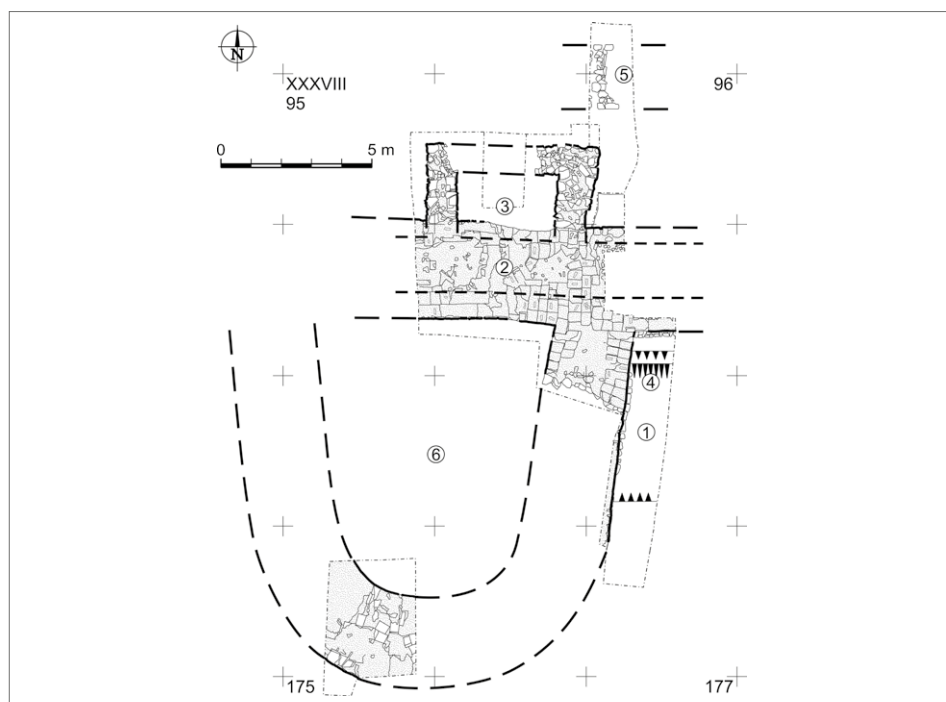


Fig. 13. Tower 12 [for the location see No. 8 in Fig. 1]: 1 – Neronian ditch, 2 – curtain wall, 3 – Tower 12, 4 – north end of the Trajanic ditch, 5 – *via sagularis*, 6 – U-shaped tower (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | plan M. Momot and P. Zakrzewski; original drawing T. Dziurdzik)

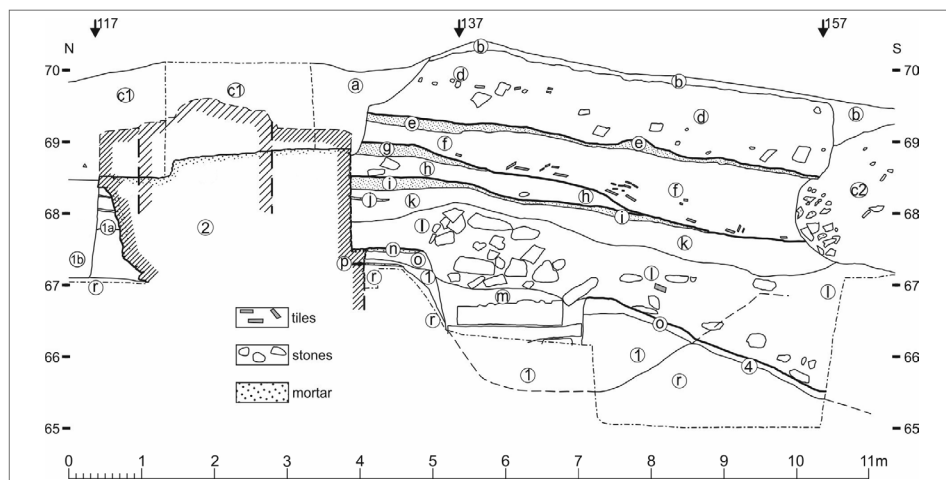


Fig. 14. Tower 12: section (for a description of the layers, see Sarnowski et al. 2016: 185, Fig. 10): 1 – Neronian ditch, 1a – rampart, 2 – curtain wall, 3 – Tower 12, 4 – north end of the Trajanic ditch (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | drawing T. Dziurdzik)

APPENDIX: COIN CATALOG

The catalog presents 128 coins from the investigations of the archaeological project at the legionary fortress of the First Italic legion at Novae between 2013 and 2016. The finds are arranged in chronological and typological order, and divided into Roman (including provincial Roman) and Byzantine coinage. The coins are considered here as a single assemblage despite the fact that they come from different, often distant sectors of the site. The archaeological contexts are briefly indicated in the respective catalog entries; an extensive discussion of the discoveries in particular areas is presented above.

Catalog entries are organized as follows: – ordinal number ([*] an asterisk was used to mark five coins comprising a foundation deposit from the last quarter of the 3rd century AD); field inventory number (small finds register) / Museum of Švištov

inventory number (for coins collected before 2013);

- date of issue (if established), mint and denomination (if impossible to determine module or metal, for instance ‘AE’ for bronze coins made of copper alloys);
- description of the obverse and the reverse, together with information on the state of preservation of legends;
- denotation of type;
- metrological data (weight, diameter, die axes expressed in hours, and remarks on the state of preservation, if relevant);
- archaeological context.

In cases where the same issue or series is represented by several items, the entries have been ordered according to the state of preservation of the coins. Separate plates with 1:1 photographs illustrate the more significant and better preserved specimens [*Figs 15–17*].

Abbreviations

cuir.	– cuirassed
diad.	– diademed
dr.	– draped
ex.	– exergue
l.	– left
laur.	– laureated
obv.	– obverse
r.	– right
rad.	– radiated
rev.	– reverse
std.	– seated
stg.	– standing
var.	– variant

I. ROMAN COINAGE**Tiberius (14–37)**

1. *Inv. No.* 127/09w (*No.* 10) / *Museum No.* 1048-HCΦ

c. 34–37, Rome mint, *as*

Obv. Rad. head l., [DIVVS AV]GVSTVS PA[TER]

Rev. Eagle stg. on globe, head r., wings half-spread, S-C

RIC I², 82

9.21 g; 27 mm; 6 h

(1) Tower 27, ha II, Sq. 171

2. *Inv. No.* 1/15w

35–36 (?), Rome mint, *sestertius*

Obv. Quadriga of elephants l., with riders; figure of Augustus, rad., in the car, holding laurel-branch in r. hand and long sceptre in l., [DIVO/AVG]VSTO/[S]PQR

Rev. TI [CAESAR DIVI AVG F AVG-VST] P M TR POT XXXVII (?) round SC
RIC I², 62 – possibly also RIC I², 56 (AD 34–35) and RIC I², 68 (AD 36–37)

24.34 g; 33 mm; 12 h

(8) Tower 12, ha XXXVIII, Sq. 97

3. *Inv. No.* 154/09w (*No.* 9) / *Museum No.* 3839

Rome mint, *as*

Obv. Head r., [...]AVG F AVG[...]

Rev. Illegible, [...] MAXIM TR [...]

Uncertain RIC type

9.13 g; 26 mm; ?

(1) Tower 27, ha II, Sq. 191

Gaius (37–41)

4. *Inv. No.* 113/09w (*No.* 8) / *Museum No.* 3837

37–38, Rome mint, *as*

Obv. Bare head l., C CAESAR AVG GERMANICVS PON M TR POT

Rev. Vesta, veiled and dr., std. l. on throne, holding patera in r. hand and long transverse sceptre in l., VESTA S-C
RIC I², 38

9.70 g; 28 mm; 8 h

(1) Tower 27, ha II, Sq. 151

5. *Inv. No.* 124/08w / *Museum No.* 3819

37–41, Rome mint, *dupondius*

Obv. Germanicus, bare-headed, stg. in quadriga r., holding eagle-tipped sceptre in l. hand, GERMANICV[S]/CAESAR

Rev. Germanicus, bare-headed, stg. l., r. hand raised, l. holding aquila, SIGNIS-RECE[PT]/[D]EVICTIS-GER[M]/S-C
RIC I², 57

14.34 g; 29 mm; 7 h

(1) Tower 27, ha II, Sq. 131

6. *Inv. No.* 243/07w / *Museum No.* 929-HCΦ

37–41, Rome mint, *as*

Obv. Agrippa head l., wearing rostral crown, M A[GRIPP]A L F [COS III]

Rev. Neptune stg. l., holding small dolphin in r. hand and vertical trident in l., [S-C]

RIC I², 58

6.47 g; 28 mm; 6 h (pierced)

Tower 27, ha II, Sq. 149

Claudius (41–54)

7. *Inv. No.* 164/09w / *Museum No.* 3838

c. 41–50, Rome mint, *as*

Obv. Bare head l., [TI CL]AVDIVS CAESAR AVG P M [TR P IMP]

Rev. Minerva r., helmeted and dr., r. hurling javelin, round shield on l. arm, S-C
RIC I², 100

