

# SAN ROCCO/KOROMAČNIK MILITARY CAMPS (2<sup>nd</sup>–1<sup>st</sup> centuries BC)

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## Izleček

[Vojaška tabora na San Roccu/Koromačniku (2. in 1. st. pr. Kr.)]

Daljinsko zaznavanje in terenski pregledi so na griču San Rocco/Koromačnik razkrili ostanke velikega vojaškega tabora (tabor 1), ta se je raztezal čez celoten grič, manjšega tabora (tabor 2) na vrhu in pravokotnih struktur na jugovzhodnem delu. V letih 2019 in 2021 smo izkopali tri sonde, da bi razjasnili funkcijo in kronologijo ostankov.

Na območju pravokotnih struktur smo izkopali sondo 1 in v njej odkrili del terase, narejene med koncem 2. in sredino 1. st. pr. Kr. Ostanke kažejo, da je bil velik del hriba preoblikovan s terasami v poznorepublikanskem obdobju.

S sondo 3 smo raziskali severno obzidje tabora 1. V prvi fazi, datirani v 2. st. pr. Kr., je bilo obzidje široko 6,5 m. Sestavljalo ga je več linij: nizek kamnit zid z leseno nadzidavo in palisado, dve vrsti lesenih ovir in s kamni obloženo pobočje. Obzidje je bilo uničeno v požaru. V drugi fazi, konec 2. ali na začetku 1. st. pr. Kr., je bilo popravljeno z zemljenim nasipom.

Sonda 2 je pokazala, da je bil tabor 2 zaščiten z vrsto kamnov ter z nizkim nasipom, sestavljenim iz zemljenega in kamnitega pasu. Nasip je bil postavljen v predcaesarijskem obdobju (faza 1) ter obnovljen v sredini 1. st. pr. Kr. (faza 2).

**Ključne besede:** San Rocco, Koromačnik, severna Istra, poznorepublikansko obdobje, 2. st. pr. Kr., 1. st. pr. Kr., vojaški tabor, zgodnjerimska vojaška arhitektura, žeblički za čevlje

## Abstract

On the San Rocco hill, remote sensing and field-walking campaigns indicated the existence of a large Roman military camp (Camp 1) extending over the whole area, a small camp on the top of the hill (Camp 2), and a large area south of it where orthogonal structures have been identified. To clarify the function and chronology of the remains, three trenches were opened in 2019 and 2021.

Part of a terrace construction dated between the end of the 2<sup>nd</sup> and mid-1<sup>st</sup> century BC was found in Trench 1. Together with orthogonal crop and shadow marks, it indicates that a large part of the hill was arranged in terraces.

The northern rampart of Camp 1 was excavated in Trench 3. The 6.5-m-wide fortification of Phase 1 consisted of four lines of defence combining a low stone wall with a wooden superstructure, protected by a palisade, two lines of wooden obstacles, and a stone escarpment. The structure, dated to the 2<sup>nd</sup> century BC, was destroyed by a fire and restored by adding an earth bank in Phase 2 (end of the 2<sup>nd</sup> or beginning of the 1<sup>st</sup> century BC).

Camp 2 on the top of the hill was protected by a low walkway that consisted of an earth rampart reinforced on the inside by a row of stones and on the outside by a stone accumulation (Trench 2). Its construction in Phase 1 is dated into the pre-Caesarean period and the renovation in Phase 2 into the mid-1<sup>st</sup> century BC.

**Keywords:** San Rocco, northern Istra, Late Republican period, 2<sup>nd</sup> century BC, 1<sup>st</sup> century BC, military camp, early Roman military architecture, *caliga* hobnails

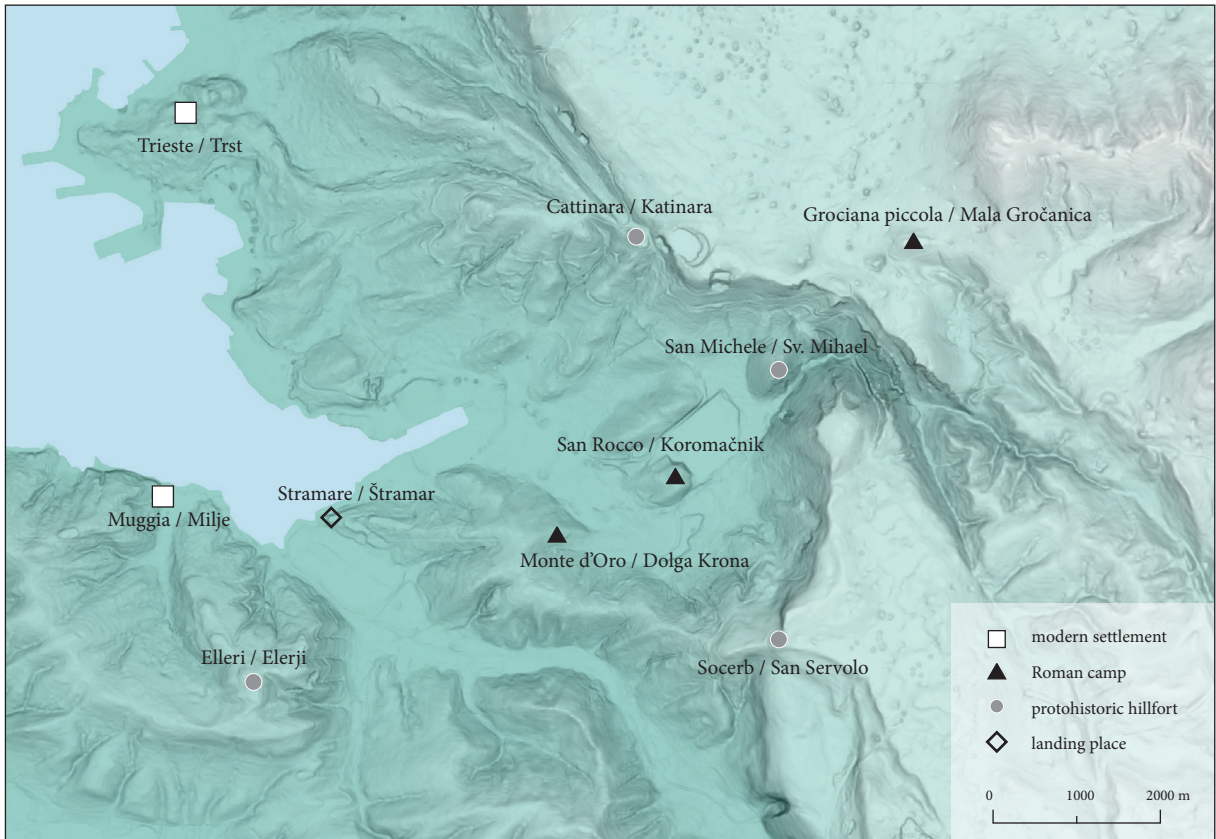


Fig. 1: Location of the Trieste Republican military fortifications and other roughly contemporary sites.

## INTRODUCTION

San Rocco (Koromačnik in Slovenian; Fig. 1) is a low hill, originally extending over 20ha.<sup>1</sup> The plan of the archaeological features has been reconstructed combining ALS-derived digital terrain models with historical aerial imagery (Fig. 2) since the site underwent a considerable transformation in the second half of the last century when large areas were destroyed. Linear ramparts are still visible along the southern and north-eastern sides of the hill (Fig. 2: A–D). An additional rectilinear rampart, north-east of feature B (Fig. 2: G), is suggested only by shadow/crop marks in historical aerial images. It has been suggested that the remains represent a large Roman military camp (hereafter Camp 1). The remains of a rectangular fortification, about 70 x 100 m wide, with a different orientation are visible on the top of the hill (Fig. 2: E). The fortification probably corresponds to a smaller military camp (hereafter Camp 2). A rampart of about 180 m in length starts at the south-eastern edge of Camp 2 and has the same orientation (Fig. 2: F). The structures identified along the south-western slope of

San Rocco and inside the ramparts of Camp 1 also share a similar orientation (Fig. 2: H and I).<sup>2</sup> This orientation corresponds to that of the Roman land division system in the Karst area.<sup>3</sup>

The area of the hill was accurately surveyed between 2015 and 2019 by gathering surface material and by means of a metal detector.<sup>4</sup> With the aim of clarifying the function and chronology of the remains, three trenches were opened in 2019 and 2021 (Fig. 2: 1–3): in area H (Trench 1), across the north-western rampart of Camp 2 (rampart E, Trench 2), and across rampart B of Camp 1 (Trench 3).<sup>5</sup>

The aim of this paper is to present the results of field-walking campaigns and archaeological excavations in San Rocco. The analyses of the excavated structures and chronology are followed by an interpretation of the historical significance of the site and its position in the development of Early Roman military architecture.

