

CONSTRUCTION HISTORY AND LIFEWAYS IN THE CIVILIAN SETTLEMENT OF POROLISSUM AS OBSERVED IN AREA 22 OF THE POROLISSUM FORUM PROJECT

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ABSTRACT: *This is the first article to disclose information about the architecture and chronology resulting from the excavations of the Porolissum Forum Project. The authors focus upon the archaeological features excavated in the NW portion of the site, designated as Area 22. The excavations revealed four principal phases of construction and use: 1) Trajanic timber and earth phase; 2) Antonine stone phase; 3) Severan stone phase; 4) Late Roman phase. The Trajanic features appear to represent an early fortress. The function of the stone architectural features remains unclear. Although they appear to have served a public function, we hesitate to term the overall complex a forum. The authors suggest that a series of hearths, post holes, and other signs of 'late' reuse of the architectural features pertain to the last decade of Roman occupation at Porolissum. The article also provides an overview of the small finds and pottery excavated in Area 22. Among the small finds, we present evidence of a ritual deposit. Statistical results derived from the study of pottery from Antonine and Severan deposits indicates supply trends.*

KEYWORDS: Porolissum; Excavation results; provincial Roman architecture; Roman pottery; small finds; ritual deposit.

REZUMAT: *Articolul de față este primul care relevă*

informații referitoare la arhitectură și cronologie într-o zonă a sitului, informații rezultate din cercetările arheologice din cadrul Porolissum Forum Project. Autorii se concentrează asupra descoperirilor arheologice excavate în porțiunea de nord-vest a sitului, denumită ca Area 22. Cercetările au relevat patru faze principale de construcție și utilizare; 1) faza traianică din lemn și pământ; 2) faza antonină din piatră; 3) faza severiană din piatră; 4) faza romană târzie. Elementele fazei traianice par a reprezenta un castru timpuriu. Funcționalitatea elementelor arhitecturale din piatră rămâne nesigură. Cu toate că par a deservei o utilitate publică, ezităm în a desemna complexul ca un forum. Autorii sugerează că o serie de vetre, gropi de pari, și alte dovezi ale unei reutilizări „târzii” a elementelor arhitectonice aparțin de ultima decadă a ocupației romane de la Porolissum. Studiul oferă de asemenea o scurtă prezentare a descoperirilor mărunte și a materialului ceramic descoperit în Area 22. Printre aceste descoperiri, prezentăm dovezi ale unui depozit ritual. Rezultatele statistice derivate din studiul ceramicii din depozitele antonine și severiene indică tendințe de aprovizionare.

CUVINTE-CHEIE: Porolissum; rezultate arheologice; arhitectură romană provincială; ceramică romană; descoperiri mărunte; depozit ritual.

1. INTRODUCTION

The Porolissum Forum Project (hereafter, PFP), 2004 and 2006–11, was an important collaboration between the authors of this paper and their mentor of Roman Dacia studies, Alexandru V. Matei.¹

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Through the work of the PFP, we gained crucial insights into the construction history of the civilian settlement of Porolissum as well as the lifeways of the inhabitants of the site during its brief history, ca. AD 106–271.² The premature death of the scientific director of the PFP, Dr. Matei, in 2010 was a major setback to the project.³ In the light of recent work by Dr. Coriolan Opreanu and colleagues in the civilian settlement of Porolissum,⁴ we are presenting an overview of the architectural sequence in one well-excavated sector of the PFP site, designated as Area 22, as well as a consideration of the assemblage of artifacts and ecofacts in the Roman town.

2. BACKGROUND

In the late 1990's, a geophysical survey was conducted by Dr. Matei and Prof. J.K. Haalebos in a relatively level area of Pomăt Hill to the southeast of the military base, identified as the civilian settlement of Porolissum. Based upon the magnetometry readings, Matei was impressed by what appeared to be a series of large architectural features surrounding a rectangular courtyard in a manner consistent with a forum. Matei excavated a number of trenches between 1999 and 2003, before proposing a collaboration with De Sena. The two formed the PFP in 2004 with Matei responsible for the excavations and De Sena responsible for archaeological materials; Robert Wanner joined the team in 2006 and developed all digital plans of the excavations. In 2011, a year after the passing of Matei, Coriolan Opreanu served as scientific director, obtaining an excavation permit in order for De Sena and Wanner to re-investigate three small areas of the site.

The PFP had two broad scientific objectives: 1) to understand the plan, development and usage of the structures and features located in the area of Porolissum's civilian settlement presumed to be a forum, and 2) to understand the lifeways at Porolissum through the study of the artifact and ecofact assemblages. This was also a didactic project which organized an archaeological field school; therefore, one of our missions was to educate students in archaeological field methods and in the history and modern culture of Romania.

The archaeological excavations at Porolissum required an element of academic diplomacy with the result of an 'old school' and 'new school' hybrid. As the area under investigation comprised ca. 2 hectares, Matei was interested in verifying the presence of walls and fortification ditches. The PFP generally excavated long exploratory trenches with a width of 1.5 m and an average length of 20 m; the team also excavated a series of box trenches with an average dimension of 5 × 4 m. Under the direction of Matei, the trenches were rapidly excavated with hired local workers and field school students. The field school students also excavated more carefully in contextually sensitive areas, recorded stratigraphic information, made drawings of trenches and architectural features, collected artifacts and ecofacts according to

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² Of the first generation of research, the following are key studies: Tóth 1978, Gudea 1989 and 1996, Bajusz 1997 and 1999, Gudea and Tamba 2001, Tamba 2008.

³ Excepting the annual reports submitted to CIMEC, Dr. Matei published only one article regarding the work in the area of the presumed forum (Matei 2003). The authors rely upon his notebooks and sketches as well as information recorded by themselves over the course of the collaboration.

⁴ Dr. Opreanu and colleagues have subsequently conducted a geophysical survey and excavations in the civilian settlement (Opreanu and Lăzărescu 2012, 2015, 2016, Opreanu, Lăzărescu and Ștefan 2013, 2013a).

their stratigraphic position, and studied the artifact and ecofact assemblages. Area 22 yielded particularly important results and is, therefore, the focus of this article.

3. OVERVIEW OF CONSTRUCTION HISTORY WITHIN AREA 22

In a pilot season and six field seasons, the PFP revealed evidence of a large, multi-phase complex with a central courtyard surrounded on at least three sides by colonnades (Figs. 1A and 1B). Due to the complete absence of inscriptions and a lack of understanding the function of many of the architectural features, the authors of this article cannot declare that the area excavated by the PFP is a forum. The buildings appear to have served public functions, however, based upon the robustness of walls and the forms of the architectural features.

The courtyard of this presumed public space measures approximately 142×130 Roman feet with colonnades along the NE, NW, and SW sides. On the NE side of the courtyard was a large, rectilinear building whose function remains undetermined. Matei referred to this structure as ‘the basilica’ of the presumed forum because of its size and rectangular form; moreover, it was not modified to a great extent over the course of time. The SW side was largely devoid of architecture, save a colonnade, a small architectural complex containing a *prae-furnium* (see Phase 3, below) and thin walls whose function remains undetermined. On the SE side of the courtyard is a large building measuring ca. 100×60 Roman feet and is the only structure whose function has been ascertained: a bath complex. The function of a bath complex was determined based upon the presence of an extensive hypocaust system with a *prae-furnium* as well as by an apsidal *caldarium* basin. On the NW side of the courtyard, Area 22 contains a complex series of superimposed features and architecture whose functions remain unclear, but which has yielded ample evidence toward our understanding of the chronology of this presumed public space and Porolissum as a whole.

Area 22 measures 30×25 m and was explored in the 2009–11 summer field seasons. Excavation of the area began in 2009 with trench 22, measuring 4×1.5 m. In the same summer, five trenches measuring 5×4 m were excavated and designated with the labels 22A–22E. Nine more trenches were excavated in 2010, 22F–22N. Trench 22N, which had only been excavated to a depth of ca. 0.8 m in 2010, was excavated to a depth of ca. 3.5 m in 2011. Trenches 16 (2008), 21 (2009), 23A and 23B (2009), 30, 31, and 32 (2010) are included in this sector. For the purpose of this paper, we also consider some evidence from two exploratory trenches excavated by Matei between 1999–2003 (Matei tr. 4 and tr. 8). Area 22 revealed two sequences of Roman architecture consisting of stone and mortar (Phases 2 and 3) as well as an earlier timber/earth phase (Phase 1) and a ‘late’ phase (Phase 4). Phases 2 and 3 pertain to the presumed public space that functioned for about a century between the Antonine period and the middle of the 3rd century.

*Construction Phase 1 (Trajanic).*⁵ The earliest features, which underlie the stone masonry, consist of ditches, carbonized traces of wooden beams, pits, and other negative features (Fig. 2). The southernmost ditch (F01), observed in trenches 22A and 22I, measures more than 3 m in width, possibly as much as 5 m, and must have served a defensive function. The top of this fortification ditch, which is oriented NW-SE, was observed at -1.9 m below ground level and was excavated to a depth of 4 m without encountering the bottom. While its length is undetermined, Matei noted a similar ditch in a trench he excavated in 2001 some 60 m to the west that would meet at a perpendicular angle with this one, while the PFP revealed a segment of another similar ditch about 120 m to the east (trench 14) that runs parallel to the ditch in 22A and 22I. A series of three narrow ditches were revealed in trenches 22C

⁵ We use ‘construction phase’ to indicate the time at which construction took place; the features were used for several decades from the moment of construction.

and 22F, oriented NW-SE. Two of these ditches measure ca. 0.6 m in width with a space of just 0.3 m between them (F08 and F09); the third ditch (F07), with a width of 0.75 m, runs roughly parallel to and is situated ca. 0.8 m from F08. Two more ditches (F06 and F05), observed in trenches 22D and 22E, are ca. 0.8 m wide, also running NW-SE. These ditches may have been used for drainage or as the foundation trenches of a wooden structure.