9.45 g; 29 mm; 7 h

Tower 27, ha II, Sq. 191

8. *Inv. No.* 173/09w / *Museum No.* 3840
c. 50–54, Rome mint, *as*
Obv. Bare head l., [T]I [CL]AVDIVS
CAESAR AV[G P M TR P I]MP P P
Rev. Libertas stg. facing, head r., holding
pileus in r. hand, l. extendend, [LIBERTAS
AVGVSTA], S-C
RIC I², 113
8.98 g; 28 mm; 7 h
Tower 27, ha II, Sq. 191

Vespasian (69–79)

9. *Inv. No.* 170/09w / *Museum No.* 3841
71, Rome mint, *denarius*
Obv. Laur. head r., IMP CA[ES VESP]
AVG P M
Rev. Vesta std. l., holding *simpulum*,
TRI-POT
RIC II², 46
3.21 g; 17 mm; 5 h
Tower 27, ha II, Sq. 191

10. *Inv. No.* 1/13w/f
71, Rome mint, *sestertius*
Obv. Laur. head r., IMP CAES VESPAS
AVG P M TR P P P COS III
Rev. Roma stg. l. holding Victory and
spear, ROMA, S-C
RIC II², 244
27.65 g; 31 mm; 5 h
Tower 27, ha II, Sq. 132 (inner side; test pit)

11. *Inv. No.* 168/09w / *Museum No.* 3859
73 or 74 (for Domitian), Rome mint,
dupondius (?)
Obv. Laureate head r., bust dr., CAES[AR
AV]G F DOMITIAN COS II
Rev. Aequitas stg. l., holding scales and
rod, AEQVITAS AVGVST, S-C
RIC II², 657
9.84 g; 27 mm; 6 h
Tower 27, ha II, Sq. 191

12. *Inv. No.* 13/10w / *Museum No.* 4019
74 (?), Rome mint, *as*
Obv. Laur. head r., [IMP CA]ESAR VESP
AVG COS V (?)
Rev. Aequitas stg. l., holding scales and
rod, AEQ[VITAS] AVGVST, S-C
RIC II², 720 (?) or RIC II², 821 (COS VI –
AD 75) or RIC II², 890 (COS VII – AD 76)
6.34 g; >26 mm; 6 h (broken, about 1/2)
North Gate, ha III, Sq. 137

13. *Inv. No.* 22/11w / *Museum No.* 4101
76, Rome mint, *as*
Obv. Laur. head r., IMP CAESAR VESP
AVG COS VII
Rev. Aequitas stg. l., holding scales and
rod, AEQVITAS AVGVST, S-C
RIC II², 890
--; --; --
Tower 27, ha II, Sq. 111

Trajan (98–117)

14. *Inv. No.* 240/12w / *Museum No.* 4108
Rome mint, *dupondius*
Obv. Rad. head r., [...]
Rev. Figure std. l. (?), [...], in ex.: [...]
Uncertain RIC type
13.61 g; 26 mm; 7 h
North Gate, ha III, Sq. 96

Marcus Aurelius (161–180)

15. *Inv. No.* 123/08w / *Museum No.* 3818
161/162, Caesarea in Cappadocia mint, AE
Obv. Laur. head r., [AYTO]K AN[TōNeI]-
NO[C CeBACTOC]
Rev. Mons Argaeus, KAICAPεωN-T II
APTAIω, in ex.: εTO B
Ganschow 267c
8.85 g; 22 x 24 mm; 12 h
Tower 27, ha II, Sq. 171

Uncertain issuers (1st–2nd century AD)**16.** *Inv. No. 241/12w / Museum No. 4110 (?)*First half of 1st century, Rome mint (?), *as**Obv.* Head l., [...]*Rev.* Illegible

Uncertain RIC type

4.54 g; 27 mm; ?

North Gate, ha III, Sq. 96

17. *Inv. No. 140/09w (No. 11) / Museum No. 972-HCΦ*1st century (?), Rome mint (?), *as**Obv.* Emperor's head (?)*Rev.* Illegible

Uncertain RIC type

5.49 g; 26 mm; ?

Tower 27, ha II, Sq. 171

18. *Inv. No. 153/09w (No. 7) / Museum No. 1047-HCΦ*1st century (?), Rome mint (?), *as**Obv.* Emperor's head*Rev.* Emperor (?) stg. l.

Uncertain RIC type

6.79 g; 28 mm; 2 h (?)

Tower 27, ha II, Sq. 191

19. *Inv. No. 234/07w / Museum No. 928-HCΦ*1st–beginning of 2nd century(?), Rome mint, *as**Obv.* Emperor's bust r., [...]*Rev.* Figure stg., [...], S-C

Uncertain RIC type

6.72 g; 23 mm; 5 h

Tower 27, ha II, Sq. 171

Septimius Severus (193–211)**20.** *Inv. No. 55/06w / Museum No. 3661*

Uncertain provincial mint, AE

Obv. Laur. head r., [...]*Rev.* Fortuna (?) stg. l., holding cornucopia and rudder (?), [...]

Uncertain type

7.93 g; 27 mm; 7 h

Northeastern corner tower, ha V, Sq. 149

Caracalla (211–217)**21.** *Inv. No. 215/07w / Museum No. 3715*

Marcianopolis mint (Quintilianus), AE

Obv. Laureate head r., ANTONINOC
ΠΙΟC AVTOVCTOC*Rev.* Eagle stg. on altar, with *signum* on either side; all set on garlanded table, V[Π KV]NTIAIANOV
MAPKIANOΠIOAIT-[O]N (the latter two letters between the legs of the table)
AMNG I, 648

8.44 g; 27 mm; 2 h

Tower 27, ha II, Sq. 151

22. *Inv. No. 226/07w*

Caracalla (?), Nicopolis ad Istrum mint, AE

Obv. Rad. bust of young, beardless emperor r., [...] P [...] -TONI [...]*Rev.* Nemesis stg. l., [...], across inner fields: CTP-ON VII (?)

Uncertain type

10.11 g; 25 mm; 7 h

Tower 27, ha II, Sq. 151

23. *Inv. No. 58/06w / Museum No. 3662*

Caracalla(?), Nicopolis ad Istrum mint, AE

Obv. Emperor's bust r., [...]*Rev.* Herakles stg. r., ΝΙΚΟΠΙΟΛ [...] O [...]

Uncertain type

3.27 g; 17 mm; 2 h

Northeastern corner tower, test pit (west of tower)

Macrinus (217–218)

24. *Inv. No.* 249/07w / *Museum No.* 3716
 Nicopolis ad Istrum mint (Staius Longinus), AE
Obv. Laur. head r., [...]N OΠEΛIOC CEVH [M]AKPINOC
Rev. Asklepios stg. facing, head l., leaning on serpent-entwined staff [...]NΓINOV NIKOΠIOAITON ΠPOC [...]
 Varbanov I, 3448 var.
 14.29 g; 26 mm; 7 h
 Northeastern corner tower/Tower No. 2, ha V, Sq. 293

Severus Alexander (222–235)

25. *Inv. No.* 231/07w / *Museum No.* 3718
 Marcianopolis mint (Tereventinus), AE
Obv. Laur., dr., and cuir. bust of Severus Alexander and dr. bust of Julia Mamaea, wearing *stephane*, facing one another, [...]M AΛ[E]ΞANΔP[...]
Rev. Homonoia stg. l., holding cornucopia in l. hand and patera over altar in r., [...]TEPEBENTIN-OV MAP[K]IAN[...]
 AMNG I, 1079 (?)
 9.96 g; 27 mm; 7 h
 Tower 27, ha II, Sq. 171

Gordian III (238–244)

26. *Inv. No.* 13/14w
 Hadrianopolis mint, AE
Obv. Laur. bust r., AVT K M ANT ΓOPΔIANOC
Rev. Tyche stg. l. within tetrastyle temple, AΔPIA-NOΠIOΛ-εITΩN
 Varbanov II, 3856
 7.98 g; 25 mm; 2 h
 East Gate, ha XII, Sq. 349

Uncertain issuers (first half of 3rd century)

27. *Inv. No.* 237/07w / *Museum No.* 3719
 First half of 3rd century, uncertain provincial mint, AE
Obv. Emperor's bust r., [...]
Rev. Female figure stg. facing, head r., [...]O[...]
 Uncertain RIC type
 2.56 g; 19 mm; 6 h
 Tower 27, ha II, Sq. 171

Valerian I (253–260)

28. *Inv. No.* 242/07w / *Museum No.* 3720
 255–256, Antioch mint, *antoninianus*
Obv. Rad. bust r., IMP C P LIC VALE-RIANVS P F AVG
Rev. Two emperors stg. facing each other, the one holding spear and globe, the other Victory and spear, VIRTVS AVGG
 RIC V.1, 293
 2.80 g; 20 mm; 6 h
 Tower 27, ha II, Sq. 171

Gallienus (253–268)

29. *Inv. No.* 202/07w / *Museum No.* 3721
 Uncertain mint, *antoninianus*
Obv. Rad. bust r., [GA]LL[I]ENVVS AVG
Rev. Female figure stg. l., holding cornucopia in l. hand, r. hand over altar (?), [...]Uncertain RIC type
 2.30 g; 22 mm; 7 h
 Tower 27, ha II, Sq. 191

30. *Inv. No.* 207/07w / *Museum No.* 3722
 Uncertain mint, *antoninianus*
Obv. Rad. bust r., [... GAL]LIENVVS AVG
Rev. Figure stg. l., [...]Uncertain RIC type
 2.13 g; 20 mm; 11 h
 Tower 27, ha II, Sq. 171

Claudius II (268–270)

31. *Inv. No. 225/07w / Museum No. 3725*

Siscia mint, *antoninianus*

Obv. Rad. bust r., IMP CLAV[DI]VS AVG

Rev. Providentia stg. l., holding baton and cornucopiae, at foot, globe, PROVIDEN AVG, in r. field: T

RIC V.1, 187

3.09 g; 18 mm; 1 h

Tower 27, ha II, Sq. 171 (?)