<sup>1</sup> Archaeological excavation permit: Italian Ministry of Culture, prot. DGABAP n. 1443, issued on 26. 10. 2020.

<sup>2</sup> Bernardini et al. 2015; Bernardini 2019.

<sup>3</sup> Bernardini et al. 2018.

<sup>4</sup> Bernardini 2019.

<sup>5</sup> Bernardini, Duiz 2021, 39–48.

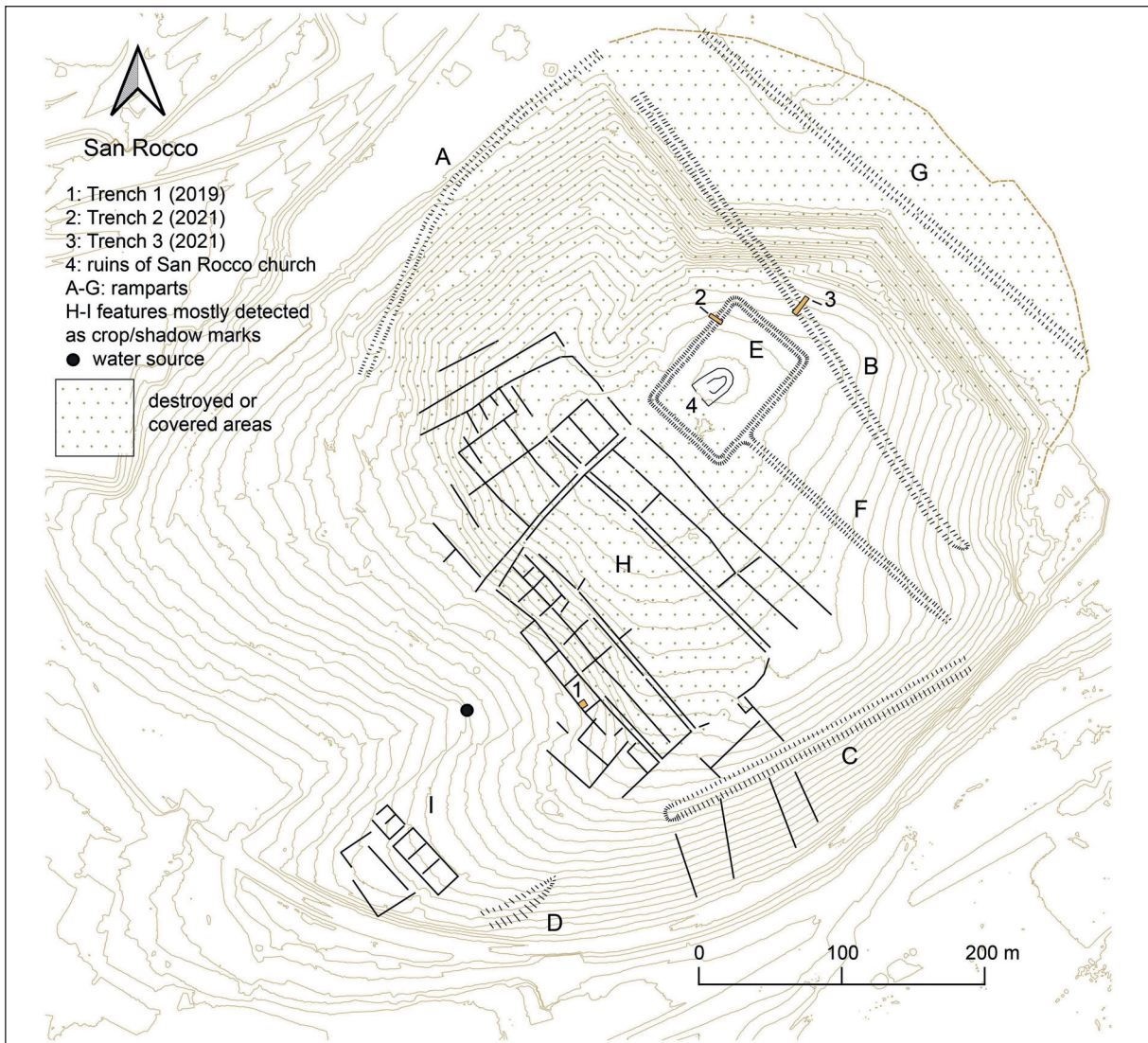


Fig. 2: Plan of San Rocco based on ALS-derived data and old aerial imagery (1957 IGM aerial photograph 2719, 1943 NCAP-000-000-050-243\_San\_Dorligo\_della\_Valle\_Friuli-Venezia\_Giulia\_Italy and later images).

## SURFACE SURVEYS

The results of the surface artefact collection and identification of topographical characteristics were affected by the dense vegetation. Most of the small finds were discovered in areas H and I, where archaeological features have been identified by remote sensing.

Among the metal finds, a Republican *as* dated to the 2<sup>nd</sup> century BC<sup>6</sup> and a peg (for find spots see Fig. 5) are worth mentioning. The latter is about 21 cm long and characterised by a head that widens to form an eyelet in which part of an iron ring has survived (Fig. 3). This long-lasting type, probably used for tents, is mainly known from military contexts dated between the 2<sup>nd</sup>

century BC and the 1<sup>st</sup> century AD.<sup>7</sup> In the hinterland of *Caput Adriae*, similar pegs have been found in Vrh gradu near Pečine, where Roman *militaria* are probably related to Octavian's Illyrian wars in 35–33 BC,<sup>8</sup> and in Ulaka above Stari trg pri Ložu, a prehistoric settlement with the presence of early Roman military finds.<sup>9</sup>

About 60 hobnails have been found at San Rocco, most of them by the metal detector (Fig. 5). According to the typology of the hobnails from Alesia, type A does not have a pattern on the underside, type B has several linear signs, type C a series of spaced large dots, and type D linear signs and dots (Fig. 4: A–D).<sup>10</sup> Type E with

<sup>7</sup> See references in Istenič 2015, 51.

<sup>8</sup> Istenič 2015, Pl. 7: 11.

<sup>9</sup> Laharnar 2013, Fig. 3.1.

<sup>10</sup> Brouquier-Reddé, Deyber 2001, 303–304, Pl. 93.

<sup>6</sup> Bernardini 2019; Callegher 2019.

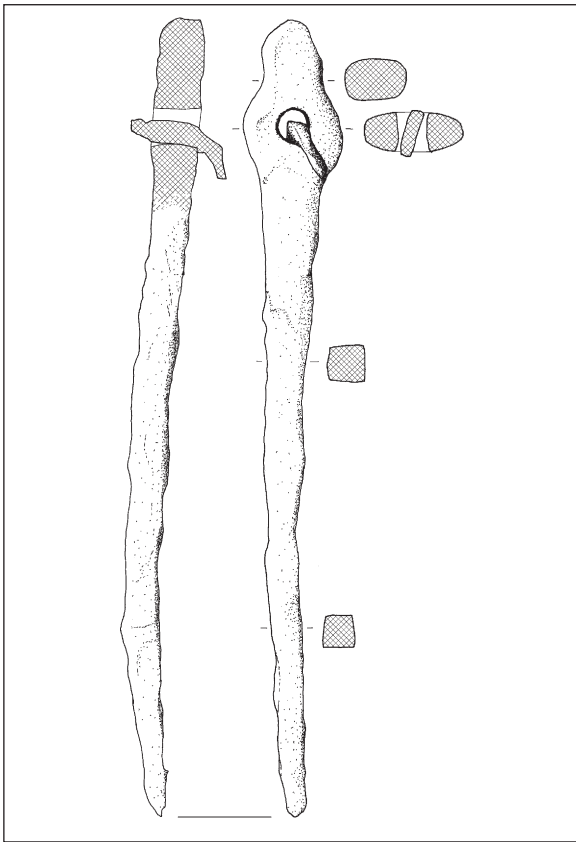


Fig. 3: San Rocco. Surface survey. Tent peg. Iron. Scale 1:2.