Trench 22N revealed some of the clearest evidence of timber features, representing the beams of a floor, wall, or roof. Timber feature F02, oriented NE-SW, was unearthed between depths of 2.65 m and 2.84 m; 27–30 cm in width. It was excavated in association with a few small bones and local pottery fragments. Timber feature F03 was also oriented NE-SW, running beneath the stone foundation of a later wall. No finds were recovered from this feature. It first appeared at a depth of 2.61 m and was 2.72 m at the bottom; 25 cm wide. Timber feature F04, the easternmost feature, also turned into the southeast profile, cutting underneath the stone foundation of the wall. It, too, was excavated in association with a few animal bones and local pottery. It first appeared at a depth of 2.61 m and was 2.70 m at the bottom; 25 cm wide. The traces of additional timber features were observed in Matei 1999–2003 trenches 4 and 8. A timber structure, oriented NW-SW, is represented by two exposed linear features (F49 and F50; both 40 cm wide) representing timber walls. Much was destroyed by later construction phases, making it difficult to interpret the size and internal structure. The structure is situated 4.62 meters southwest of the early defensive ditch (F01). An earlier timber wall is cut by the wall of this structure (F51), suggesting two distinct sub-phases of the timber construction. The latter measured 90 cm in length, but only 30 cm of its width was preserved. No further information was recovered for this building in subsequent excavations, and its interpretation remains uncertain.

Trench 22N also yielded a large circular pit, identified approximately halfway along the northwest profile. It first appeared at a depth of 2.63 m and had a bottom at 3.57 m below datum, cutting deep into the sterile soil. This pit was over 1 m in diameter and was filled with yellow mortar and medium-sized and large rocks. One large boulder, ca. 0.80 m in diameter, sat near the bottom of the feature. There were also many wooden splinters preserved in this feature, especially toward the bottom. Finally, there was a negative rectangular feature in the SE corner of the trench filled with dark burnt clay on top of very light grey clay and lined at the bottom with a rusty brown-red clay. This contained only a few animal bones. The feature was encountered at 2.80 m below datum; its shoulder was 2.87 m deep and its bottom, next to the profile, was at 3.05 m. The timber and earth features were abandoned by the reign of Antoninus Pius as pottery evidence attests.⁶

Given the dimensions of Ditch #1 and other corresponding ditches, the timber features and pits in Area 22 and other parts of the site excavated by Dr. Matei and the PFP team, we suspect that the timber and earthen features represent an early fortress.⁷

Construction Phase 2 (early Antonine). The second construction phase noted in Area 22 is represented by a large stone and concrete building and associated walls (Fig. 3). The same pottery indicating the time before which of the timber and earthen features give us a *terminus ad quem* for the construction of this public building. Matei and the PFP revealed six parallel walls oriented NE-SW, the first five of which measure 0.9–1.0 m in width. Wall 1 was revealed in 2001 by Matei in a trench designated as Matei

⁶ The pottery revealed at the threshold between Phases 1 and 2 in Area 22 consists almost exclusively of small fragments of locally manufactured wares. Fragments of a Gauloise IV amphora, common in the 1st and 2nd centuries were identified in Trench 21 near the foundation of Phase 2 wall #3. The clearest ceramic evidence, however, for the date of Phase 2 walls is from Trench 14 of the PFP. A sequence of deposits at –1.6–2.0 m below datum, overlying timber phase remains, contained fragments of a Spanish Beltran IIA amphora (1st to mid-2nd c. AD), local cooking ware forms Rusu-Bolindeț 551, 553, 556, 580, and 583 (which the author dates to the period of Trajan and the wooden phase of Napoca), and Italian sigillata form Curle 15, dated ca. AD 100–150.

⁷ Cf. Matei 2003.

1999–2003 trench 4. Wall 2, 7 m from wall 1, was observed by Matei in the same trench as well as in PFP trench 21. Wall 3 was observed in trenches 22L, 22M, 22N, 22K and 21, 5.5 m from wall 2. Wall 4, 5.5 m from wall 3, was observed in trenches 22C, 22D, 22E, and 21. Wall 5, situated 4 m from wall 4 and the inner wall of the portico, was noted in trenches 22J, 22F, 22G, 22H, and 21. Wall 6, the foundation of the NW colonnade with a width of 45 cm, was revealed in trenches 16 and 31.

Four walls are oriented perpendicularly to walls 1–6. Wall 7 was observed in trenches 22K, 22E, 22H, 16, and 30 and connects to walls 3–6; this wall continues east of wall 6, forming the foundation of the SW colonnade. Wall 8 is 4 m to the south, running between walls 3–5 and observed in trenches 22N, 22D, and 22G. Wall 9 also connects to walls 3–5, 6.5 m to the south and visible in trenches 22M, 22C, and 22F. Wall 10 appears to represent the southern terminus of the building, connecting walls 3–5, 4 m from wall 9, and was revealed in trenches 22L, 22B, and 32.

The excavations did not demonstrate a direct relationship between the building defined by walls 3, 6, 10, and 7 and the two northwestern-most walls, 1 and 2. The Antonine construction defined by walls 3, 6, 10, and 7 represents a large, rectilinear building measuring ca. 14 m in width, including the porticus. The length of the principal construction is at least 22 m, as it continues NE of trench 21. The masonry consists of large blocks of hewn igneous stone, presumably acquired from the nearby Magura Moigradului, that is bonded with a pale-yellow mortar. There is no evidence of this structure's function. Similar masonry was noted on the NE and SE sides of the courtyard, indicating that this area was already taking on the shape and function of a public square by the middle of the second century.

Construction Phase 3 (early Severan). The Antonine structure was systematically dismantled or cleared, possibly following a destruction event. The archaeological record indicates that the walls were razed to a common level, at ca. –1.3 below datum. In association with the razed walls, there is a thick layer, an average of 30 cm, of rubble and mortar consisting of decomposed yellow mortar and small stones (Fig. 4). Above this is a floor preparation consisting of a thick layer of clay upon which terracotta tiles were installed. Several contexts, for example in the SW corner of trench 22G and in trench 21, showed significant burn layers, ca. 20 cm deep. Similar patterns were observed on the NE side of the courtyard in trenches 10 and 11. Whatever the reasons for the abandonment of the Antonine structure, there was another program of building on the site.

Pottery evidence from Area 22 indicates that construction phase 3 in this presumed public space dates to the early Severan period, corresponding to the time of the dedication of *municipium Septimium Porolissensis*.⁸ The chronology is corroborated by the presence of tile stamps of the Cohors I Hispanorum in the collapse layers of the structure. The Severan building campaign is somewhat more complex in plan than the Antonine precursor (Fig. 5). After being razed to a similar level, most of the Antonine walls were simply built upon in the Severan phase; thus, walls 1, 2, and 3 bear Severan masonry. Wall 4 was abandoned, while only the northern part of wall 5 was built upon, observed in trenches 22G, 22H, 21, and 31 (Fig. 6). Two parallel NW-SE walls, 13 and 14, were constructed over fill and not directly upon Antonine walls 7 and 8 in trenches 22E, 22H, 22N, 22D, and 22G. Repairs were made to the colonnade at this time.

Within the rectilinear part of the building defined by walls 3, 14, and 5/6, a feature was revealed in trench 21 that we identify as an oven or kiln (Fig. 7). This feature is round with a diameter of ca. 1.3 m. and is immediately adjacent to the SW face of wall 3. The floor was composed of small, neatly arranged slabs of volcanic stone with smoothed surfaces. The aperture was not identified as half of the feature extended into the north balk of the trench at a depth of 1.5 m. Matei excavated several kilns within the area of the forum prior to the PFP. These kilns were generally larger in diameter (1.6 m or more) than

⁸ Late Antonine and early Severan period pottery types allowing us to date Phase 3 walls at the PFP include the Kapitän II amphora (late 2nd to 4th c. AD) and sigillata porolissensis forms akin to Dragendorff 30, 37, 40 and 42.

the feature located in trench 21; and unlike this feature, the kilns observed by Matei did not possess brick linings. In addition, there were no artifacts, such as animal bone, slag or ceramic wasters, found in association with this feature. Thus, a small bread oven cannot be excluded as a possible function.

The SW wing of the architectural complex has an irregular plan that is unified by a *cocciopesto* floor. Wall 3 represents the NW limit of the complex. An apsidal chamber was constructed to the SW of wall 10, measuring ca. 3.7×2.2 m; wall 10 was partially demolished to form a doorway. A block of limestone served as the threshold and a short wall (20) joined the NE section of the apsed wall (19). Near the apse is a short spur of a wall (22) whose function was not determined. To the NE of the threshold is another apsidal chamber measuring 3.7×1.8 m. Apsed wall 18 joins walls 3 and 9; the NW portion of Antonine wall 9 was demolished. A new wall (21) was constructed to join walls 9 and 10, observed in trenches 22 and 22B. An existing aperture in wall 3 served to access the two apsidal chambers. Below the *cocciopesto* floors of these chambers was a hypocaust system. The rectangular chamber formed by walls 5, 9, 21, and 10 also had a *cocciopesto* floor.