32. *Inv. No. 34/14w*

Uncertain mint, *antoninianus*

Obv. Rad. bust r., IMP CL[AVDIVS ...]

Rev. Providentia stg. l., holding baton and cornucopiae, at foot, globe, PROV[...]

Uncertain RIC type

2.30 g; 18 mm; 6 h

East Gate, ha XII, Sq. 329

33. *Inv. No. 204/07w / Museum No. 3724*

Uncertain mint, *antoninianus*

Obv. Rad. bust r., [... CLAV]DIVS AVG

Rev. Pax stg. facing, head l., holding branch and sceptre, PAX [...]

Uncertain RIC type

1.61 g; 18 mm; 12 h

Tower 27, ha II, Sq. 171

34. *Inv. No. 247/07w / Museum No. 3723*

Uncertain mint, *antoninianus*

Obv. Rad. bust r., [... CLA]VDI[VS ...]

Rev. Female figure stg. l., holding cornucopia, [...] AVG

Uncertain RIC type

2.51 g; 18 mm; 11 h

Northeastern corner tower/Tower No. 2, ha V, Sq. –, “from separate spoil heap”

Aurelian (270–275)

35. *Inv. No. 246/07w / Museum No. 3727*

Rome mint, *antoninianus*

Obv. Rad. bust r., IMP AVRELIANVS AVG

Rev. Sol stg. between two captives, ORIENS AVG, in ex.: BXXIR

RIC V.1, 63

3.48 g; 22 mm; 12 h

Northeastern corner tower/Tower No. 2, ha V, Sq. 292

36*. *Inv. No. 123/09w (6a) / Museum No. 3843*

Mediolanum mint, *antoninianus*

Obv. Rad. bust r., IMP AVRELIANVS AVG

Rev. Soldier stg. r., presenting globe crowned by Victory to emperor stg. l., [F]I[DE]S MILITVM, in ex.: T

RIC V.1, 126

3.62 g; 23 mm; 11 h

Tower 27, ha II, Sq. 191

37*. *Inv. No. 123/09w (6b) / Museum No. 3842*

Cyzicus mint, *antoninianus*

Obv. Rad. bust r., IMP AVRELIANVS AVG

Rev. Emperor stg. r., holding sceptre, receiving globe from Jupiter stg. l., holding spear, [CONCORD] MILIT, in ex.: *C*

RIC V.1, 342

3.19 g; 21 x 23 mm; 5 h

Tower 27, ha II, Sq. 191

38*. *Inv. No. 123/09w (6c) / Museum No. 3844*

Cyzicus mint, *antoninianus*

Obv. Rad. bust r., IMP AVRELIANVS AVG

Rev. Female stg. r., presenting wreath to emperor stg. l., holding spear, RESTITVT [O]RBIS, in ex.: A

RIC V.1, 348

3.66 g; 24 mm; 1 h

Tower 27, ha II, Sq. 191



Fig. 15. Selected coins struck from the 1st until the mid-3rd centuries AD (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | photos and processing P. Jaworski)

Tacitus (275-276)

39. *Inv. No.* 128/09w / *Museum No.* 3848

Serdica mint, *antoninianus*

Obv. Rad. bust r., IMP C M CL TAC-ITVS AVG

Rev. Roma stg. r., holding spear, receiving globe from emperor stg. l., holding sceptre, between them: A, CLEMENTIA TEMP, in ex.: KA

RIC V.1, –; reverse type identical to RIC V.1, 126 (Ticinum)

3.48 g; 22 mm; 10 h (plating partly preserved)

Tower 27, ha II, Sq. 191

40. *Inv. No.* 244/07w / *Museum No.* 3729

Ticinum mint, *antoninianus*

Obv. Rad. bust r., IMP C M CL TACITVS AVG

Rev. Victory stg. r., holding palm-branch, presenting wreath to emperor stg. l., holding sceptre, SPES PVB[L]ICA, in ex.: T

RIC V.1, 167 (var.)

4.14 g; 22 mm; 5 h

Northeastern corner tower/Tower No. 2, ha V, Sq. 293

Florian (276)

41. *Inv. No.* 231/12w / *Museum No.* 4113

Rome mint, *antoninianus*

Obv. Rad. bust r., IMP C FLORIANVS AVG

Rev. Salus stg. l., holding sceptre, feeding serpent rising from altar, SALVS AVG, in ex.: XXIA (?)

RIC V.1, 40

3.76 g; 22 mm; 6 h

East Gate, ha XII, Sq. 349

Probus (276-282)

42. *Inv. No.* 221/07w / *Museum No.* 3730

Siscia mint, *antoninianus*

Obv. Rad bust r.. IMP PROBVS P F AVG

Rev. Pax stg. l., holding olive-branch and sceptre, PAX AVGVSTI, in r. field: V, in ex.: XXI

RIC V.2, 713

3.58 g; 23 mm; 12 h

Tower 27, ha II, Sq. 151

43. *Inv. No.* 4/13w/f

Siscia mint, *antoninianus*

Obv. Rad bust r.. IMP C PROBVS AVG

Rev. Pax stg. l., holding olive-branch and sceptre, PAX AVGVSTI, in ex.: XXIS
RIC V.2, 714 (var.)

3.31 g; 21 mm; 10 h

Tower 12, ha XXXVIII, Sq. 115

44. *Inv. No.* 20/11w / *Museum No.* 4103

Siscia mint, *antoninianus*

Obv. Rad. bust l., in imperial mantle, holding scepter surmounted by eagle, IMP C M AVR PROBVS P F AVG

Rev. Mars walking r., holding spear and trophy, VIRTVS PROBI AVG, in r. field: V, in ex.: XXI

RIC V.2, 810

3.62 g; 21 mm; 7 h

North Gate, ha III, Sq. 76

45*. *Inv. No.* 123/09w (6e) / *Museum No.* 3845

Siscia mint, *antoninianus*

Obv. Rad. bust l., in imperial mantle, holding scepter surmounted by eagle, IMP C M AVR PROBVS P F AVG

Rev. Emperor riding l., r. hand raised, holding sceptre in l., captive at foot, ADVENTVS PROBI AVG, between the horse's back legs: –, in ex.: XXI

RIC V.2, 632 (var.)

3.44 g; 23 mm; 6 h

Tower 27, ha II, Sq. 191

46*. *Inv. No. 123/09w (6d) / Museum No. 3846*

Siscia mint, *antoninianus*

Obv. Rad. bust r., IMP C M AVR
PROBVS AVG

Rev. Emperor stg. r., clasping hand of
Concordia stg. l., between them: V, CON-
CORD MILIT, in ex.: XXI

RIC V.2, 651 (var.)

3.80 g; 23 mm; 11 h

Tower 27, ha II, Sq. 191

Carus (282–283)

47. *Inv. No. 2/10w / Museum No. 4021*

Ticinum mint, *antoninianus*

Obv. Rad. bust r., IMP CARVS P F AVG

Rev. Spes walking l., holding flower and
raising robe, S[PES P]VBLICA, in ex.:
SXXI

RIC V.2, 82

2.97 g; 22 mm; 12 h (pierced twice)

Tower 4, ha XIX, Sq. 173

Diocletian (284–305)

48. *Inv. No. 28/14w*

289–290, Siscia mint, *antoninianus*

Obv. Rad. bust r., IMP C C VAL
DIOCLETIANVS P F AVG

Rev. Emperor stg. r. and Jupiter stg. l.,
sacrificing at altar, each holding sceptre,
CONSERVATOR AVGG, in ex.: XXI[...].I•

RIC V.2, 263 (var.)

3.83 g; 23 mm; 6 h

East Gate, ha XII, Sq. 329

49. *Inv. No. 16/10w / Museum No. 4022*

291, Heraclea mint, *antoninianus*

Obv. Rad. bust r., IMP C C VAL DIO-
CLETIANVS P F AVG

Rev. Emperor stg. r., holding *parazonium*,
receiving Victory Jupiter stg. l., holding
sceptre, CONCORDIA [MIL]ITVM, in
field: ε, in ex.: •XXI•

RIC V.2, 284

4.14 g; 22 mm; 12 h

North Gate, ha III, Sq. 137

50. *Inv. No. 205/07w / Museum No. 3731*

292, Heraclea mint, *antoninianus*

Obv. Rad. bust r., IMP C C VAL
DIOCLETIANVS P F AVG

Rev. Emperor stg. r., holding *parazonium*,
receiving Victory Jupiter stg. l., holding
sceptre, CONCORDIA MILITVM, in
field: HB, in ex.: [•XXI•] (?)