numerous circularly arranged small dots has been additionally defined (Fig. 4: E).<sup>11</sup> Hobnails of Alesia types B, C, and D are well attested in Late Republican military sites in the period between Caesar's campaigns in Gaul and the beginning of the Augustan period.<sup>12</sup> However, Alesia type D hobnails have recently been reported from Lampourdiér – the probable battlefield of Arausio (105 BC).<sup>13</sup> In the middle and late Augustan period, type C dots became smaller and multiplied.<sup>14</sup> Type E, with very small dots arranged in a circle, is probably at the end of this development in the 1<sup>st</sup> century AD.<sup>15</sup> Type A was in use for a long time during the Roman period.<sup>16</sup>

About one third of the hobnails from the San Rocco surface survey are heavily corroded making a reliable classification impossible and suggesting caution in the interpretation of the assemblage. Hobnails of types A, C and D have been identified. It is important to stress that types B and D from San Rocco as well as from other sites in the Trieste area (about 200 hobnails

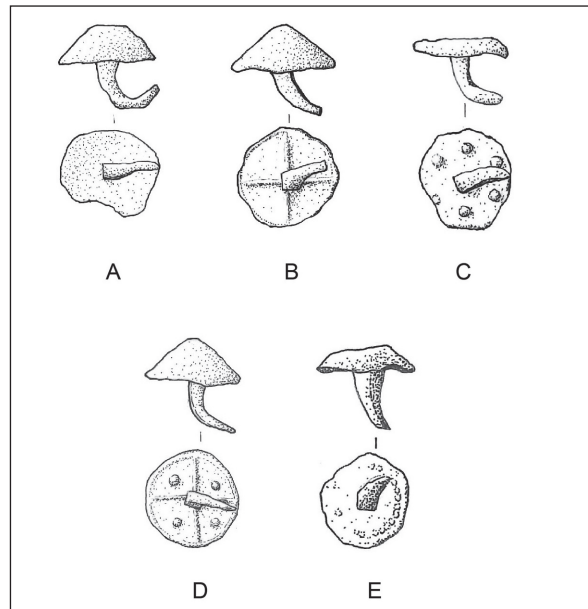


Fig. 4: Typology of iron hobnails: Alesia types A–D and type E. Grociana piccola and the surrounding area. Not to scale.

from military sites and ancient roads are known) bear only the pattern with cross-shaped linear signs (Fig. 4: B,D),<sup>17</sup> contrary to Alesia where a variety of layouts and numbers of linear signs appear in the same types.<sup>18</sup> We compared the types and quantity of the hobnails from San Rocco to the assemblage from the Grociana piccola (Mala Gročanica in Slovenian) Outer Camp, dated to the mid-1<sup>st</sup> century BC,<sup>19</sup> and to the military sites in Slovenia possibly connected to Caesar's proconsulship in Gaul and Illyricum (59–49 BC) or with Octavian's Illyrian Wars (35–33 BC).<sup>20</sup> San Rocco is the only site where type A has a significant presence, while in all the other sites type D is the most common (Fig. 6). The peculiar head size distribution of San Rocco hobnails is evident. Quite a large group of nails or hobnails have a diameter between 9 and 12 mm and some of them have a very small head with a diameter between 4 and 7 mm (Fig. 7). It is possible that some small-sized nails could have been used for other purposes, not only as hobnails. A similar diameter size distribution is observed in the assemblage from the probable battlefield of *Baecula* (208 BC) at Las Alhacacas, where the most represented group of nails or hobnails bears no pattern on the underside and shows a diameter of around 6 mm.<sup>21</sup>

Amphorae, all very fragmented, prevail among survey finds of pottery. In all, 11 rims of amphorae were found besides several bases and handles (Fig. 9). A rela-

<sup>11</sup> Bernardini et al. 2018.

<sup>12</sup> Poux 2008, 376–81; Istenič 2019, 273–79.

<sup>13</sup> Deyber, Luginbühl 2018, 158, 160–61, Fig. 14.3.

<sup>14</sup> Istenič 2019, 276.

<sup>15</sup> Bavdek 2005; Volken 2011.

<sup>16</sup> Bernardini et al. 2018, with relevant literature.

<sup>17</sup> Bernardini et al. 2018, Fig. 5, S4–S8.

<sup>18</sup> Brouquier-Reddé, Deyber 2001, 303–304, Pl. 93.

<sup>19</sup> Bernardini et al. 2021a.

<sup>20</sup> Istenič 2019.

<sup>21</sup> Quesada Sanz et al. 2015, 381.

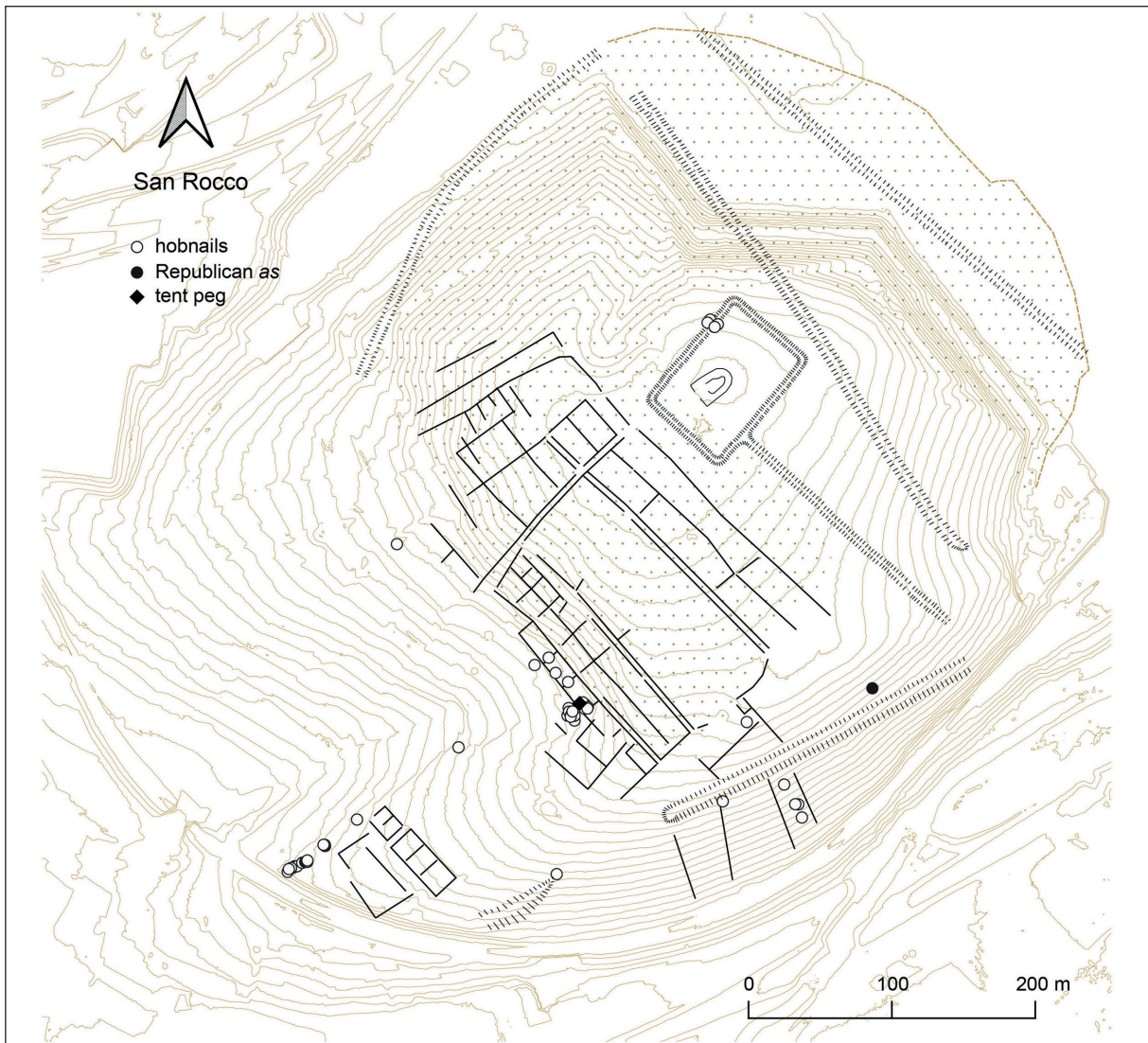


Fig. 5: San Rocco. Distribution of the hobnails and the find spots of a Roman coin and a tent peg from surface surveys.