To the SE of apsidal chamber 1, observed in trenches 22A, 22B, 23A, and 32, is an L-shaped chamber formed by walls 19, 10, 17, 15, and 16; hypocaust pillars were unearthed beneath a broken section of the *cocciopesto* floor. To the SW, creating the L-shape, is a small square space formed by walls 15, 16, and 17 (Fig. 8). There is an aperture leading beneath the floor of the L-shaped chamber and much of the stone on the interior walls was highly oxidized, suggesting this may have served as a *praeefurnium*.

4 m to the SE of the possible *praeefurnium* is yet another apse, this one with a diameter of 6 m. There is a linear wall that could be a late extension of wall 6; the apse (wall 24) is to the SE of this wall. As no walls were observed joining to walls 5 or 17, we do not know what the relationship of this space to the aforementioned Severan wings.

Based upon the presence of hypocaust pillars beneath *cocciopesto* floors and a possible *praeefurnium*, our best guess as to the function of this SW wing is a small bathing complex. While no water basins were identified, the PFP discovered in 2007 a large brick cistern 50 m to the SW of Area 22. Clearly, a nearby water supply and hypocaust pillars do not necessarily signify a bath; therefore, this identification remains speculative.

Construction Phase 4 (ca. AD 260–271). The fourth phase yielded the most primitive features of the site, which present many questions (Fig. 9). The features were all discovered beneath sealed stone and tile rubble layers, indicating they were in use when the walls and roofs of the Roman structures were still intact.

Area 22 yielded three hearths and related features which post-date the Severan period renovations. The southwestern-most apsidal chamber bears two hearths composed of reused tiles and stones (trenches 22A and 22B). The hearth in trench 22A was installed within the apsidal chamber on a low platform composed of recycled stones bonded by mortar. This hearth is in association with four post holes that pierced the *cocciopesto* floor (Fig. 10). Within the same chamber, the hearth revealed in trench 22B consists of recycled roof tiles set directly upon the *cocciopesto* floor. A third, well-preserved hearth was unearthed in trench 22N (Fig. 11). This U-shaped hearth is situated outside a chamber of the Severan construction and, presumably, within a possibly open space between walls 2 and 3. It was encountered approximately 80 cm below ground level upon a light grayish-brown clay treading surface. This packed-earth floor overlaid a rubble layer consisting of large igneous stones of the type used for construction at Porolissum. The hearth itself, more like a camp-fire, was quite shallow (0.10 cm). Its straight side, composed of small stones, was oriented along the same axis as the wall of the Severan phase at a distance of 1.50 m; the curved, rear part of the hearth consists of recycled tiles; the floor of the hearth is also composed of re-used tiles. Beneath the hearth, cutting into the rubble, there was a post hole with a diameter of 20 cm, which should also be associated with this fourth phase.

While we are aware of how these features fit into the relative sequence of the site, establishing an absolute chronology is more challenging. In addition to the features unearthed in Area 22, the PFP has also revealed other hearths and crudely sealed-in Severan apertures (Fig. 12).⁹ As such 'primitive' features do not correspond to the formal function of Roman public spaces, we require an explanation. In past years, we assumed, following the orthodox version of Porolissum's chronology, that all such 'late' features necessarily pertained to the immediate post-Roman period (AD 271–375), the so-called Daco-Roman phase. After much scrutiny and careful analysis of the features and artifacts, the PFP now considers these features to date to the final decade of the Roman period. The hearth in trench 22A incorporates concrete in its construction, a technique that was not used by non-Romans during this time period. Moreover, in seven years of excavation, the PFP did not reveal a single artifact that can be dated to the late 3rd or 4th centuries. The latest coins unearthed through the PFP excavations date to the reign of Severus Alexander, while none of the pottery or small finds are attributed to the period after the Roman withdrawal from Dacia.

The best scenario we can offer, which requires further thought, may have involved the gradual abandonment of the *municipium* some time prior to the reign of Aurelian and the crude re-use of the architectural features by the soldiers who remained to defend the frontier until full Roman withdrawal from Dacia ca. AD 271. This scenario supports Gazdac's hypothesis, based upon an analysis of numismatic evidence, that auxiliary forts in Roman Dacia were gradually abandoned during the period AD 253–268.¹⁰ The PFP revealed no evidence for later occupation of the site.

4. LIFEWAYS AT POROLISSUM

The second objective of the PFP is discussed here, namely an assessment of the lifeways of the Romans at Porolissum in the 2nd and 3rd centuries. Since the 1960s, artifact/ecofact assemblages from Roman period sites are frequently studied in order to understand the socio-economic conditions of cities, towns, and rural areas.¹¹ The PFP collected the majority of artifacts and ecofacts, which were bagged according to their stratigraphic position. All small finds (coins, copper alloy, silver, and iron objects, worked bone, stone, terracotta, and glass) have been accessioned and listed in a spreadsheet, whilst much of the pottery has been classified and quantified in a cursory manner.

Of the small finds (see Appendix 1), the PFP unearthed nine coins ranging in date from Domitian to Severus Alexander; none are unique and they did not lend themselves toward establishing a site chronology. A total of 28 copper alloy objects were revealed, including elements of fibulae and other decorative items, as well as a blade. Two silver objects were discovered, the fragment of a fibula with a trapezoidal head and part of a circular applique. Six objects of worked bone were unearthed, including 3 hairpins or styluses, a possible medicinal spoon, and fragments of a cylindrical item. The copper alloy, silver, and worked bone objects demonstrate a modest degree of luxury at Porolissum and connections to large manufacturing centers, such as Apulum.

Associated with the artifacts and ecofacts recovered by the excavation team, the PFP may have revealed the elements of a ritual deposit.¹² Accessioned item 182 is the skull of a wolf that was recovered in a context representing the late Roman phase. The skull was found in the SW corner of trench 22A at a depth of –0.8 m from ground level in a context characterized by compact dark earth overlain by an even layer of reddish brown earth. Just 15 cm deeper, accessioned item 539, the cranium of a horse (Fig. 13),

⁹ In the case demonstrated here, PFP trench 24, a doorway was raised and narrowed, then raised again to serve a function involving fire. The two sandstone blocks (one collapsed) were inserted to make the space narrower.

¹⁰ Găzdac 2002.

¹¹ E.g., Carandini 1985, Peacock and Williams 1986, MacKinnon 2004.

¹² For a recent commentary on ritual deposits, see Haynes 2013.

was recovered in association with a small ceramic cup (acc. no. 540) that was capped by a spindle whorl (acc. no. 541) (Fig. 14). If this were indeed a ritual deposit, the sequence is as follows: a hole was purposefully dug; the jawless head of a horse was placed upside-down with the cup and spindle whorl and covered by several flat stones; the skull of the wolf, also jawless, was placed above in the stone; a layer of brown earth was deposited over this and leveled; a layer of small stones was placed to overlie the brown earth.

While all artifacts and ecofacts are important indicators of past lifeways, pottery is particularly crucial for our understanding of procurement. Because the sources of clay used in domestic pottery and transport amphorae are readily identified and Roman-period ceramic forms can be dated with relative precision, often to within a decade, supply patterns can be established when stratigraphically excavated pottery is classified and quantified.¹³ In terms of quantification, we count and weigh all sherds, separating rims, bases, handles and body sherds. We also quantify using estimated vessel counts (EVC) and estimated vessel equivalents (EVE). EVC's are calculated by seeking joins among diagnostic sherds – 'EVC rim' takes account only of rims; 'EVC all' takes account of rims, bases and handles. EVE's are calculated by measuring the percentage of completeness of rims. If we find a vessel whose rim is 100% complete, the EVE is 1; if a rim is 10% complete, the EVE is 0.1. Presenting a range of quantification methods allows a somewhat more accurate view of the proportions among pottery classes.

TABLE 1. Pottery from mid-2nd century AD contexts from Trench 14. Percentages of total number, total weight, estimated vessel count (rims), estimated vessel count (all), estimated vessel equivalents.

	Total number	Total weight (g)	EVC rims	EVC all	EVE
Porolissum Fine 1	10.3	5.5	11.0	12.9	16.3
Porolissum Fine 2	16.2	24.2	11.1	12.1	13.0
Porolissum Coarse 1	38.0	28.9	28.5	24.2	28.3
Porolissum Coarse 2	7.9	14.7	9.6	8.8	9.7
Porolissum Coarse 3	0.6	0.3	–	–	–
Porolissum Coarse 4	0.6	0.1	–	–	–
Gray Fine 1	0.9	1.8	1.4	1.3	0.9
Gray Coarse 1	8.8	9.6	9.7	9.6	7.0
Gray Coarse 2	9.7	9.1	9.0	14.6	9.2
Dacian hand-built ware	0.8	2.4	1.4	1.3	0.9
Overpainted ware	0.1	0.1	–	–	–
Black slipped ware	4.3	2.4	9.0	6.7	8.3
Sigillata Porolissensis	2.0	1.5	6.9	6.7	3.6
Gallic Sigillata	0.3	0.1	0.7	0.4	0.5
Italian Sigillata	0.2	0.1	0.7	0.8	0.5
Early glazed ware	0.1	0.1	–	–	–
Unclassified pottery	0.2	0.2	0.7	0.4	1.4
TOTAL	1521	24311	144	239	15.31
	Total number	Total weight (g)	EVC rims	EVC all	EVE
Porolissum cookware	99.8	99.6	99.1	99.2	99.1
Cookware, IRSC	0.2	0.4	0.9	0.8	0.9
TOTAL	486	7072	113	126	11.45
	Total number	Total weight (g)	EVC rims	EVC all	EVE
Amphora	12.9	5.2	50.0	20.0	20.6
Amphora, Spanish	80.8	92.3	50.0	20.0	79.4
Amphora, Forlimpopoli	2.1	1.2	–	20.0	–
Amphora, unclassified	4.2	1.3	–	40.0	–
TOTAL	47	15180	2	5	1.26

¹³ For a summary of theory regarding Roman pottery studies, see De Sena 2003, 15–19.