RIC V.2, 284 (?)

2.15 g; 21 mm; 12 h

Tower 27, ha II, Sq. 171

51. *Inv. No. 49/14w*

c. 295–299, Cyzicus mint, AE

Obv. Rad. bust r., IMP C C VAL DIO-
CLETIANVS P F AVG

Rev. Emperor stg. r., receiving Victory
Jupiter stg. l., leaning on sceptre, CON-
CORDIA MI[L]IT[VM], in field: ΚΓ

RIC VI, 15–17

3.20 g; 22 mm; 12 h

East Gate, ha XII, Sq. 369

Maximian (286–305)

52. *Inv. No. 116/09w (No. 4) / Museum No. 3849*

292–295, Heraclea mint, *antoninianus*

Obv. Rad. bust r., [IMP C M] A MAX-
IMIANVS P F AVG

Rev. Emperor stg. r., holding *parazonium*,
receiving Victory Jupiter stg. l., holding
sceptre, , CONCORDIA [MILITVM], in
field: ΗΓ, in ex.: •[XXI•]

RIC V.2, 595

1.72 g; 20 mm; 12 h

Tower 27, ha II, Sq. 191



Fig. 16. Selected late Roman coins (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | Photos and processing P. Jaworski)

Uncertain issuers (second half of 3rd century)

53. *Inv. No. 222/07w / Museum No. 933-HCΦ*

Uncertain mint, *antoninianus*

Obv. Rad. bust r., [... A]VG

Rev. Two figures stg. facing each other, [C] ONCO[RDIA ...]

Uncertain RIC type

1.23 g; 19 mm; ?

Tower 27, ha II, Sq. 151

54. *Inv. No. 4/10w / Museum No. 1060-HCΦ*

Uncertain mint, *antoninianus*

Obv. Rad. bust r., [...]

Rev. Female figure stg. l., holding cornucopia, [...]

Uncertain RIC type

2.72 g; 20 mm; 11 h

Tower 27, ha II, Sq. 171

Galerius (293–311)

55. *Inv. No. 48/14w*

308–309, Cyzicus mint, AE

Obv. Laur. bust r., GAL MAXIMIANVS P F AVG

Rev. Mars advancing r., naked but for floating chlamys, holding spear and trophy, VIRTVTI EXERCITVS, in l. field: B, in ex.: MKV

RIC VI, 47

6,23 g; 27 mm; 6 h

East Gate, ha XII, Sq. 329

Licinius I (307–324)

56. *Inv. No. 250/07w / Museum No. 3733*

311, Nicomedia mint, AE

Obv. Laur. bust r., IMP C VAL LIC[IN LICINVS P F AVG]

Rev. Jupiter stg l., chlamys hanging behind, in r. hand holding Victory on globe, l. hand leaning on sceptre, eagle at feet to l., IOVI CONSER[VATORI], in r. field: [...], in ex.:

SMN

RIC VI, 69a

1.48 g; 22 mm; 6 h (broken, about 1/2)

Northeastern corner tower/Tower No. 2, ha V, Sq. 293

57. *Inv. No. 88/14w*

313, Heraclea mint, AE

Obv. Laur. bust r., IMP C VAL LICIN LICINVS P F AVG

Rev. Jupiter stg. facing, head l., in r. hand holding Victory on globe, l. hand leaning on sceptre, eagle with wreath in beak at feet to l., IOVI CONSERVATORI AVGG, in r. field: Δ, in ex.: SMHT

RIC VI, 73

3.55 g; 21 mm; 12 h

East Gate, ha XII, Sq. 309

Constantine I (308–337)

58. *Inv. No. 105/09w (No. 2) / Museum No. 3850*

326–328, Mennica Thessaloniki, AE

Obv. Laur. head r., [CONSTA]N[TINVS [AVG] (?)

Rev. Camp gate, two turrets, no doors, star above, PROVIDENTIAE AVGG, in ex.: SMTST

RIC VII, 153

2.96 g; 18 mm, 5 h

Tower 27, ha II, Sq. 151

59. *Inv. No. 218/07w / Museum No. 3734*

330–333, Thessalonica mint, AE

Obv. Diad. bust r., CONSTANTINVS MAX AVG

Rev. Two soldiers stg. facing, looking at one another, reversed spear in outer hand, inner hand on shield resting on ground, between them two standards, GLORIA EXERC[ITVS], in ex.: SMTSA

RIC VII, 183

1.95 g; 18 mm; 12 h
Tower 27, ha II, Sq. 151

60. *Inv. No.* 18/11w / *Museum No.* 4104
330–335, Nicomedia mint, AE
Obv. Diad. bust r., CONSTANTINVS
MAX AVG

Rev. Two soldiers stg., between them two
standards, GLORIA EXERCITVS, in ex.
SMNS

RIC VII, 188

1.97 g; 17 mm; 12 h
Tower 5 (test pit), ha XIX, Sq. 273

61. *Inv. No.* 203/07w / *Museum No.* 3737
336–337, uncertain mint, AE
Obv. Diad. bust r., CONSTANTINVS
MAX AVG

Rev. Two soldiers stg., between them one
standard, [G]LORIA EXERC[I]TVS, in
ex.: [...]

Uncertain RIC type
1.89 g; 19 mm; 12 h (pierced)
Tower 27, ha II, Sq. 191

Urbs Roma series

62. *Inv. No.* 230/12w
About 336–340, uncertain mint, AE
Obv. Helmeted and dr. bust of Roma l.,
[VRB]S [ROMA]

Rev. Two soldiers stg., between them one
standard, [GLORIA EXERCITVS], in ex.:
[...]

Uncertain RIC type

—; —; —

East Gate, ha XII, Sq. 350

Crispus (317–326)

63. *Inv. No.* 15/10w / *Museum No.* 4024
324–325, Rome mint, AE
Obv. Laur. bust l., FL IVL CRISPVS NOB
CAES

Rev. Camp gate, two turrets, no doors,
star above, [PROVIDENTIAE CAESS],
in ex.: RS

RIC VII, 266

2.74 g; 19 mm; 12 h
North Gate, ha III, Sq. 116

Constantine II (337–340)

64. *Inv. No.* 65/14w
333–336, Heraclea mint, AE
Obv. Diad. bust r., CONSTANTINVS IVN
NOB C

Rev. Two soldiers stg., between them two
standards, GLORIA EXERCITVS, in ex.:
SMHA*

RIC VII, 137

2.59 g; 18 mm; 11 h
East Gate, ha XII, Sq. 309

Constans or Constantius II (caesars)

65. *Inv. No.* 240/07w / *Museum No.* 3736
333–336, uncertain mint, AE
Obv. Diad. bust r., [...]ONSTAN[...]
Rev. Two soldiers stg., between them two
standards, [GLORIA EXERCITVS], in
ex.: [...]

Uncertain RIC type

1.68 g; 17 mm; 6 h
Tower 27, ha II, Sq. 131

Constantine I (posthumous)

66. *Inv. No.* 248/07w / *Museum No.* 3758
337–340, Nicomedia mint, AE
Obv. Veiled head r., [DV CONSTANT]
INVS PT AVGG

Rev. Emperor, veiled, in quadriga to r., the
hand of God reaches down to him, in ex.:
SMNA

RIC VIII, 18

1.35 g; 14 mm; 12 h
Northeastern corner tower/Tower No. 2,
ha V, Sq. 293

67. *Inv. No.* 60/o6w / *Museum No.* 3664
347–348, Constantinople mint, AE
Obv. Veiled head r., DV CONST[AN-
TINVS] PT AVGG
Rev. Emperor stg. r., veiled, raising r. hand,
VN-MR, in ex.: CONSA
RIC VIII, 68
1.47 g; 15 mm; 6 h
Northeastern corner tower/Tower No. 2,
ha V, Sq. 129

68. *Inv. No.* 210/o7w / *Museum No.* 3742
347–348, uncertain mint, AE
Obv. Veiled head r., DV CONSTANTI-
NVS PT AVGG
Rev. Emperor stg. r., veiled, raising r. hand,
[VN]-MR, in ex.: [...] *Uncertain RIC type*
1.45 g; 15 mm; 6 h
Tower 27, ha II, Sq. 171

Constans (337–350)

69. *Inv. No.* 213/o7w / *Museum No.* 3740
340, Cyzicus mint, AE
Obv. Diad. bust r., [D] N CONSTANS P
F AVG
Rev. Two soldiers stg., between them one
standard, G[LORIA EXERCITVS], in ex.:
SMKT
RIC VIII, 18
1.39 g; 16 mm; 6 h
Tower 27, ha II, Sq. 171

70. *Inv. No.* 216/o7w / *Museum No.* 3739
347–348, Thessalonica mint, AE
Obv. Diad. bust r., CONSTANS P F A[VG]
Rev. Two Victories facing one another, each
holding wreath and palm-branch, VICTO-
RIAE DD A[VGGQ NN], in ex.: SMTSA
RIC VIII, 106
0.74 g; 16 mm; 6 h
Tower 27, ha II, Sq. 151

Constantius II (337–361)