tively high number of shards rich in black shiny minerals was imported from the Tyrrhenian area (Fig. 8).<sup>22</sup> One of them represents a late Greco-Italic Tyrrhenian amphora, probably from Campania (Fig. 9: 1),<sup>23</sup> and its paste shows less volcanic minerals than the other remains of Tyrrhenian transport containers. The profile of the rim can be classified to type VIa or type VIb by Cibecchini and Capelli (2013), which corresponds to types MGS / RMR VI<sup>24</sup> and Will 1c.<sup>25</sup> Late Greco-Italic amphorae imported from the Tyrrhenian area are very rare in northern Istria, only a few specimens were found at Sermin.<sup>26</sup> They are

also attested in Republican military contexts in the Iberian Peninsula, such as in La Palma and El Castellet de Banyoles, dating back to the end of the 3<sup>rd</sup> to the beginning of the 2<sup>nd</sup> century BC<sup>27</sup>, and Camp 2 of Renieblas, dated to the first half of the 2<sup>nd</sup> century BC.<sup>28</sup> The other rims from the field survey belong to Adriatic amphorae of Lamboglia 2 type (Fig. 9: 2–10).<sup>29</sup> An amphora lid manufactured on a potter's wheel represents the form that was used with Greco-Italic and Lamboglia 2 amphorae.<sup>30</sup> Finally, there were shards of black slip pottery, in general belonging to the Republican period.<sup>31</sup>

<sup>22</sup> Bernardini et al. 2021b.

<sup>23</sup> Bernardini et al. 2015, Fig. 3.4; Bernardini et al. 2021b, Fig. 2; Bernardini 2019, Pl. 3: 12.

<sup>24</sup> Vandermersch 1994, 2001.

<sup>25</sup> Will 1982.

<sup>26</sup> Horvat 1997, 69–71.

<sup>27</sup> Noguera Guillén 2008.

<sup>28</sup> Jiménez et al. 2020, 16, 29, Fig. 20: 5.

<sup>29</sup> Bernardini 2019, Pl. 3.

<sup>30</sup> Horvat 1997, 80–81.

<sup>31</sup> Bernardini 2019.

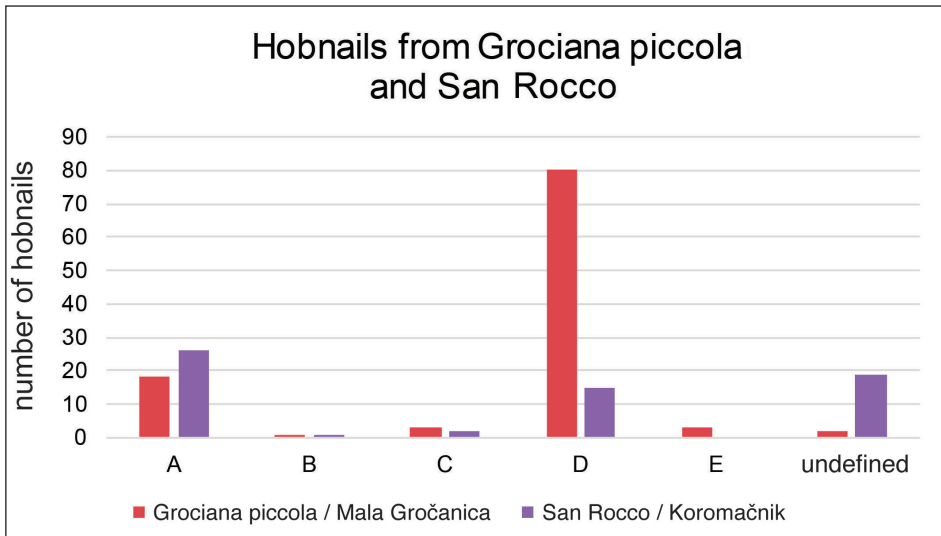


Fig. 6: Quantity of type A-E hobnails. Small nails without pattern (presumed hobnails) are included into type A. San Rocco and Grociana piccola (from both surveys and excavations).

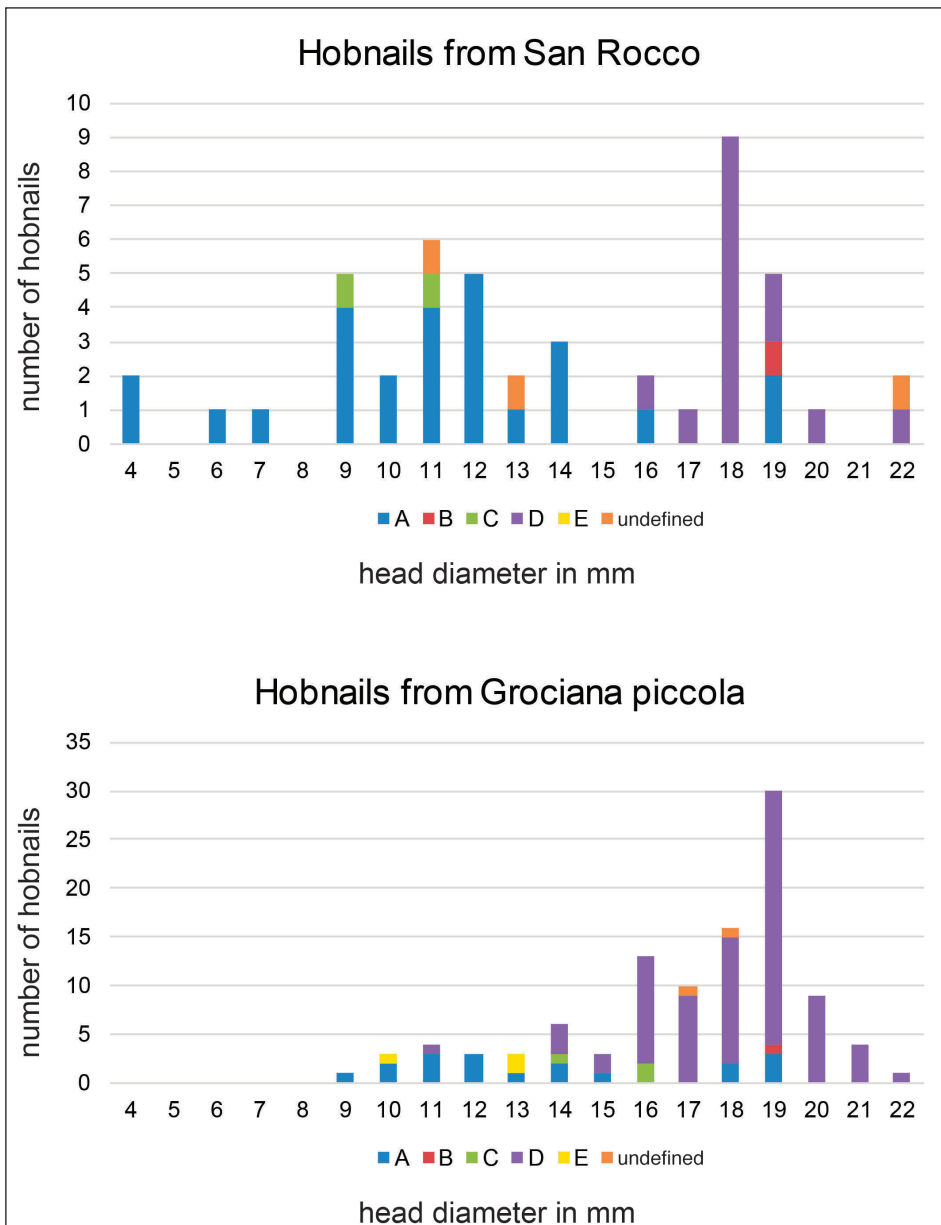


Fig. 7: Head diameters and types of the hobnails from Grociana piccola and San Rocco (from both surveys and excavations). Small nails without pattern (presumed hobnails) are included into type A.