Presented here are the statistical results from two phases (Antonine and Severan),¹⁴ whilst Appendix 2 provides a succinct characterization of the regional pottery classes.¹⁵ Not surprisingly, the study of pottery from stratigraphically excavated deposits of the Porolissum Forum Project confirms that the military and civilian inhabitants of Roman Porolissum relied upon their hinterland for quotidian needs. There are chronological differences, however.

In the Antonine phase, we note small amounts of pottery and amphora manufactured in the western and central Mediterranean – Italia, Gallia and Hispania. Among the regionally produced pottery, Porolissum Fine and Coarse wares, as well as the Gray wares are well-represented. Sigillata Porolissensis represents ca. 2–7% of the domestic wares, whilst Black slipped ware represents a somewhat higher percentage, ca. 2.5–9%. Overpainted ware was not common at this time. There is a small presence of Internal red slipped cookware, roughly 1% of the cookwares. Of 47 amphora sherds in the context, most pertain to a single vessel, a Beltran IIA amphora; an example of a Forlimpopoli amphora, from the central Adriatic coast of Italy, is also represented; another amphora is of an unknown type.

TABLE 2. Pottery from early-mid 3rd century AD contexts from Trench 22N. Percentages of total number, total weight, estimated vessel count (rims), estimated vessel count (all), estimated vessel equivalents.

	Total number	Total weight (g)	EVC min	EVC max	EVE
Porolissum Fine 1	5.2	2.6	3.4	10.6	16.2
Porolissum Fine 2	0.4	0.1	–	–	–
Porolissum Coarse 1	21.1	21.0	6.9	16.7	3.4
Porolissum Coarse 2	2.8	4.1	3.4	1.5	9.3
Porolissum Coarse 3	2.8	1.6	3.4	1.5	11.1
Overpainted ware PF-1	12.9	13.4	3.4	10.6	2.3
Overpainted ware PC-1	8.4	12.1	6.9	6.1	9.5
Overpainted ware PC-2	0.8	0.2	–	–	–
Gray Fine 1	1.6	0.7	3.4	1.5	2.5
Gray Coarse 1	23.3	28.1	10.3	10.6	8.1
Gray Coarse 2	10.0	6.3	6.9	10.6	4.1
Black slipped ware	0.4	0.1	–	–	–
Sigillata Porolissensis	9.6	8.8	48.3	27.3	29.6
Italian sigillata	0.4	0.3	–	1.5	–
Other sigillata	0.4	0.1	3.4	1.5	1.6
Unclassified pottery	0.8	0.2	–	–	–
TOTAL	249	8474	29	66	4.32

	Total number	Total weight (g)	EVC rims	EVC all	EVE
Porolissum cookware	100	100	100	100	100
TOTAL	117	2378	34	38	4.49

	Total number	Total weight (g)	EVC rims	EVC all	EVE
Amphora, imitation Kăpitan	33.3	76.2	–	100	–
Amphora, Middle Roman I	33.3	7.0	–	–	–
Amphora, unknown	33.3	16.8	–	–	–
TOTAL	3	143	0	1	0

¹⁴ The Severan deposits are from trench 22N; the Antonine pottery is from an important sequence in Trench 14 on the north side of the excavated area. We chose to use the statistics from Trench 14 rather than from Area 22 as the sample group is larger and presents a more accurate picture of the pottery from the Antonine period. De Sena uses the terms Porolissum Fine, Porolissum Coarse, Gray Fine, Gray Course to denote subdivisions within the ‘common ware’ pottery from Porolissum.

¹⁵ The most thorough classification of Roman period pottery in Dacia is Rusu-Bolindeț 2007.

In the Severan period, there very few imported wares. The small number of sherds of Italian sigillata are residual. Among the amphorae, there is an example of a Kapitän II type, likely from the Black Sea region rather than the Aegean, judging by the fabric, as well as the rim of a Middle Roman I amphora from central North Africa. There are some shifts in the proportions of local/regional wares. Sigillata Porolissensis is very common, while Black slipped ware is under-represented. Overpainted ware was also quite common at this time, cumulatively ca. 11–25% of the domestic wares.

A key question is to what extent the inhabitants of Porolissum relied upon the Roman hinterland as opposed to the neighboring region of *Barbaricum* during the Roman period. Scholars have established that the relationship between Romans and free native European cultures was not always hostile and, in fact, there was a fair amount of trade across the border of the Empire.¹⁶ The degree to which Romans and native European cultures traded and the mechanisms of exchange are still not fully understood and the pottery evidence from the PFP is not particularly illuminating. Only in the Antonine phase do we note Dacian hand-built ware.¹⁷

5. CONCLUSION

After a pilot season in 2004 and six full excavation seasons 2006–2011, the PFP has revealed considerable knowledge about the urban topography of the civilian settlement of Porolissum.

According to our working hypothesis, the Romans first erected a fortress in this location consisting of wooden structures surrounded by an earthen fortification system (PFP Phase 1). This fortress was utilized by the first generations of Roman soldiers, until its abandonment in the Antonine period.¹⁸ PFP Phase 2 is represented by the construction of at least three large stone buildings around a courtyard.¹⁹ One of these buildings was revealed in Area 22; however, we were unable to determine its function. For heretofore unknown reasons the Antonine building in Area 22 was dismantled; perhaps it had suffered damage, or perhaps it had become obsolete. PFP Phase 3 is characterized by a campaign to gather Antonine period building materials for re-use, including decorative elements, large building stones, and even the floor pavement. At this time, a considerable portion of the Antonine building in Area 22 was reconstructed, albeit according to a modified plan. The irregularly shaped SW wing of the building with cocciopesto floors and two apsidal chambers may have served as a small bathing complex. The latest features in Area 22 (PFP Phase 4) consisted of crude adaptations to the Severan architecture. This included the installation of hearths, temporary enclosures or roofs (indicated by the presence of post holes), and the constricting or closing off of apertures with stone and concrete masonry. The complete absence of artifacts post-dating the Aurelian period and the fact that the features were sealed below tile and stone deposits suggests that the features were installed in the decade immediately prior to the Roman withdrawal of administration.

The PFP has documented all small finds in a cursory manner and we are seeking collaborators who will assist in their full publication. There are no novelties among the coins, metals, or worked bone. Of interest are two examples of faunal remains: the skull of a wolf and the cranium of a horse found in association with a small ceramic vase capped by a spindle whorl. These associated finds may have been part of

¹⁶ E.g., Rutkowski 1961, Gabler 1966; articles in Gudea 1997; Gindele and Istánovits 2009; Kulcsár and Merai 2011.

¹⁷ Negru 2003.

¹⁸ Considering that soldiers permanently based at Porolissum required a robust stone fortress and that both the amphitheatre (Bajusz 1997 and 1999) and the buildings around a courtyard excavated by the PFP were monumentalized in stone during the reign of Antoninus Pius, it is possible, if not likely that the fortress on Pomăt Hill was first constructed in stone at the same time.

¹⁹ The PFP did not excavate extensively on the south side; therefore, we are not aware of similar constructions that framed the 4th side of the courtyard.

a ritual deposit. Finally, the statistical evidence from an analysis of pottery demonstrates a strong reliance upon regionally-procured pottery and a very small proportion of imports from the Mediterranean in the 2nd century and from the Black Sea and North Africa in the 3rd century.

ABBREVIATIONS

ActaMP	Acta Musei Porolissensis, Zalău, 1977-.
BAR-IS	British Archaeological Reports – International Series, Oxford, 1974-.
JRA	Suppl. Journal of Roman Archaeology Supplemental Series, Ann Arbor, 1990-.
RCRFA	Rei Cretariae Romanae Fautores Acta, U. Michigan, 1958-.