71. *Inv. No.* 219/o7w / *Museum No.* 3738
336–337, uncertain mint, AE
Obv. Diad. bust r., FL IVL CONSTAN-
TIVS NOB C
Rev. Two soldiers stg., between them one
standard, GLORIA EXER[CI]TVS, in ex.:
[...] *Uncertain RIC type*
1.29 g; 15 mm; 12 h
Tower 27, ha II, Sq. 151

72. *Inv. No.* 3/10w / *Museum No.* 4026
347–348, uncertain eastern mint, AE
Obv. Diad. bust r., D N CONSTANTIVS
P F AVG
Rev. VOT/XX/MVLT/XXX within wreath,
in ex.: [...] *Uncertain RIC type*
1.78 g; 17 mm; 10 h
Tower 27, ha II, Sq. 131

73. *Inv. No.* 223/o7w / *Museum No.* 3743
347–348, uncertain eastern mint, AE
Obv. Diad. bust r., D N CONS[TANTI]
VS P F AVG
Rev. VOT/[XX]/MVLT/XXX within
wreath, in ex.: [...] *Uncertain RIC type*
1.67 g; 14 mm; 1 h
Tower 27, ha II, Sq. 151

74. *Inv. No.* 33/14w
351–355, Thessalonica mint, AE
Obv. Diad. bust r., D N CONSTANTIVS
P F AVG
Rev. Helmeted soldier l., shield on l. arm,
spearing falling horseman, shield on
ground at r.; horseman turns to face soldier
and extends l. arm, FEL TEMP [REPA]
RATIO, in l. field: M, in ex.: SMTS (?)
RIC VIII, 211

1.50 g; 17 mm; 11 h

East Gate, ha XII, Sq. 329

75. *Inv. No. 8/10w / Museum No. 4025*

351–355, Heraclea mint, AE

Obv. Diad. bust r., D [N CONST]ANTIVS
P F AVG, in l. field: Δ

Rev. Soldier spearing fallen horseman, [FEL
TEMP REPAR]ATI[O], in ex.: SMHA (?)
RIC VIII, 86

3.98 g; 19 x 23 mm; 12 h

North Gate, ha III, Sq. 157

76. *Inv. No. 56/06w / Museum No. 3665*

351–355, Heraclea mint, AE

Obv. Diad. bust r., D N CONSTANTIVS
P F AVG

Rev. Soldier spearing fallen horseman, FEL
TEMP REPARATIO, in ex.: SMHT (?)
RIC VIII, 90

1.70 g; 18 mm; 5 h and 11 h (reverse struck
twice)

Northeastern corner tower/Tower No. 2,
ha V, Sq. 150

77. *Inv. No. 220/07w / Museum No. 3744*

355–361 (?), Siscia mint, AE

Obv. Diad. bust r., D N CONSTANTIVS
P F A[VG]

Rev. Soldier spearing fallen horseman, [FEL
T]EMP REPARATIO, in l. field: M, in ex.:
SMSIS

RIC VIII, – (similar to RIC VIII, 369–384
but different mint mark)

1.71 g; 20 mm; 12 h

Tower 27, ha II, Sq. 151

78. *Inv. No. 232/12w / Museum No. 4121*

351–361, Constantinople mint, AE

Obv. Diad. bust r., [DN C]ONSTANTIVS
P F AVG

Rev. Soldier spearing fallen horseman, FEL
TEMP RE[PARA]TIO, in ex.: CONS[...]
Uncertain RIC type

2.96 g; 17 mm; 5 h

East Gate, ha XII, Sq. 330

79. *Inv. No. 106/09w (No. 3) / Museum No. 3852*

351–361, Nicomedia mint (?), AE

Obv. Diad. bust r., D N CONSTANTIVS
P F AVG

Rev. Soldier spearing fallen horseman,
[FEL TEMP RE]PARATIO, in ex.:
[SM]N[...] (?)

Uncertain RIC type

2.78 g; 17 mm; 12 h

Tower 27, ha II, Sq. 151

80. *Inv. No. 217/07w / Museum No. 3745*

351–361, uncertain mint, AE

Obv. Diad. bust r., D N CONSTA[N]TIVS
P F A[VG]

Rev. Soldier spearing fallen horseman, [FEL
T]EMP REPARATIO, w l. field: M, in ex.:
[...]A

Uncertain RIC type

1.83 g; 18 mm; 12 h

Tower 27, ha II, Sq. 151

81. *Inv. No. 238/07w / Museum No. 3746*

351–361, uncertain mint, AE

Obv. Diad. bust r., D N CONSTANTIVS
P F [AVG]

Rev. Soldier spearing fallen horseman, FEL
TEMP [REPARATIO], in l. field: –, in ex.:
[...]

Uncertain RIC type

1.82 g; 17 mm; 4 h

Tower 27, ha II, Sq. 171

Constantius Gallus (351–354)

82. *Inv. No.* 236/07w / *Museum No.* 3747
351–355, Siscia mint, AE
Obv. Bareheaded bust r., D N CONSTAN-
TIVS IVN NOB C
Rev. Soldier spearing fallen horseman, FEL
TEMP REPARATIO, in ex.: Γ SIS
RIC VIII, 351
2.41 g; 18 mm; 6 h
Tower 27, ha II, Sq. 171

83. *Inv. No.* 9/10w / *Museum No.* 4027
351–355, Heraclea mint (?), AE
Obv. Bareheaded bust r., [D N C]ON-
STANTIVS NOB C
Rev. Soldier spearing fallen horseman, [FEL
TEMP] REPA[RATIO], in ex.: [...] Γ SIS
RIC VIII, 91 (?)
2.61 g; 16 mm; 5 h
North Gate, ha III, Sq. 117

84. *Inv. No.* 228/07w / *Museum No.* 3748
351–355, Constantinople mint, AE
Obv. Bareheaded bust r., D N [FL CL
CONSTANTIVS NOB CAES] (?)
Rev. Soldier spearing fallen horseman, [FEL
TEMP REPARATIO], in l. field: $\bullet$ S $\bullet$ *, in
ex.: CONSA (?)
RIC VIII, 117
4.77 g; 21 mm; 12 h
Tower 27, ha II, Sq. 151

85. *Inv. No.* 12/14w
351–354, Cyzicus mint, AE
Obv. Bareheaded bust r., D N FL CL CON-
STANTIVS NOB CAES
Rev. Soldier spearing fallen horseman, FEL
TEMP REPARATIO, in ex.: SMKA
RIC VIII, 106
2.77 g; 18 mm; 11 h
East Gate, ha XII, Sq. 349

86. *Inv. No.* 11/10w / *Museum No.* 4028
351–354, Cyzicus mint, AE
Obv. Bareheaded bust r., D N FL CL CON-
STANTIVS NOB CAES
Rev. Soldier spearing fallen horseman, FEL
TEMP REPARATIO, in ex.: SMKS
RIC VIII, 106
2.04 g; 16 x 18 mm; 1 h
North Gate, ha III, Sq. 137

Julian II (361–363)

87. *Inv. No.* 5/13w/f
355–361, Siscia mint, AE
Obv. Bareheaded bust r., D N [IVLIANVS
NOB C] (?)
Rev. Emperor, helmeted and in military
dress, stg. l., holding globe and spear, [SPES
REI] PVBLICE, in ex.: ASIS (?)
RIC VIII, 391–404 (var.)
2.48 g; 17 mm; 12 h
North Gate, ha IV, Sq. 136

88. *Inv. No.* 50/14w
355–361, Thessalonica mint, AE
Obv. Bareheaded bust r., [D N CAES
IVLIA]NVS NOB CAES
Rev. Soldier spearing fallen horseman, FEL
TEMP REPARATIO, in ex.: SMTS
Uncertain RIC type (similar to RIC VIII,
210)
2.85 g; 16 mm; 6 h
East Gate, ha XII, Sq. 349 (“or 369”)

89. *Inv. No.* 46/14w
355–361, Cyzicus mint, AE
Obv. Bareheaded bust r., D N FL CL IV-
LIANVS NOB CS
Rev. Soldier spearing fallen horseman, FEL
TEMP REPARATIO, in l. field: $\bullet$ M $\bullet$, in
ex.: SMKA
RIC VIII, 116

2.85 g; 18 mm; 6 h

East Gate, ha XII, Sq. 369

Valentinian I (364–375)

90. *Inv. No.* 241/07w / *Museum No.* 3751

364–367, Siscia mint, AE

Obv. Diad. bust r., D N VALENTINIAN-
[VS P] F AVG

Rev. Emperor advancing r., with r. hand
dragging captive and holding *labarum* in
l., [GLOR]IA ROMANORVM, in r. field:

*/A, in ex.: ΞSISC

RIC IX, 5 (a)

1.90 g; 18 mm; 1 h

Tower 27, ha II, Sq. 133

91. *Inv. No.* 12/10w / *Museum No.* 4029

364–367, Thessalonica mint, AE

Obv. Diad. bust r., [D N] VALENTINI-
ANVS P F A[VG]

Rev. Emperor advancing r., with r. hand
dragging captive and holding *labarum* in
l., GLORIA ROMANORVM, in l. field:

*, in r. field: */B, in ex.: TES

RIC IX, 16 (a)