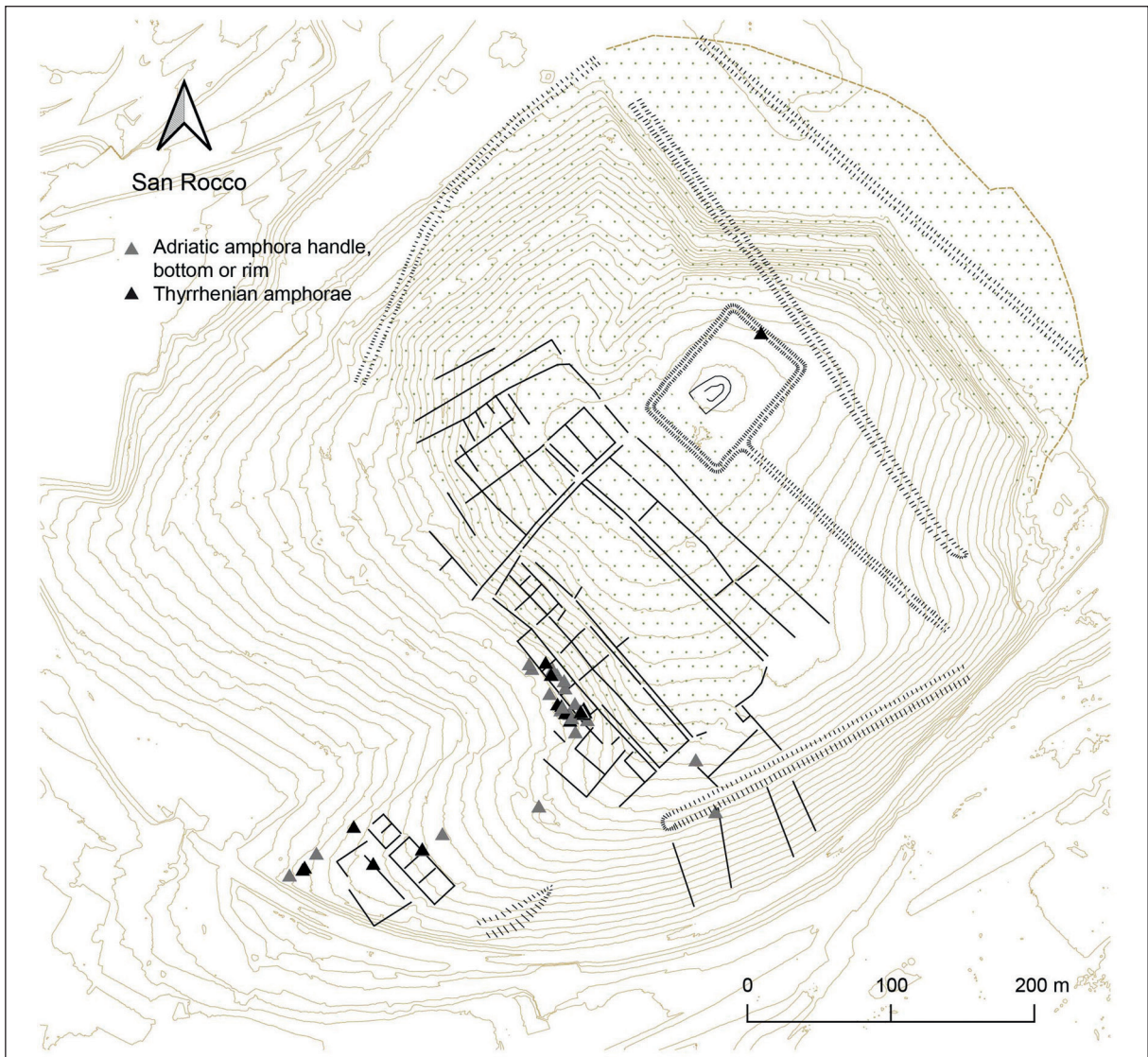


Fig. 8: San Rocco. Distribution of amphora fragments from surface surveys.

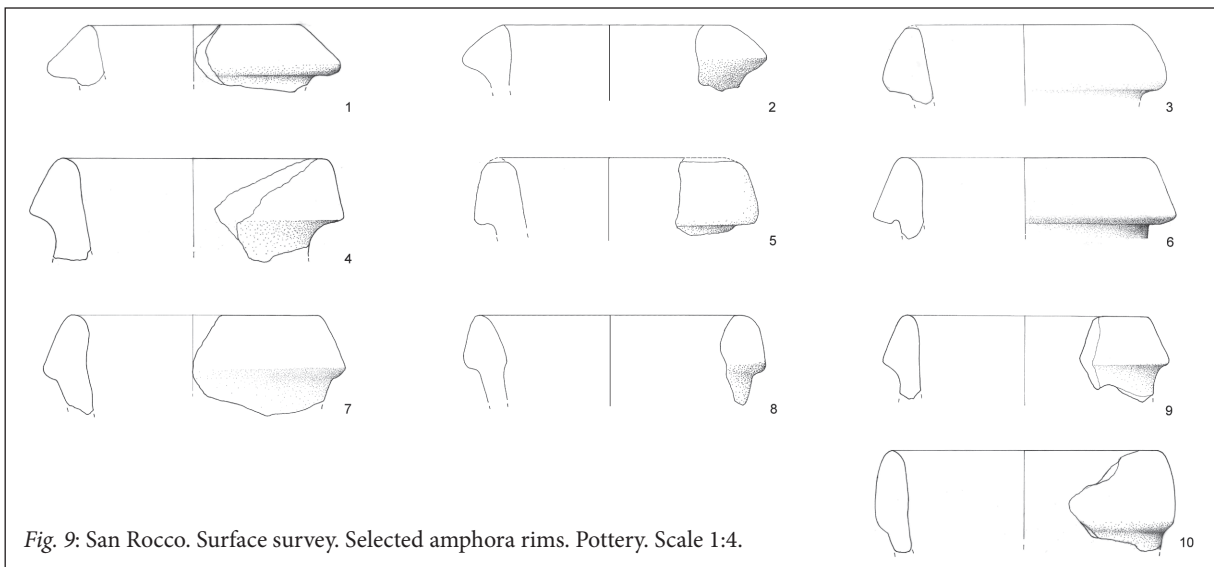


Fig. 9: San Rocco. Surface survey. Selected amphora rims. Pottery. Scale 1:4.

## TRENCH 1

Trench 1 (code SDV19SRO1) (Figs. 10–12) was located in area H where rectilinear structures have been remotely identified and the surface survey revealed a concentration of archaeological finds (Figs. 2: H; 5; 8).

## STRATIGRAPHY

### Stratigraphic units (SU) according to phases

**Bedrock** (Figs. 11–12):

SU516: Marly-arenaceous bedrock.

**Roman period** (Figs. 10–12; 13: A–C):

SU524: A feature cut into bedrock to house SU522/526.

SU522 = SU526: A line of stones housed at a partially remodelled bedrock, identified in the north-western sector of the trench as SU526 and in the south-eastern sector as SU522.

SU521 = SU525: Yellowish silt-clayey layer – in the south-eastern sector (SU521) and in the north-western sector (SU525). Characterised by abundant small fragments of weathered sandstone and a compact roof (possible walking surface?). It contained only Roman finds (Fig. 13: A). Pottery fragments which are generally small (<5 cm) and rounded include walls of Adriatic amphorae, a thin-walled beaker (Fig. 13: 5), and several iron objects (Fig. 13: 1–4).