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APPENDIX 1. "SMALL FINDS" FROM AREA 22 OF THE POROLISSUM FORUM PROJECT

Acc. No.	Archaeological context	Description
184 – coin	Tr. 22G, SU 2, Rubble layer to west of wall	Denarius of Severus Alexander. Obv. IMP M AUR SEV ALEXAND AUG, head laureate facing r.; Rev. VIRTUS [AUG], male figure facing l. holding spear in l. hand and wreath (?) in r.; close to Găzdac 1468
186 – coin	Tr. 22A, SU 4, Depth –0.8 m.	Sesetertius of Carcalla for Plautilla. Obv. PL[AU]TILLA AUG, female bust facing r.; Rev. CONCO[RDIA], seated figure facing l. with cornucopia in l. hand and patera in r. hand
238 – coin	Tr. 22J, SW corner, Dark earth above sand, D. –0.75	Denarius of Domitian. Obv. IMP CEAS DOMIT AUG with head laureate facing r.; Rev. IMP XXI COS XIII CENS PP... with Minerva (?) standing facing l. with shield to bottom r. and spear in r. hand; silver plated
239 – coin	Tr. 22N, light brown layer w yellow mortar, Depth –0.75 m.	Denarius of Septimius Severus. Obv. IMP CAE L SE[VER]US... COS I, head laureate facing r.; Rev. ROMA – SPES (?), Ceres standing holding grain, facing l
241 – coin	Tr. 22F1, SU 1 – Topsoil	Denarius of Antoninus Pius for Marcus Aurelius Caesar. Obv. ... AUG P[IUS]... with bust facing l.; Rev. ... AUG PIUS COS with bust facing ... (note hair is beaded like portraits of Marcus Aurelius, no beard); akin to Găzdac 661
246 – coin	Tr. 22M, SU 1 – Topsoil	Sestertius of Commodus (for Crispina?). Obv. Legend erased, female bust facing r.; Rev. legend erased, standing figure facing l.
247 – coin	Tr. 22K, dark earth W side of late ditch, Depth –0.46 m.	Denarius of Septimius Severus (for Geta?). Obv. L SEPTIMIUS ... CAES, bust without beard facing r.; Rev. ... AE ..., togate figure facing l.
255 – coin	Tr. 22E, colored clay level between wall and N balk, Depth –1.32 m.	Sestertius of Antoninus Pius. Obv. ANTONINUS AUG PIUS PP TR P COS III with head laureate facing r.; Rev. Salus standing facing l., holding staff in l. hand and feeding serpent coiled around column to l., SALVS SC (AV)G; akin to RIC III 784
256 – coin	Tr. 22I, Depth –1.7 m.	Sestertius of Trajan. Obv. [IMP TRAIANO] AUG GER DA[C PM TR P] COS [V PP] with bust facing left; Rev. SPQR O[PTIMUS AUG] with winged victory facing r. with shield.
182 – faunal	Tr. 22A, SU 8, SW corner, Depth –0.8 m.	Cranium of wolf, possibly of military standard and/or ritual deposit
539, 540, 541 – faunal and ceramic	Tr. 22A, SU 8, SW corner, Depth –0.95 m.	Cranium of horse with ceramic vessel and spindle whorl; ritual deposit?
183 – metal, copper alloy	Tr. 22E, SU 4, dark earth with artifacts on west side, Depth –0.8 m.	Fragment with two squared edges and hole in the middle, possibly fragment of a statue. 1.6 × 6.5 cm
192 – metal, copper alloy	Tr. 22A, SU 4, Depth –0.9 m.	Rectangular element with rounded edge; component of a buckle? 1.9 × 0.8 cm; Cf. Gudea 1972 LXXI/1–22 and CXIII/32–33
194 – metal, copper alloy	Tr. 22A, SU 4, Depth –0.8 m.	Thin strip tapering to a point, 1.4 × 0.4 cm; Cf. Gudea 1972 CXIII/33
195 – metal, copper alloy	Tr. 22D NE corner, D. –0.77	Three related fragments: 2.9 × 1.9 cm, 2.8 × 2.5 cm, 1.7 × 1.6 cm; roughly triangular with curved sides; appliqué or scales of armor?
198 – metal, copper alloy	Tr. 22A, SU 9, south side, Depth –0.86 m.	small ligula?

201 – metal, copper alloy	Tr. 22G NE corner, D. –0.8 m.	Circular element with Diam. of 1.2 cm crested by a cylindrical rod with L. 1.5 cm is placed upon a fragmented shaft preserved L. 2.9 cm; hole drilled through shaft. Armor attachment? Cf. Matei and Bajusz LXXX/6
202 – metal, copper alloy	Tr. 22E, SU 3, M. 1.8 on top of wall, Depth –0.75 m.	small squared shaft; 7.1 × 0.7 cm; decorative nail?
203 – metal, copper alloy	Tr. 22E, Depth –1.12 m.	Roughly square applique, pierced with 4 holes; crescents below each of the holes; 5.0 × 4.8 cm; cf. Gudea 1972 CXVIIIa/4 and 6
204 – metal, copper alloy	Tr. 22E, SU 3, white mortar layer below rubble, Depth –0.78 m.	Roughly square applique, pierced with 4 holes; crescents below each of the holes; 5.0 × 4.2 cm; cf. Gudea 1972 CXVIIIa/4
249 – metal, copper alloy	Tr. 22J, brown layer with yellow mortar W of wall, Depth –0.7 m.	Intact circular appliqué yellow central circle delineated with alloy with enameled alternating white and blue radiating trapezoids; diam. 1.8 cm; Cf. Matei and Bajusz LXXVII/8 and Gudea 1972 LXIX/10, 11 and LXX/13, 14
250 – metal, copper alloy	Tr. 22J, SU 2 rubble layer in SE corner; Depth –0.3 cm	Fragment of applique with pierced abstract geometric design and scalloped edge; 1.7 × 2.8 cm; cf. Gudea 1972 LXXVI/1
251 – metal, copper alloy	Tr. 22L, dark brown layer E of wall, SE corner, Depth –0.6 m.	Circular appliqué with 2 holes near the center; diam. 3.2 cm; cf. Gudea 1972 LXIX/53
252 – metal, copper alloy	Tr. 22J, light brown layer W of wall, NW corner, Depth –0.9 m.	Spherical copper alloy object on an iron shaft, 1.2 × 3.2 cm; cf. Gudea 1972 CXVIII/3
259 – metal, copper alloy	Tr. 22A, SU 2, rubble layer, Depth –0.3 m.	Circular object like acc. no. 201; circular element has diam. 1.3 cm; total L. 7.3 cm; cf. Matei and Bajusz LXXX/6
260 – metal, copper alloy	Tr. 22A, brown layer within apse, Depth –1.1 m.	A thin metal strip was bent to form the body of the piece, widening at ends to form 2 convex circles with flattened edges; one end pierced by a hole; 3 × 1 cm;
261 – metal, copper alloy	Tr. 22K, light brown layer E of wall, Depth –1.0 m.	Shaft of an object, L. 9.8 cm, W. 0.2 cm
263 – metal, copper alloy	Tr. 22A, dark earth below rubble layer, Depth –0.6 m.	Rounded bead with central hole; diam. ca. 0.4 cm; cf. Gudea 1972 XCVII/16 and XCVIII/2
264 – metal, copper alloy	Tr. 22E, SU16, Depth –1.5 m.	Roughly rectangular fragment of a statue? Ca. 8.8 × 2.8 cm, thickness 0.4 cm.
265 – metal, copper alloy	Tr. 22D, dark earth below rubble layer and above columns, Depth –0.7 m.	Fragment of a large hollow cast statue, no telling features; 9.0 × 6.7 cm, thickness 0.7 cm.
266 – metal, copper alloy	Tr. 22C, compact dark clay layer with plaster, Depth –1.35 m.	Fragment of a spear head (?) with 2 pierced holes, 1 centered 0.6 mm above the base, 2nd off-center 2.2 cm above base; 5.4 × 2.7 cm; cf. Gudea 1972 LXI/11
268 – metal, copper alloy	Tr. 22A, SU 2, Rubble layer, Depth –0.3 m.	Convex circular object with a flat border and oblong central hole; cf. Gudea 1972 LXIX/53 – classified as a decorative nail
269 – metal, copper alloy	Tr. 22J, loose yellow-brown layer, Depth –1.16 m.	Foot and catch plate of a fibula, foot is decorated with 2 deeply incised horizontal bands; 2.1 × 1.3 cm; cf. Matei and Stanciu Pl. 336/3 and Gudea 1972 XCIII/2
270 – metal, copper alloy	Tr. 22J, loose yellow-brown layer, Depth –1.16 m.	Fragment of head and catch plate of a fibula; trapezoidal head with semicircular incision, 4.0 × 1.8 cm