1.79 g; 17 mm; 12 h

North Gate, ha III, Sq. 136

92. *Inv. No.* 239/07w / *Museum No.* 3757

367–375 (for Gratian), Siscia mint, AE

Obv. Diad. bust r., D N GRATIANVS P
F AVG

Rev. Emperor advancing r., with r. hand
dragging captive and holding *labarum* in
l., GLORIA ROMANORVM, w l. field:
Q, in r. field: A/R, in ex.: ΔSISCE

RIC IX, 14 (c)

2.40 g; 18 mm; 11 h

Tower 27, ha II, Sq. 191

Valens (364–378)

93. *Inv. No.* 32/14w

364–367, Siscia mint, AE

Obv. Diad. bust r., D N VALENS P F AVG

Rev. Victory advancing l., holding wreath
and palm-branch, SECVRIT[AS] REI
PVBLICAE, in ex.: •ASISC

RIC IX, 7 (b)

2.40 g; 19 mm; 12 h

East Gate, ha XII, Sq. 329

94. *Inv. No.* 227/07w / *Museum No.* 3755

364–367 (?), Uncertain mint, AE

Obv. Diad. bust r., D N VALENS P F AVG

Rev. Emperor advancing r., with r. hand
dragging captive and holding *labarum* in l.,
GLORIA ROMANORVM, mint-mark in
ex. uncertain

Uncertain RIC type

1.77 g; 19 mm; 6 h

Tower 27, ha II, Sq. 151

95. *Inv. No.* 214/07w / *Museum No.* 3756

367–375, Thessalonica mint, AE

Obv. Diad. bust r., D N VALENS P F AVG

Rev. Victory advancing l., holding wreath
and palm-branch, SECVRITAS REI
PVBLICAE, in l. field: •/–, in ex.: TES

RIC IX, 27 (b)

1.84 g; 17 mm; 6 h

Tower 27, ha II, Sq. 151

96. *Inv. No.* 230/07w / *Museum No.* 3754

Uncertain mint, AE

Obv. Diad. bust r., [D N] VALEN[S] P F
A[VG]

Rev. Victory advancing l., holding wreath
and palm-branch, [S]ECVRITA[S] REI
PVBLICAE], mint mark in ex. uncertain

Uncertain RIC type

1.39 g; 16 mm; 12 h

Tower 27, ha II, Sq. 171

97. *Inv. No.* 10/10w / *Museum No.* 4030
Uncertain mint, AE
Obv. Diad. bust r., [D N VA]LENS P F
AVG

Rev. Victory advancing l., holding
wreath and palm-branch, SECVRITAS
REI[PVBlicAE], mint mark in ex. un-
certain

Uncertain RIC type

1.83 g; 17 mm; 12 h

North Gate, ha III, Sq. 137

98. *Inv. No.* 235/07w / *Museum No.* 3753

Uncertain mint, AE

Obv. Diad. bust r., D N VALENS P F
AVG

Rev. Victory advancing l., holding wreath
and palm branch, [SECVRITAS REI
PVBlicAE], mint mark in ex. uncertain

Uncertain RIC type

1.80 g; 16 mm; 5 h

Tower 27, ha II, Sq. 171

Valentinian I or Valens

99. *Inv. No.* 208/07w / *Museum No.* 932-
HCΦ

364–367, uncertain mint, AE

Obv. Diad. bust r., [...]

Rev. Emperor stg. facing, head r., holding
standard and Victory on globe, [RESTIT-
VTOR REIP], mint mark in ex. uncertain

Uncertain RIC type

1.48 g; 16 mm; 6 h

Tower 27, ha II, Sq. 171

Theodosius I (379–395)

100. *Inv. No.* 209/07w / *Museum No.* 3759

379–383, uncertain mint, AE

Obv. Diad. bust r., [D] N THEODOSIVS
P F AVG

Rev. VOT/X/MVLT/XX in wreath, mint
mark in ex. uncertain

Uncertain RIC type

1.28 g; 12 mm; 11 h

Tower 27, ha II, Sq. 171

101. *Inv. No.* 224/07w / *Museum No.* 931-
HCΦ

Uncertain mint, AE

Obv. Diad. bust r., [D N] THEODO[SIVS
P F AVG]

Rev. Illegible

Uncertain RIC type

1.37 g; 16 mm; ?

Tower 27, ha II, Sq. 151

102. *Inv. No.* 232/07w / *Museum No.* 3761

388–392 (for Valentinian II), Heraclea
mint, AE

Obv. Diad. bust r., D N VALENT[INIAN-
VS] P F AVG

Rev. Victory advancing l., holding trophy
in r. hand and dragging captive with l.,
SALVS [REI P]VBlicAE, in l. field: *chi-*
rho, in ex.: SMHB

RIC IX, 26 (a)

1.06 g; 12 mm; 12 h

Tower 27, ha II, Sq. 171

103. *Inv. No.* 68/14w

388–392 (for Arcadius), Constantinople
mint, AE

Obv. Diad. bust r., D N ARCADIVS
[P F AVG]

Rev. Victory advancing l., holding trophy
in r. hand and dragging captive with l.,
[SALVS] REI PVBlicAE, in l. field: *chi-*
rho, in ex.: [C]ONSA

RIC IX, 86 (c)

1.23 g; 14 mm; 12 h

East Gate, ha XII, Sq. 309

104. *Inv. No.* 233/07w / *Museum No.* 3760

388–392 (for Arcadius), Cyzicus mint, AE
Obv. Diad. bust r., [D N AR]CADIVS

P F [AVG]

Rev. Victory advancing l., holding trophy in r. hand and dragging captive with l., SALVS REI PVBLICAE, in l. field: *chi-rho*, in ex.: [S]MKΓ

RIC IX, 26 (c)

1.30 g; 12 mm; 12 h

Tower 27, ha II, Sq. 151

105. *Inv. No.* 14/10w / *Museum No.* 4031

392–395 (for Arcadius), Heraclea mint, AE
Obv. Diad. bust r., D N ARCADIVS P F AVG

Rev. Emperor stg. facing, head r., holding standard and globe, GLORIA ROMANORVM, in r. field: *, in ex.: SMHA

RIC IX, 27(b)

4.67 g; 21 mm; 6 h

North Gate, ha III, Sq. 117

106. *Inv. No.* 229/12w / *Museum No.* 4126

392–395 (for Arcadius), Nicomedia mint, AE

Obv. Diad. bust r., D N ARCADIVS P F AVG

Rev. Emperor stg. facing, head r., holding standard and globe, GLORIA ROMANO[RV]M, in ex.: SMNB

RIC IX, 46(b)

4.23 g; 21 mm; 6 h

East Gate, ha XII, Sq. 348

Arcadius (395–408)

107. *Inv. No.* 2/15w

395–401, uncertain mint, AE

Obv. Diad. bust r., D N [ARCAD]IVS P F AVG

Rev. Emperor stg. l., head r., holding spear and resting l. hand on shield, Victory holding palm branch in l. hand, crowns him, [VIRTVS EX]ERCI[TI], mint mark in ex.

uncertain

Uncertain RIC type

1.95 g; 17 mm; 6 h

Tower 12, ha XXXVIII, found in a spoil heap

108. *Inv. No.* 59/06w / *Museum No.* 3666

401–403, Nicomedia or Cyzicus mint, AE
Obv. Helmeted bust facing, diad., spear in r. hand, shield slung behind l. shoulder, D N ARCADIVS P F AVG

Rev. Constantinopolis std. facing, head l., holding sceptre and Victory on globe, beneath r. foot, a prow, CONCORDIA AVGG, in ex.: SM[...]

RIC X, 91 (Nicomedia) or 94 (Cyzicus)

1.84 g; 17 mm; 7 h

Northeastern corner tower/Tower No. 2, ha V, Sq. 150

109. *Inv. No.* 17/11w / *Museum No.* 4106

401–403, uncertain eastern mint, AE

Obv. Helmeted bust facing, diad., spear in r. hand, shield slung behind l. shoulder, [D N ARCADI]VS P F AVG

Rev. Constantinopolis std. facing, head l., holding sceptre and Victory on globe, beneath r. foot, a prow, [C]ONCORDIA AVGG, mint mark in ex. uncertain

Uncertain RIC type (see RIC X, 248)

1.65 g; 17 mm; 6 h

Tower 5, ha XIX, kw. 273 (test pit)

110. *Inv. No.* 66/14w

406–408, Constantinople mint, AE

Obv. Diad. bust r., * behind, [D N THEO]DOSIVS [P F AVG]

Rev. Three emperors stg. facing, each of two taller, outermost figures turn towards each other, holding spear and resting hand on shield, smaller innermost figure, holding spear, his head is turned r., [GLORIA

ROMANORVM], in ex.: [C]ONSA
RIC X, 144
1.57 g; 15 mm; 6 h
East Gate, ha XII, Sq. 329

Theodosius II (408–450)

111. *Inv. No.* 64/14w
408–423, uncertain eastern mint, AE
Obv. Diad. bust r., [D N] THEOD[OSIVS
P F AVG]
Rev. Two emperors stg. facing (figure to
l. invisible), heads turned to one another,
each holding spear and supporting between
them a globe, [GLORIA ROMANORVM],
mint mark in ex. uncertain
Uncertain RIC type (see RIC X, 272)
1.37 g; 10 mm; 5 h
East Gate, ha XII, Sq. 309

Uncertain issuers (4th–first half of 5th century)

112. *Inv. No.* 67/14w
About 327–340, uncertain mint, AE
Obv. Helmeted and dr. bust of Roma l.,
[VRB]S [R]OM[A]
Rev. Illegible
Uncertain RIC type
1.52 g; 17 mm; ?
East Gate, ha XII, Sq. 309

113. *Inv. No.* 206/07w / *Museum No.* 3741
About 337–347, uncertain mint, AE
Obv. Diad. bust r., [...]
Rev. Two soldiers stg., between them one
standard, [GLORIA] EXE[RCITVS], mint
mark in ex. uncertain
Uncertain RIC type
1.05 g; 13 mm; 6 h
Tower 27, ha II, Sq. 171

114. *Inv. No.* 228/12w
About 337–347, uncertain mint, AE
Obv. Diad. bust r., [...]