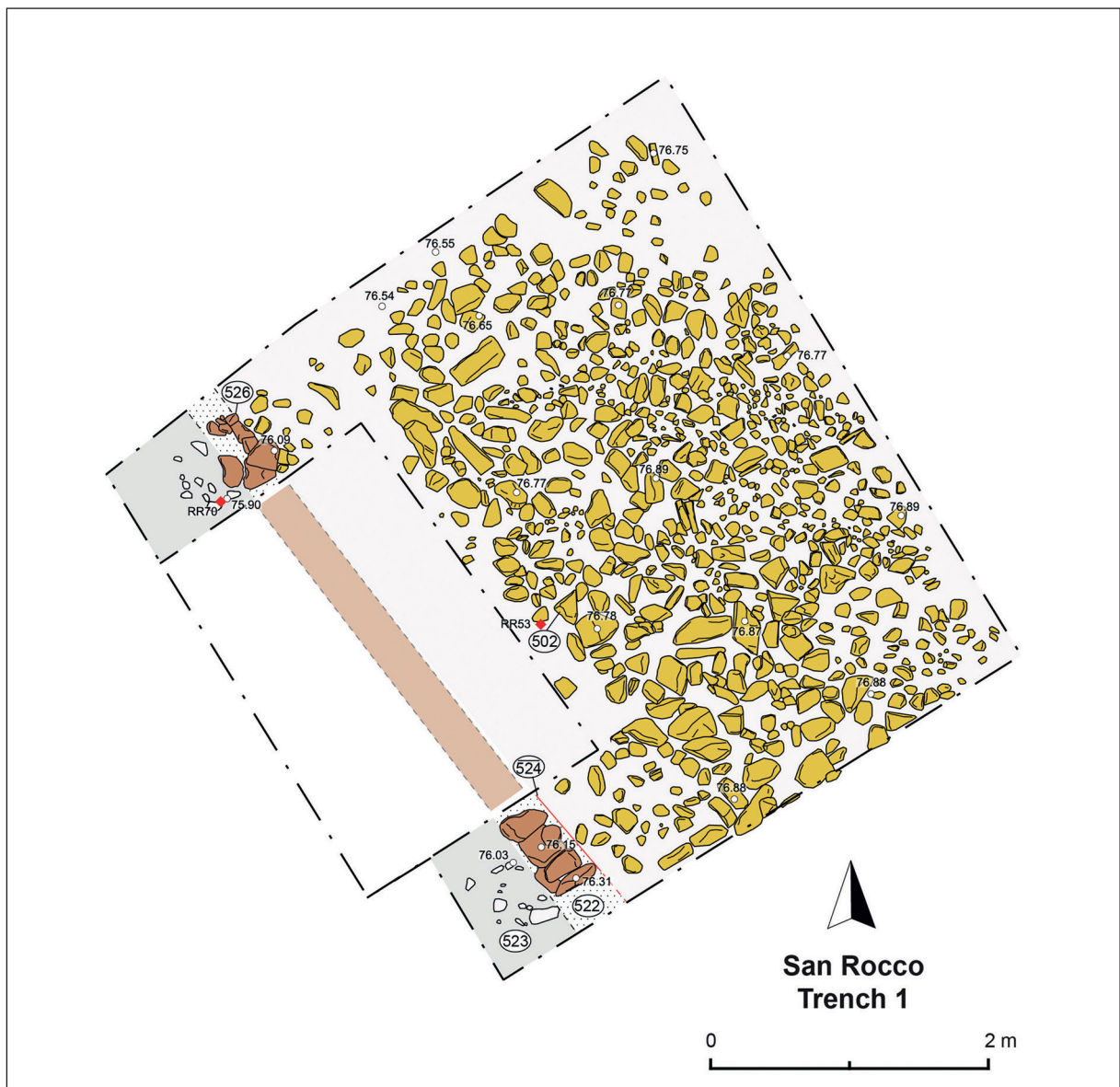


Fig. 10: San Rocco. Trench 1. Ground plan after the removal of SU501 and SU503, highlighting the SU502 stone platform and associated structures. Red diamonds: position of small finds in SU502 and SU506 (RR70 = 506/01 = Fig. 13: 17).



SU515 = SU513 = SU520: Yellowish silt-clayey layer with weathered sandstone fragments; in the south-eastern sector (SU515 = SU513) and in the north-western sector (SU520). Situated above SU521 and SU525. It contained only Roman finds (*Fig. 13: B*), mainly small (<5 cm) and rounded pottery fragments (Adriatic amphorae, thin-walled pottery, Italic cooking ware; *Fig. 13: 16*), several iron artefacts (*Figs. 13: 6–15; 14: 1,2*), and a piece of lead.

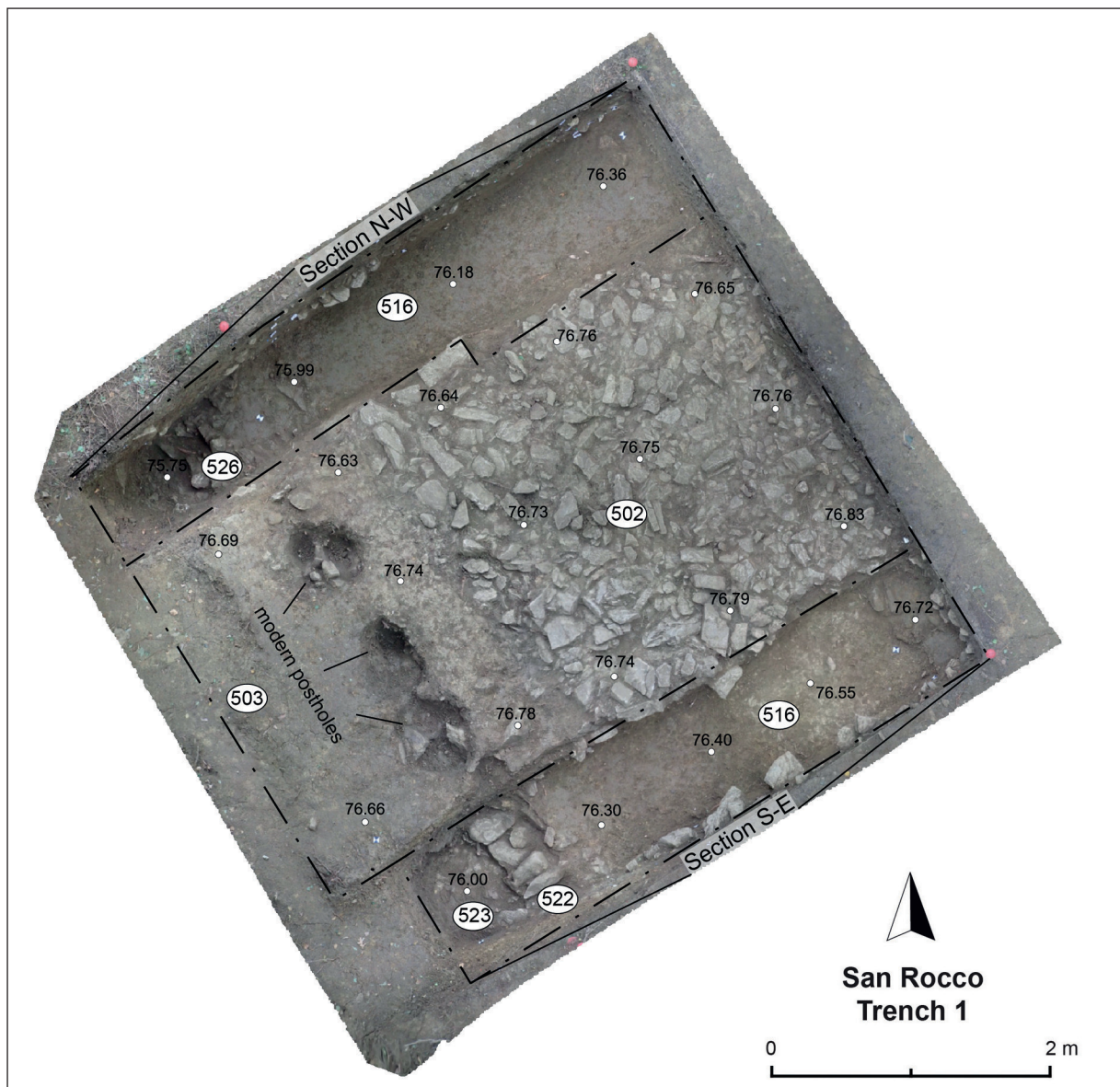
SU502 = SU514: Layer of blocks of sandstone. The larger blocks were positioned in the south-western part of the trench where the layer was inclined and collapsed towards the valley.

SU506: Silt-clayey layer of brown colour and rich in organic matter immediately above SU502. It survived

in the south-western sector of the trench where it was inclined, while it has been tampered by the plough in the central and north-eastern parts of the excavation area. It could be a layer originally made up of the degradation of SU502 and that of the turf grown on it. It was later covered by SU503. It contained several fragments of Adriatic amphorae (*Fig. 13: C–17*).