271 – metal, copper alloy	Tr. 22C, dark earth below early Severan rubble layer, Depth –1.3 m.	Complete fibula with spring and pin; the head is triangular and the body widens at the bending point, like a “knee type”; spring is held in place by a rectangular fastening attached to the back of the head, the pin measures 3.0 cm; 4.0 × 2.9 cm; cf. Gudea 1972 XCV/1–3 and Matei and Bajusz XCII/1.E
272 – metal, copper alloy	Tr. 22F, compact black layer, Depth –0.9 m.	Thin shaft, circular in section, which tapers to a point; flattened end, needle, stylus, or hairpin; 18.6 cm; cf. Apulum 2007/23, Gudea 1972 CX/10
273 – metal, copper alloy	Tr. 22F, compact black layer, Depth –0.9 m.	Component of a fibula; slightly curved with ten rows of 3 knobs, each knob measuring 0.3 cm; Matei and Stanciu Pl. 339/7
275 – metal, copper alloy	Tr. 22A, brown layer with yellow mortar W of wall, Depth –0.7 m.	Slightly curved rectangular fragment widening toward one end with an indentation near what is likely the head of the object, 1.5 × 0.9 cm; cf. Gudea 1972 LXXI/1–22 and CXIII/32–33
287 – metal, copper alloy	Tr. 22L, SU 2, early Severan rubble layer inside apse, Depth –1.1 m.	Circular head of a spoon with a basin 1.2 cm deep and diam. of 3.1 cm; the basin is half-spherical with an incised line delineating the border; the handle of the spoon
205 – metal, iron	Tr. 22E, NE corner below plaster layer in dark earth, D. –1.0	spear head: L. 19.3 cm, 4.0 cm
461 – metal, iron	Tr. 22F1, Depth –1.6 m.	Knife. Blade has L. of 11 cm, max. W. 2.7 cm; portion of handle shaft preserved with L. 7.5 cm; curved cutting edge; akin to examples from Gudea 1972 in Gudea 1989 Pl. LXVII/5, 7, and 9
462 – metal, iron	Tr. 22J, SU 2, rubble layer, Depth –0.45 m.	Fragment of arrow head with conical attachment; L. 3.8 cm. Cf. Gudea 1972 Pl. LXI/ 3, 5, 7
-- metal, iron	Area 22	34 nails recovered
-- metal, iron	Area 22	3 clamps recovered
262 – metal, silver	Tr. 22F1, SU 13, Depth –1.55 m.	Half of a circular appliqué, undecorated; 5.4 × 3.0 cm
270 – metal, silver	Tr. 22J, early Severan rubble layer, Depth –1.16 m.	Fragment of a fibula with head and catch plate; decorated trapezoidal head; 4.0 × 1.8 cm
289 – worked bone	Tr. 22L, light brown layer above mortar, E of wall, Depth –0.9 m.	Three fragments of a hairpin or stylus. Head of object is rounded; shaft remains unpolished; cumulative L. 11.6 cm, thickness 0.3–0.5 cm; cf. Matei and Bajusz XCV/4–5
290 – worked bone	Tr. 22J, sandy layer near hearth, Depth –0.7 m.	Polished shaft of a hairpin or stylus; L. 9.7 cm, thickness 0.3–0.5 cm; cf. Apulum 2007/100
291 – worked bone	Tr. 22J, dark brown layer with pink sandy mortar, E of wall, Depth –0.8 m.	Polished shaft, circular in section; L. 4.5 cm, thickness 0.4–0.5 cm
294 – worked bone	Tr. 22C, Depth –2.0 m.	Fragment of a medical spoon. The head of the spoon is fragmentary, but the remains suggest it was circular and shallow; the shaft is circular in section with a thickness 0.3–0.5 cm; L. 10 cm; Matei and Bajusz LXXXII/4
323 – worked bone	Tr. 22D, dark earth below rubble, Depth –0.8 m.	This object is a hook with a 4-pronged base; the U-shaped hook comes to a point; base of hook is drilled and has 2 incised lines, dividing it into 4 quarters; 5 × 1.2 cm
324 – worked bone	Tr. 22J, pink/yellow surface in structure, Depth –0.7 m.	Cylindrical container consisting of 12 fragments; flat circular base; smoothed surfaces; interior bears a ridge into which the circular base can fit; a lip at the opposite end held a disc that could close the cylinder; L. ca. 13 cm, diam. 3.2 cm

APPENDIX 2. CHARACTERIZATION OF THE LOCAL/ REGIONAL VARIETIES OF POTTERY.²⁰

Dacian hand-built ware has, to date, only been identified in mid second century deposits of the PFP associated with the abandonment of the wooden fortress and construction of the Antonine stone phase. This fabric of this pottery is not dissimilar to the “coarse 2” variety of Porolissum Gray Ware; however, the range and size of inclusions (some as large as 5–6 mm.) is different and the vessels were hand-built. Negru (2003) dates this pottery between the late Iron Age of Dacia and the fourth century AD.

Porolissum fine-bodied ware is characterized by a fine, pale yellowish-brown to light reddish-orange paste with few to sparse inclusions: milky quartz, limestone, and schist; sometimes coated with a thin reddish slip. This fabric is subdivided into PF–1, which has a rather soft, powdery body, and PF–2, which has somewhat more inclusions and was fired at a higher temperature, creating a harder fabric. The form repertory is broad and includes a series of open and closed vessels utilized for household purposes. Its chronology spans the Roman period.

Porolissum coarse-bodied ware is characterized by a slightly gritty paste that ranges in color from pale grayish-brown to yellowish-brown and reddish-orange; sometimes coated with a reddish to reddish-brown slip. This pottery also contains milky quartz, limestone, and fine particles of schist. PC–1 is common and has a rather fine clay matrix containing a variety of small inclusions; PC–2 is common and contains a significant amount of mostly sand-sized inclusions. The form repertory is broad and includes a series of open and closed vessels utilized for household and utilitarian purposes. Its chronology spans the Roman period. Two other classes of pottery, provisionally labelled PC–3 and PC–4 are rare and contain inclusions that are not typical of the other “Porolissum” wares.

Porolissum Gray Ware, fine-bodied shares the basic characteristics of Porolissum fine-bodied ware, except that this pottery was intentionally fired to a pale to medium gray color. This pottery is not very common and, thus, the form repertory is more limited than its oxidized counterpart. This pottery becomes more common in the late Roman phase.

Porolissum Gray Ware, coarse-bodied shares similar characteristics as Porolissum coarse-bodied ware, except that this pottery was intentionally reduced. Like its oxidized counterpart, there are two variants – GC–1 and GC–2. This pottery is far more common than the fine-bodied gray ware, but the chronology is similar. The form repertory consists primarily of large open containers and closed containers, such as pitchers, jugs and ollae.

Sigillata Porolissensis is characterized by a fabric that is macroscopically similar to PF–1. This pottery is fine-bodied, generally deprived of macroscopic inclusions (only schist is noted without a handlens) and bears a well-preserved red slip.²¹ The vessel repertory consists primarily of plates, bowls and cups which were frequently decorated with stamped motifs.²² The connections between SP and Mediterranean red-slipped wares are not straightforward. Many SP forms recall ARS, Gallic sigillata or some of the eastern wares, but there are few exact matches. Interestingly, the closest matches are between SP and some of the second and third century forms of ARS-A, such as the Hayes 9B, 10, 14B and 34 as well as Gallic sigillata form Dragendorff 37. In terms of the decorative stamps, the models are some combination of Mediterranean and native European pottery. This is the only ware manufactured in the vicinity of Porolissum known to have been exported from the region; it has been noted as far away as southern Poland.²³

Black stamped ware occurs in small numbers between the mid second and third century at Porolissum. This is a widespread tradition of ceramic production in central Europe, both within the confines of the Empire and as far as the Vistula River Valley. A number of production centers of this ware are known, including Iglonomia and

²⁰ De Sena is preparing an article on the pottery from Antonine deposits from the PFP, which will contain a catalogue of forms.

²¹ Rusu-Bolindeț 2007, Section B.1.2.

²² E.g., Gudea and Filip 1997, Matei and Stanciu 2000, Rusu-Bolindeț 2007.

²³ Rutkowski 1961, Gabler 1966.

Zofipole, Poland,²⁴ Beregsurany, Hungary,²⁵ and even Porolissum (unpublished kiln site excavated by A. Matei). In the PFP excavations, we have identified three different fabrics including two that are akin to the Porolissum Gray wares (fine and coarse 1); all bear a well-preserved dark gray slip. The third fabric is much finer and harder than the typical PGF clay and is almost certainly an “import”. The repertory at Porolissum is limited to a series of small to medium-sized open vessels; many examples bear stamped decoration.²⁶

Overpainted ware occurs throughout Roman period in PFP deposits. The ceramic bodies resemble fabric PC-1, while the surfaces bear polychrome slip applied in “spontaneous” non-geometric and non-figural patterns.²⁷ The slip is generally applied in the form of straight or wavy lines or in a manner to achieve a splotched effect. This tradition of overpainted surfaces was very common in Dacia during the middle centuries of the first millennium AD, but was also a part of early Roman traditions.

Porolissum cooking ware is characterized by the same fabric as Porolissum coarse-bodied ware with, however, a dark brown to gray appearance due to its use over coals and fire.²⁸ The repertory comprises a series of pans, casseroles and ollae with ollae as the most common types. The chronology spans the Roman period.

²⁴ Dobrzańska 1990, 2000, Dobrzańska and Piekarczyk 1999–2000.

²⁵ Dumitrașcu and Sfrengeu 2006, 199–206.

²⁶ Matei 1997b; see also Rusu-Bolindeț 2007, Section B.1.3.

²⁷ E.g., Matei and Stanciu 2000; Rusu-Bolindeț 2007, Section B.1.8.

²⁸ See Rusu-Bolindeț 2007, Section B.2.3.