Rev. Two soldiers stg., between them one
standard, [GLORIA EXERCITVS], mint
mark in ex. uncertain
Uncertain RIC type
--; --; --
East Gate, ha XII, Sq. 329

115. *Inv. No.* 105/09w (No. 1)
About 351–361, uncertain mint, AE
Obv. Diad. bust r., [...] P F [...]
Rev. Soldier spearing fallen horseman, [FEL
TEMP REPA]RATIO, mint mark in ex.
uncertain
Uncertain RIC type
2.78 g; 16x18 mm; 11 h
Tower 27, ha II, Sq. 151

116. *Inv. No.* 87/14w
About 364–367, uncertain mint, AE
Obv. Diad. bust r., [...]
Rev. Emperor advancing r., with r. hand
dragging captive and holding *labarum* in l.,
GLORIA ROMANORVM, mintmark in
ex. uncertain
Uncertain RIC type
2.09 g; 17 mm; 7 h
East Gate, ha XII, Sq. 309

117. *Inv. No.* 229/07w / *Museum No.* 934-
HCΦ
About 364–375, uncertain mint, AE
Obv. Diad. bust r., [...]S P F AVG
Rev. Victory advancing l., holding wreath
and palm branch, [SEC]VRITAS [REI
PVBLICAE], mint mark in ex. uncertain
Uncertain RIC type
1.37 g; 12 mm; 12 h
Tower 27, ha II, Sq. 171

118. *Inv. No.* 211/07w / *Museum No.* 930-HCΦ
Uncertain mint, AE
Obv. Diad. bust r., [...]

Rev. Victory advancing l., [...]

Uncertain RIC type

2.56 g; 17 mm; 12 h

Tower 27, ha II, Sq. 171

119. *Inv. No. 21/11W / Museum No. 4105*

Uncertain mint, AE

Obv. Diad. bust r., [...]

Rev. Victory advancing l., (?), [...]

Uncertain RIC type

1.61 g; 13 mm; 12 h

North Gate, ha III, Sq. 116

120. *Inv. No. 201/07W / Museum No. 935-HCΦ*

Uncertain mint, AE

Obv. Diad. bust r., [...]

Rev. Victory advancing l., (?), [...]

Uncertain RIC type

1.29 g; 10 mm; 2 h

Tower 27, ha II, Sq. 191

121. *Inv. No. 212/07W / Museum No. 3749*

Uncertain mint, AE

Obv. Diad. bust r., [...]

Rev. Emperor stg. l., holding globe in r. hand and standard in l., [...]

Uncertain RIC type

1.92 g; 16 mm; 12 h

Tower 27, ha II, Sq. 171

122. *Inv. No. 70/14W*

Uncertain mint, AE

Obv. Diad. bust r., [...]

Rev. Emperor (?) advancing l., [...]

Uncertain RIC type

1.52 g; 12 mm; 7 h

East Gate, ha XII, Sq. 329

123. *Inv. No. 47/14W*

Uncertain mint, AE

Obv. Diad. bust r., [...]

Rev. Figure stg. ?, [...]

Uncertain RIC type

1.54 g; 14 mm; 12 h

East Gate, ha XII, Sq. 369

124. *Inv. No. 89/14W*

Uncertain mint, AE

Obv. Illegible

Rev. Illegible

Uncertain RIC type

0.52 g; >13 mm; ?

East Gate, ha XII, Sq. 309

II. BYZANTINE COINAGE

Justin I (518–527)

125. *Inv. No. 17/10W / Museum No. 4032*

522–527, Constantinople mint, half *folles*

Obv. Diad. bust r., [D N IVSTI]NVS

P P AVC

Rev. K, long cross to l., * above and below, e to r.

MIB I, 19

8.30 g; 22 x 27 mm; 11 h

North Gate, ha III, Sq. 117

Justinian I (527–565)

126. *Inv. No. 18/10W / Museum No. 4033*

538–542, Thessalonica mint, 8 *nummi*

Obv. Diad. bust r., [D N I]VSTINIANVS

P [P AVC]

Rev. H, cross above (?), A to l., P to r., line below

MIB I, 174

4.06 g; 19 x 20 mm; 5 h

North Gate, ha III, Sq. 116

127. *Inv. No. 200/07W / Museum No. 3764*

557/558, Cyzicus mint, *folles*

Obv. Helmeted and cuir. bust facing, holding *globus cruciger* and shield, cross to r., D

I I IVSTINIANVS P P AVG

Rev. M, cross above, A below, A/N/N/O to l., X/X/X/I to r., in ex.: KYZ

MIB I, 120

17.40 g; 33 mm; 6 h

Tower 27, ha II, Sq. 151

Maurice Tiberius (582–602)

128. Inv. No. 245/07w / Museum No. 3765
587/588, Nicomedia mint, half *folles*

Obv. Crowned and cuir. bust facing, holding *globus cruciger* and shield, [D N] m[...] TI (?)

Rev. K, cross above, A below, A/N/N/O to l., Q/I to r.

MIB II, 79

5.05 g; 20 x 23 mm; 7 h

Northeastern corner tower/Tower No. 2, ha V, Sq. 293



Fig. 17. Selected Byzantine coins (University of Warsaw, Faculty of Archaeology, Archaeological Expedition to Novae | Photos and processing P. Jaworski)

Dr. Piotr Jaworski

<https://orcid.org/0000-0001-8328-8035>

Institute of Archaeology, University of Warsaw
pk.jaworski@uw.edu.pl

Piotr Zakrzewski

<https://orcid.org/0000-0001-8569-3237>

Polish Centre of Mediterranean Archaeology,
University of Warsaw
p.zakrzewski2@uw.edu.pl

How to cite this article: Jaworski, P. and Zakrzewski, P. (2020). The defenses of the Roman legionary fortress at Novae (Lower Moesia) and coin finds from the latest excavations "*Per lineam munitionum*": numismatic and archaeological interpretation. *Polish Archaeology in the Mediterranean* 29/2 (pp. 357–406). <https://doi.org/10.31338/uw.2083-537X.pam29.2.16>

References

Abbreviations

- AMNG Pick, B. and Regling, K. (eds). (1898). *Die antiken Münzen Nord-Griechenlands I. Die antiken Münzen von Dacien und Moesien*. Berlin: Reimer
- Ganschow Ganschow, T. (2018). *Münzen von Kappadokien Sammlung Henseler*. Beyoğlu-Istanbul: Arkeoloji ve Sanat Yayınları
- IGLNovae Kolendo, J. and Božilova, V. (1997). *Inscriptions grecques et latines de Novae (Mésie inférieure)*. Bordeaux: Ausonius
- MIB Hahn, W. (1973–1975). *Moneta imperii Byzantini: Rekonstruktion des Prägeaufbaues auf synoptisch-tabellarischer Grundlage I–II*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften
- RIC *The Roman Imperial Coinage*, vol. I²–II², London 1984–2007, vol. III–X, London 1930–1994
- Varbanov Varbanov, I. (2005–2007). *Greek imperial coins and their values I–III*. Bourgas: Adicom

- Čičikova, M. (1978). Razkopki v Nove (bългарski sektor) (Excavations in Novae [the Bulgarian sector]). *Arheologičeski otkritiâ i razkopki*, 74–75 (in Bulgarian)
- Čičikova, M. (1979). Razkopki v Nove (bългарski sektor) (Excavations in Novae [the Bulgarian sector]). *Arheologičeski otkritiâ i razkopki*, 80–83 (in Bulgarian)
- Čičikova, M. (1981). Razkopki v Nove (bългарski sektor) (Excavations in Novae [the Bulgarian sector]). *Arheologičeski otkritiâ i razkopki*, 42–44 (in Bulgarian)
- Čičikova, M. and Najdenova, V. (1981). Rimski i rannovizantijski grad Nove – Istočen Sektor (The Roman and early Byzantine town of Novae – the Eastern Sector). *Arheologičeski otkritiâ i razkopki*, 47–48 (in Bulgarian)
- Ciolek, R. (2011). Conclusions from the inventory. In R. Ciolek and P. Dyczek, *Novae: Legionary fortress and late antique town II. Coins from sector IV* (pp. 235–278). Warsaw: Center for Research on the Antiquity of Southeastern Europe, University of Warsaw
- Czerniak, L. (1977). Odcinek IX (Section IX). In S. Parnicki-Pudelko (ed.), *Novae – Sektor Zachodni 1974. Sprawozdanie tymczasowe z wykopalisk Ekspedycji Archeologicznej Uniwersytetu im. Adama Mickiewicza w Poznaniu. Archeologia*, 27, 141–143 (in Polish)
- Dimitrov, K. (2011). Antični i rannovizantijski moneti ot sektor XI (Principia) v Nove (Dolna i Vtora Miziâ) (Ancient and early-Byzantine coins from Sector XI [Principia] in Novae [Lower Moesia and Moesia Secunda]). In N. Hristova (ed.), *Varia Thracica: Studia in honorem Mariae Čičikova* (pp. 140–216). Sofia: Akademichno izdatelstvo “Prof. Marin Drinov” (in Bulgarian with English summary)