SU517: Light-brown silt-clayey layer above SU502, visible in the northern corner of the trench. It contained small fragments of Roman pottery. It could be a residual flap of a layer that covered and levelled SU502 but it could also be modern.

SU523: Yellowish silt-clayey layer containing sandstone fragments. Probable filling of wall SU522, identified only in the southern area.



*Fig. 11:* San Rocco. Trench 1. Photogrammetry-derived orthophoto. A part of SU502 and modern post holes in SU503 are visible in the centre; the underlying strata are exposed in the north-western and south-eastern sectors.

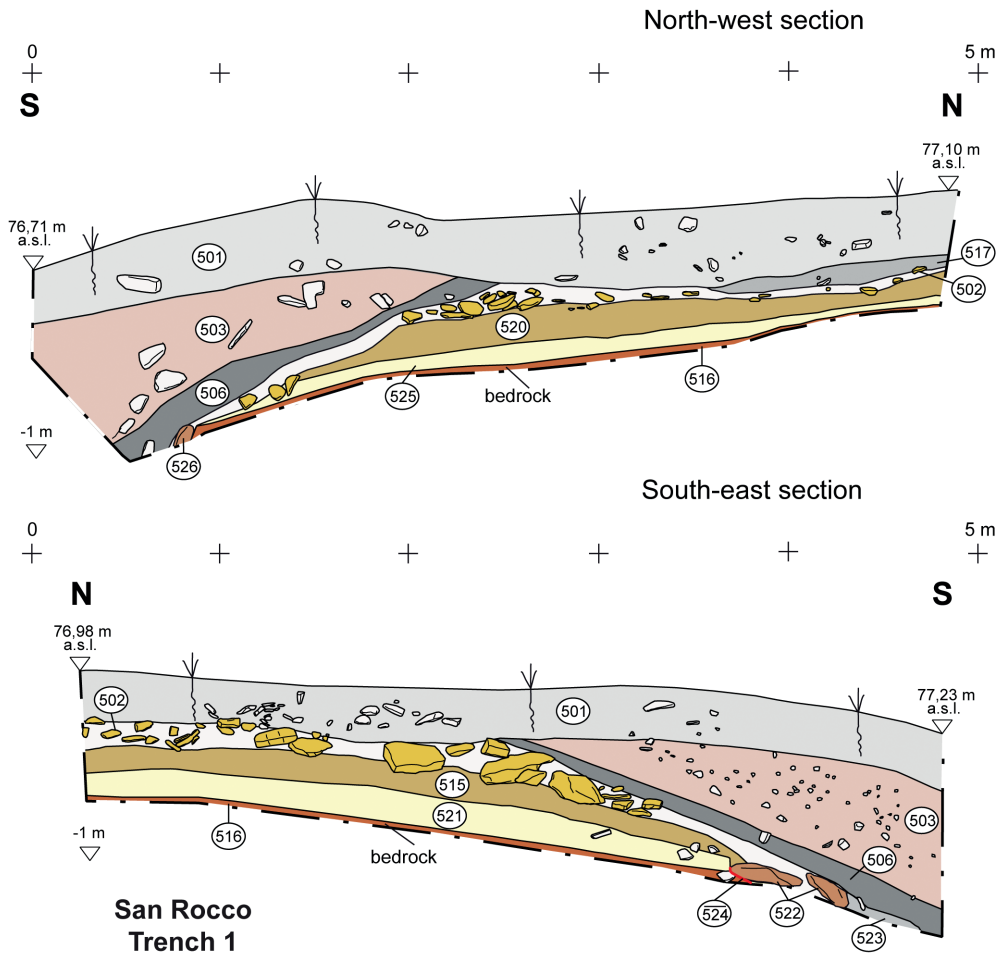


Fig. 12: San Rocco. Trench 1. North-west and south-east cross-sections.

**Modern** (Figs. 10–12; 13: D):

SU503: Layer of silt-clayey soil of yellowish colour located in the south-western area of the trench containing Roman (Fig. 13: 19,22,23) as well as rare modern artefacts.

SU501: Surface layer damaged by the plough to a depth of about 30–40 cm. It held sandstone blocks coming from the tampering of SU502 below. In addition to modern finds, it also contained Roman artefacts (Fig. 13: 18,20,21,24–26).

SU519–SU518, SU510–SU512, SU509–SU511, SU505–SU508, SU527–SU528, SU504–SU507: Post holes obtained inside SU503 and related fillings (Fig. 11).

INTERPRETATION

The earliest layers and structures that contained exclusively Roman material (Fig. 13: A–C) are probably connected to the ancient terracing system. The

terrace was constructed of two preparation levels of silt-clayey material that were placed one above the other: the lower (SU521, SU525) and the upper ones (SU515, SU513, SU520). Preparation levels supported a platform of stones (SU502, SU514) which had probably a drainage function on the top of the terrace. The terrace was consolidated on the slope by a retaining wall (SU522, SU526). All these layers and structures are partially collapsed down the slope. The stone platform (SU502, SU514) was covered by dark layer SU506 which can be interpreted as the thin original topsoil or walking surface on the terrace. It was found only in the south-western sector of the trench where it lay deeper below the slope and therefore was not tampered by the modern plough.

The mixed surface layers (SU501, SU503) above the Roman terrace contained both Roman (Fig. 13: D) and modern artefacts. Layer SU503 is probably the result of a modern soil removal – it was possibly taken in the upper parts of the hill and deposited in the area