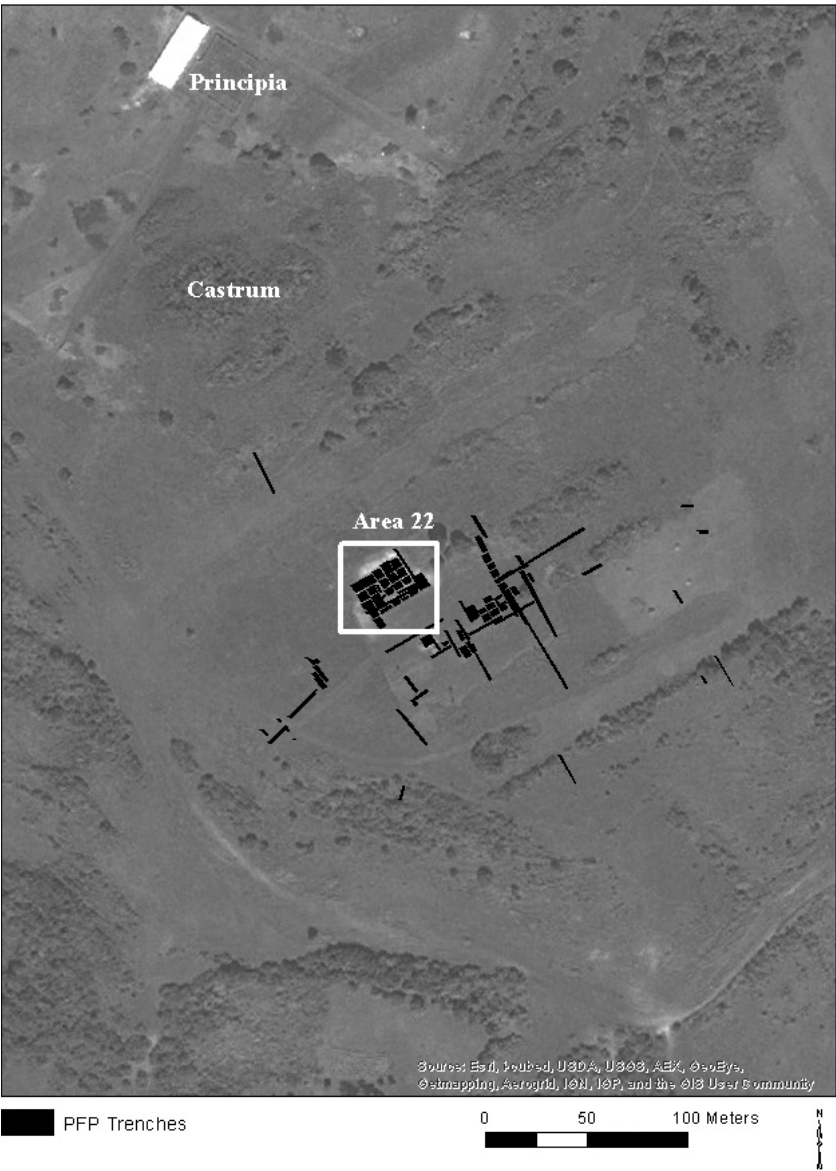


Figure 1A. PFP excavations with location of trenches and features (plan by R. Wanner).

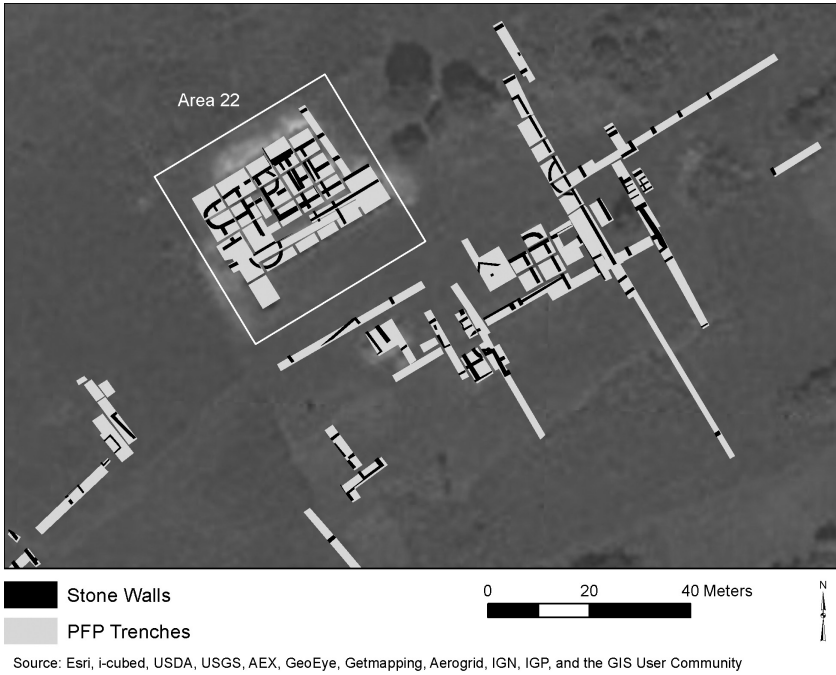


Figure 1B. Plan of PFP excavations with details of trenches and features (plan by R. Wanner).

Figure 2. Plan of Area 22, Phase 1 – Trajanic (plan by R. Wanner).

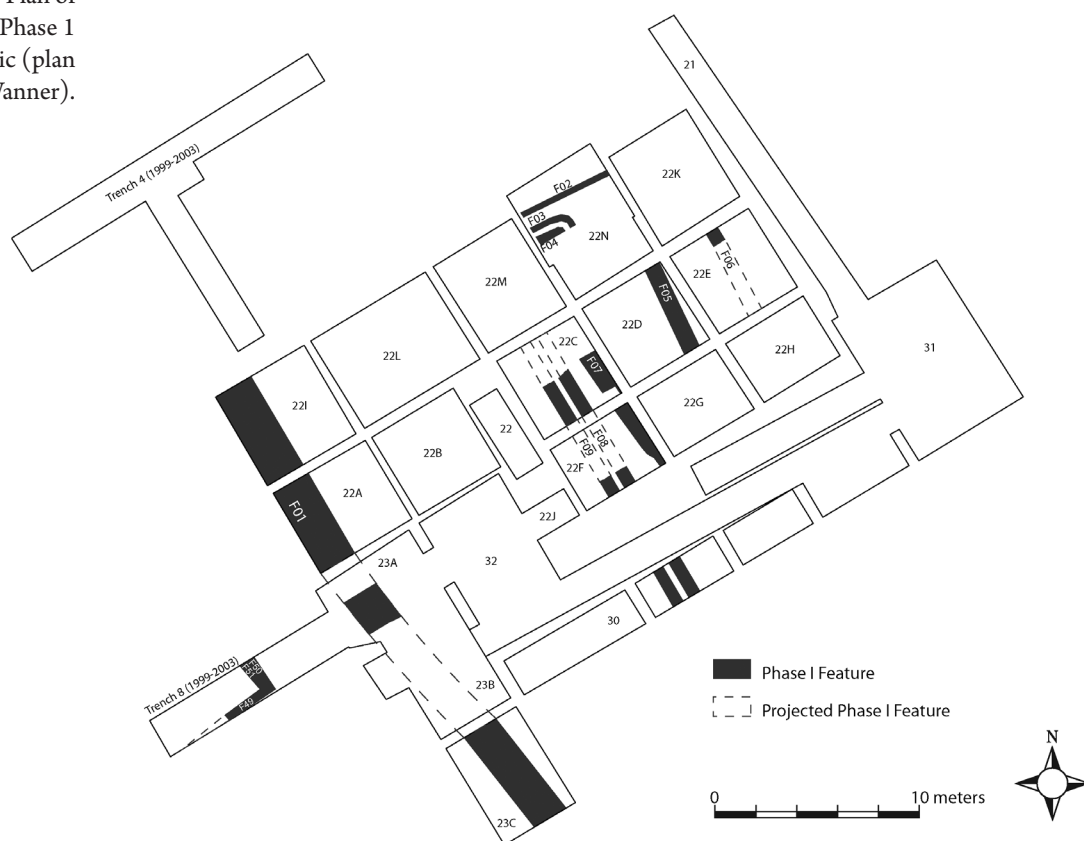


Figure 3. Plan of Area 22, Phase 2 – Antonine (plan by R. Wanner).