- Dimitrov, K. (2013). Antični moneti ot rajona na Nove (Miziâ), sečeni predi osnova-
vaneto na rimskiâ voenen lager (V v. pr. Hr. – 41 g. sl. Hr.) (Ancient coins from
the area of Novae (Moesia), struck before the foundation of the Roman military
camp [5th C BC – AD 41]). In K.K. Rabadžiev (ed.), *Sbornik v pamet na akademik
D. P. Dimitrov* (pp. 712–766). Sofia: BAN. Arheologiĉeski institut s muzej; Sofijski
universitet Kliment Ohridski (in Bulgarian with English summary)
- Donevski, P. (1989). Razkopki v Nove (bâlgarski sektor) (Excavations in Novae [the
Bulgarian sector]). *Arheologiĉeski otkritiâ i razkopki*, 64–65 (in Bulgarian)
- Donevski, P. (1994). Otĉet za arheologiĉeski razkopki v Nove prez 1993 g. Iztoĉna
krepostna stena (Report on archaeological excavations in Novae in 1993. The east
defense wall). *Arheologiĉeski otkritiâ i razkopki*, 57–58 (in Bulgarian)
- Donevski, P. (1996). Some aspects of defensive system of the Roman camp Novae
(Moesia inferior) in Ist–IIIrd century. In P. Petrovi (ed.), *Roman limes on the Middle
and Lower Danube* (pp. 201–203). Belgrade: Archaeological Institute
- Dyczek, P. (2008). The geography of the area and topography of Novae. In T. Derda,
P. Dyczek, and J. Kolendo (eds), *Novae: Legionary fortress and late antique town I.
A companion to the study of Novae* (pp. 249–262). Warsaw: Center for Research on
the Antiquity of Southeastern Europe, University of Warsaw
- Koĉkówna, S. (1967). Sondaĉ przy poĉudniowym murze obronnym (Sondage by
the south defense wall). In K. Majewski (ed.), *Novae – Sektor Zachodni 1965.
Sprawozdanie tymczasowe z wykopalisk Ekspedycji Archeologicznej Uniwersytetu
im. Adama Mickiewicza w Poznaniu. Archeologia*, 17, 163–167 (in Polish)
- Kunisz, A. (1992a). La monnaie et les camps des légionnaires romains le long du bas
Danube aux I^{er}, II^{ème} et III^{ème} siècles: l'exemple de Novae. *Litterae Numismaticae
Vindobonenses*, 4, 107–114
- Kunisz, A. (1992b). *Obieg monetarny na obszarach Mezji i Tracji w I i II w. n.e.* (Monetary
circulation in the territory of Moesia and Thracia in the 1st and 2nd c. AD).
Katowice: Uniwersytet Śląski (in Polish)
- Lemke, M. (2015). The dwindling legion: Architectural and administrative changes in
Novae (Moesia Inferior) on the threshold of late antiquity. In R. Collins, M.F.A.
Symonds, and M. Weber (eds), *Roman military architecture on the frontiers: Armies
and their architecture in late antiquity* (pp. 90–97). Oxford: Oxbow Books
- Lewartowski, K. (1985). Odcinek II (Section II). In L. Press (ed.), *Novae – Sektor
Zachodni 1981. Sprawozdanie tymczasowe z wykopalisk Ekspedycji Archeologicz-
nej Uniwersytetu im. Adama Mickiewicza w Poznaniu. Archeologia*, 34, 160–164
(in Polish)
- Majewski, K. (ed.). (1962). Sprawozdanie tymczasowe z wykopalisk w Novae w 1960
roku (Interim report on excavations in Novae in 1960). *Archeologia*, 12, 75–170 (in
Polish with French summary)
- Parnicki-Pudelko, S. (1962). Odcinek VI (Section VI). In K. Majewski (ed.),
Sprawozdanie tymczasowe z wykopalisk w Novae w 1960 roku. *Archeologia*, 12,
128–133 (in Polish)

- Parnicki-Pudelko, S. (1990). *The fortifications in the western sector of Novae*. Poznań: Uniwersytet im. Adama Mickiewicza
- Poulter, A.G. (ed.). (2007). *The transition to late antiquity on the Danube and beyond* (=Proceedings of the British Academy 141). Oxford: Oxford University Press
- Sarnowski, T. (1981). The legionary defences of Novae. Report on latest sections. *Archeologia*, 32, 29–45
- Sarnowski, T. (1983a). La forteresse de la légion I Italica à Novae et le limes de sud-est de la Dacie. *Eos*, 71, 265–276
- Sarnowski, T. (1983b). Wschodni bok twierdzy legionowej. Sondáže (The eastern side of the legionary fortress. Sondages). In *Novae – Sektor Zachodni 1981*. *Archeologia*, 34, 153–160 (in Polish)
- Sarnowski, T. (1984). Początki legionowego budownictwa w Novae i wojny dackie Domicjana i Trajana (Les premiers remparts de Novae et les guerres daciques de Domitien et de Trajan). *Balkanica Posnaniensia*, 1, 143–169 (in Polish with French summary)
- Sarnowski, T. (1990). Novae Italicae im I. Jh. n. Chr. *Et Trav*, 15, 347–355
- Sarnowski, T. (1995). Another legionary groma gate hall? The case of Novae in Lower Moesia. In A.B. Biernacki (ed.), *Novae: Studies and materials I* (pp. 37–40). Poznań: Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza w Poznaniu
- Sarnowski, T. (2016). Legionary fortress at Novae in Lower Moesia. Old and new observations made during the recent work per lineam munitionum. In C.-G. Alexandrescu (ed.), *Troesmis – A changing landscape. Romans and the others in the Lower Danube Region in the first century BC–third century AD. Proceedings of an international colloquium, Tulcea, 7th–10th of October 2015* (=Biblioteca Istro-Pontică 12) (pp. 175–188). Cluj-Napoca: Editura Mega
- Sarnowski, T. (2018). Novae und die legio I Italica unter Trajan und Hadrian. *Archeologia*, 67, 57–71
- Sarnowski, T. and Kaniszewski, J. (2007). Roman and early Byzantine defences of Novae in Lower Moesia. North-eastern corner. In L.F. Vagalinski (ed.), *The Lower Danube in antiquity (VI c BC–VI c AD): International Archaeological Conference, Bulgaria-Tutrankan, 6.–7.10.2005* (pp. 227–231). Sofia: Bulgarian Academy of Sciences. National Institute of Archaeology and Museum; Tutrankan History Museum
- Sarnowski, T., Kovalevskaja, L., and Kaniszewski, J. (2005). Novae – castra legionis, 2003–2005. Preliminary report on the excavations of the Warsaw University archaeological expedition. *Archeologia*, 56, 141–152
- Sarnowski, T., Kovalevskaja, L., and Tomas, A. (2010). Novae – castra legionis, 2006–2009. Preliminary report on the excavations of the University of Warsaw archaeological expedition. *Archeologia*, 59, 153–172
- Sarnowski, T., Kovalevskaja, L., Tomas, A., Chowaniec, R., and Zakrzewski, P. (2014). Novae – castra legionis, 2010–2012. Preliminary report on the excavations of the University of Warsaw archaeological expedition. *Archeologia*, 62–63, 75–90

- Sarnowski, T., Tomas, A., Kovalevskaja, L., Zakrzewski, P., Dziurdzik, T., and Jęczmienowski, E. (2016). Novae – castra, canabae, vicus 2013–2015. Preliminary report on the excavations and prospection surveys of the University of Warsaw archaeological expedition. *Archeologia*, 65, 177–203
- Sarnowski et al. 2012
- Sarnowski et al. 2013
- Sarnowski and Tomas 2011
- Zakrzewski, P. (2017). The gates of the legionary fortress at Novae (Lower Moesia). *Archeologia*, 66, 7–26
- Ziemiński, J. (1973). Odcinek IX (Section IX). In S. Parnicki-Pudółko (ed.), *Novae – Sektor Zachodni 1970. Sprawozdanie tymczasowe z wykopalisk Ekspedycji Archeologicznej Uniwersytetu im. Adama Mickiewicza w Poznaniu*. *Archeologia*, 23, 60–61 (in Polish)
- Ziemiński, J. (1975). Odcinek IX (Section IX). In S. Parnicki-Pudółko (ed.), *Novae – Sektor Zachodni 1972. Sprawozdanie tymczasowe z wykopalisk Ekspedycji Archeologicznej Uniwersytetu im. Adama Mickiewicza w Poznaniu*. *Archeologia*, 25, 130–132 (in Polish)