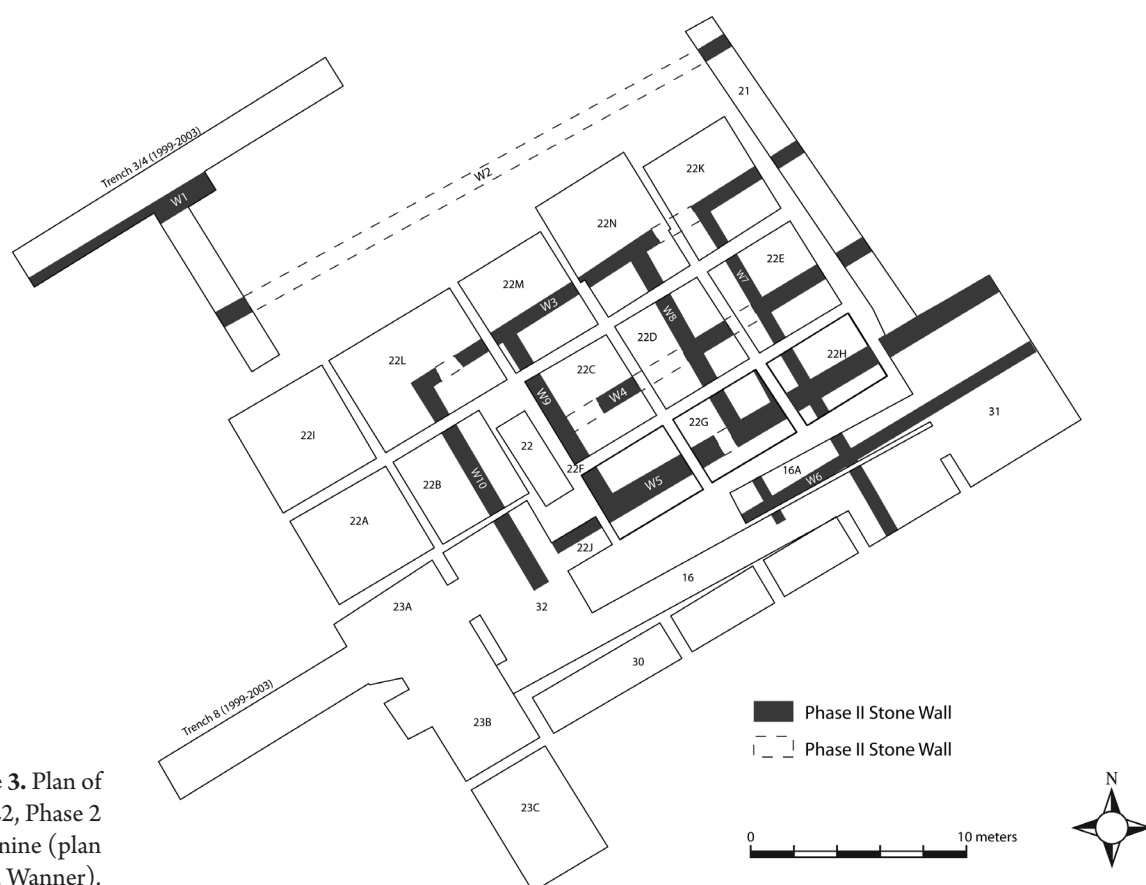




Figure 4.
Trench
22G with
Antonine floor
preparation,
rubble from
dismantling
Antonine
phase building
and packed
clay (photo
E.C. De Sena).

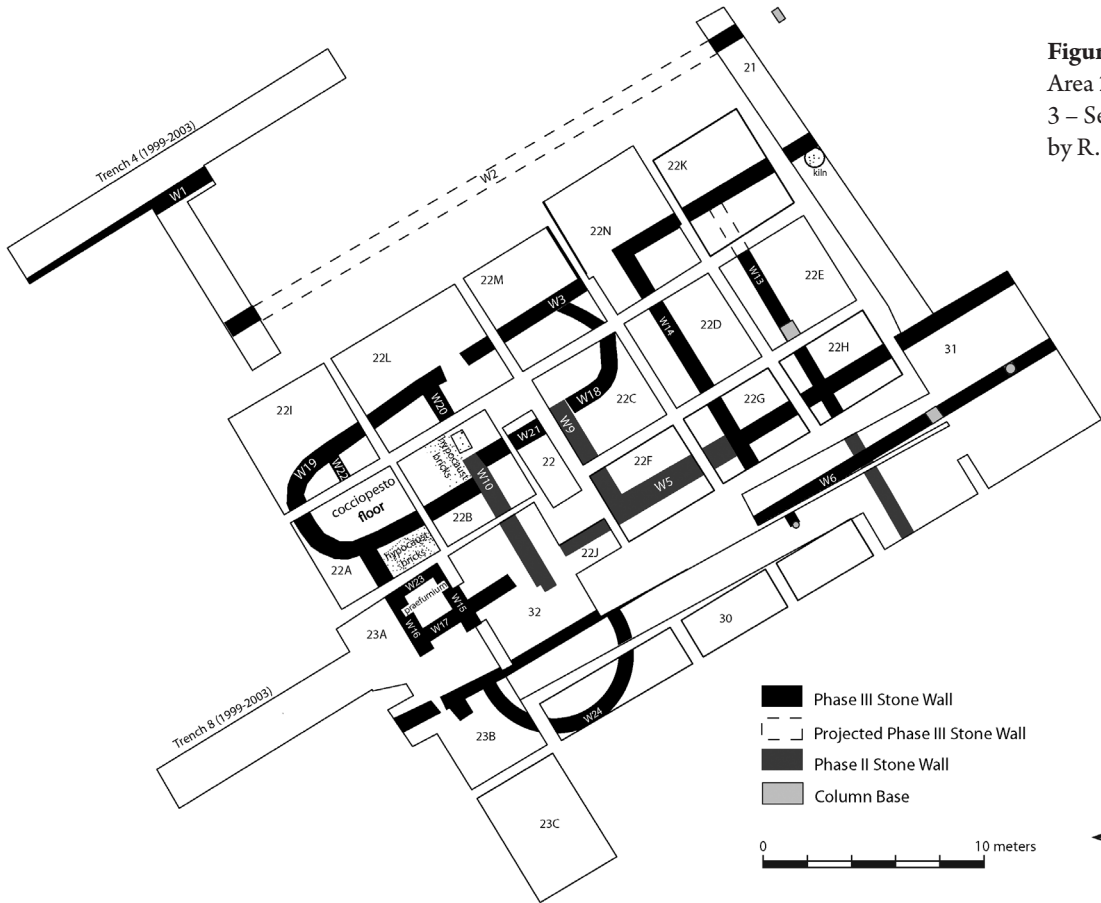


Figure 5. Plan of
Area 22, Phase
3 – Severan (plan
by R. Wanner).

Figure 6. Trench 21 with Severan wall overlying Antonine wall (photo E.C. De Sena).



Figure 7. Trench 21 with oven or kiln (photo E.C. De Sena).





Figure 8. Trench 23A with possible praefurnium (photo E.C. De Sena).

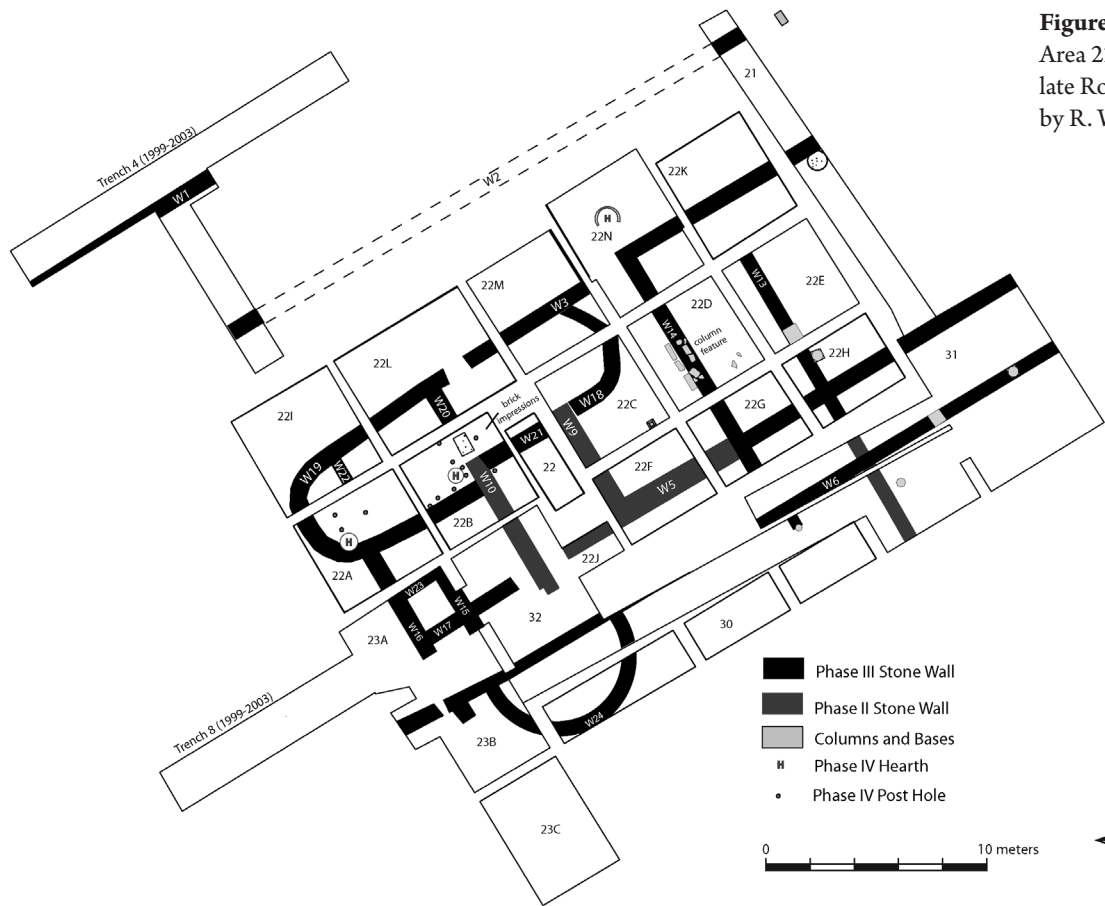


Figure 9. Plan of Area 22, Phase 4 – late Roman (plan by R. Wanner).



Figure 10. Trench 22A with south apse, post-Roman hearth and post holes (photo E.C. De Sena).



Figure 11. Open hearth from trench 22N (photo E.C. De Sena).



Figure 12. Trench 24 with a doorway made increasingly narrower with paving stones and sandstone (photo E.C. De Sena).



Figure 13. Accessioned item 539, cranium of a horse, from possible ritual deposit in trench 22A, SE corner (photo E.C. De Sena).



Figure 14. Accessioned items 540 and 541, small ceramic cup and spindle whorl, from possible ritual deposit in trench 22A, SE corner (photo E.C. De Sena).