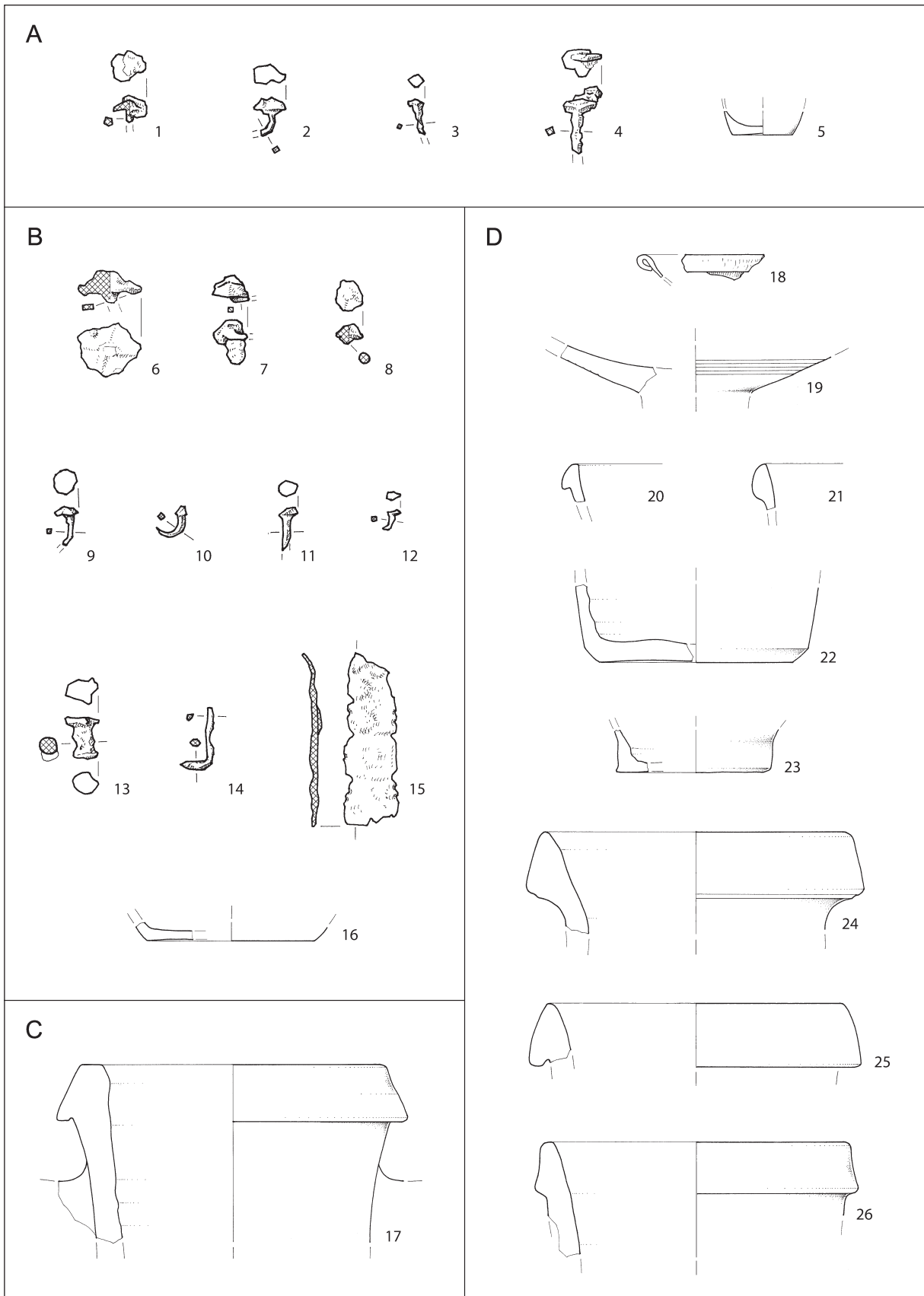


Fig. 13: San Rocco. Trench 1. A – lower preparation level for the terrace, B – upper preparation level for the terrace, C – walking surface, D – modern layers. 1-4, 6-15 iron; 18 glass; rest pottery. Scale 1-4, 6-15 = 1:2; 5, 16-26 = 1:3.

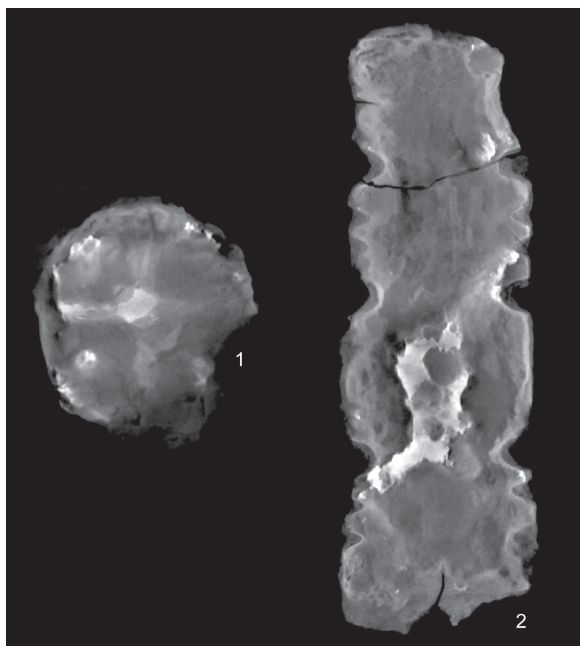


Fig. 14: San Rocco. Trench 1. X-ray micro-computed tomography – virtual slices of a hobnail (1 = Fig. 13: 6) and an iron plate (2 = Fig. 13: 15) (see Fig. 13 for dimensions).

of the trench with the intention to widen the terrace. Surface layer SU501 was mixed by the agricultural use of the area. The postholes (SU519–SU518, SU510–SU512, SU509–SU511, SU505–SU508, SU527–SU528, SU504–SU507) were probably dug to support a modern wooden fence.

#### SMALL FINDS

##### Catalogue (Fig. 13)

*SU521, SU525 – lower preparation level for the terrace (Fig. 13: A):*

1. Iron hobnail. No. 525/02. SU525.
2. Iron hobnail. No. 521/02. SU521.
3. Iron nail. No. 525/03. SU525.
4. Iron nail. No. 525/01. SU525.
5. Fragment of a thin-walled beaker. Pottery, orange, hard, slightly powdery surface, deperated. No. 525/05. SU525.

*SU515, SU513, SU520 – upper preparation level for the terrace (Fig. 13: B):*

6. Fragment of an iron hobnail. Cross-shaped embossed lines and four dots. Alesia type D. Fig. 14: 1. No. 520/05. SU520.
7. Fragment of an iron hobnail. No. 520/08. SU520.
8. Fragment of an iron hobnail. No. 520/06. SU520.

9. Iron nail. No. 520/09. SU520.
10. Fragment of an iron hobnail (only the point survived). No. 520/10. SU520.
11. Iron nail. No. 513/01. SU513.
12. Iron nail. No. 520/04. SU520.
13. Iron rivet. No. 520/03. SU520.
14. Iron wire. No. 515/04. SU515.
15. Iron plate with elaborated edges. Fig. 14: 2. No. 520/07. SU520.
16. Fragment of a pot. Pottery. The inner face is orange, the outer face grey; hard. Inclusions: white, fine, abundant. No. 515/03. SU515.

*S U506 – walking surface (Fig. 13: C):*

17. Fragment of a Lamboglia 2 amphora. Pottery. No. 506/01. SU506.

*SU501, SU503 – modern layers (Fig. 13: D):*

18. Fragment of a bowl. Dark blue transparent glass. Free blown. No. 501/17. SU501.
19. Fragment of a bowl. Pottery: pale brown, hard; shiny black slip. No. 503/08. SU503.
20. Fragment of a baking dish. Pottery: orange, porous. Inclusions: bright, very fine and fine, abundant. Red slip inside and outside. Grey burnt outer face. No. 501/02. SU501.
21. Fragment of a pot. Pottery: orange, hard, smooth surface. Inclusions: bright, very fine, moderate density. No. 501/07. SU501.
22. Fragment of a pot. Pottery: orange, soft, powdery. Inclusions: dark grey, coarse, sparse. No. 503/06. SU503.
23. Fragment of a pot. Pottery: dark grey to brown, hard, smooth surface. Inclusions: white, fine to medium sized. Handmade. No. 503/01. SU503.
24. Fragment of a Lamboglia 2 amphora. Pottery. No. 501/01. SU501.
25. Fragment of a Lamboglia 2 amphora. Pottery. No. 501/14. SU501.
25. Fragment of a Lamboglia 2 amphora. Pottery. No. 501/03. SU501.

#### ANALYSIS

A dark blue glass bowl (Fig. 13: 18) was probably produced in the 1<sup>st</sup> century AD.<sup>32</sup>

A hobnail (Figs. 13: 6; 14: 1) with the pattern of cross and dots (Alesia type D) can be dated to the period between Caesar's campaigns in Gaul and the early Augustan period<sup>33</sup> or even earlier – from the very end of the 2<sup>nd</sup> century BC.<sup>34</sup> The nails with small head diameters of around 1 cm and without any pattern might be also used

<sup>32</sup> Fünfschilling 2015, 37–39.

<sup>33</sup> Istenič 2019, 273–279.

<sup>34</sup> Deyber, Luginbühl 2018, 158, 160–61, Fig. 14.3.

as hobnails (*Fig. 13: 1,2,7–9*). The function of the iron plate with elaborated edges is not known (*Figs. 13: 15; 14: 2*).

The black slip pottery (*Fig. 13: 19*) and the thin-walled beakers made of depurated clay and fired in an oxidising atmosphere (*Fig. 13: 5*) are common finds in the Late Republican sites in the north-eastern Adriatic area.<sup>35</sup>

The baking dish with the almond-shaped rim and red slip is dated from the end of the 2<sup>nd</sup> century BC to the Augustan period (*Fig. 13: 20*).<sup>36</sup>

The form of the pot with the almond-shaped rim (*Fig. 13: 21*) is dated to the 2<sup>nd</sup> and 1<sup>st</sup> centuries BC and originates from central Italy (type Olcese 3a) where the production centres were located.<sup>37</sup> Similar pots could also have been produced in the northern Adriatic area (Form 4 from Aquileia).<sup>38</sup> Imported from Italy or manufactured in the local workshops, these pots manifest the spread of the Roman culture and cooking habits to northern Italy and the western Mediterranean.<sup>39</sup> In *Caput Adriae*, the pots with almond-shaped rims are present in Sevegliano deposit US 2136 in the 2<sup>nd</sup> century BC.<sup>40</sup> At the end of the 2<sup>nd</sup> and at the beginning of the 1<sup>st</sup> century BC, the type appears in Razdrto-Mandrga<sup>41</sup> and Aquileia – fondi Cossar.<sup>42</sup> However, it is quite rare during the 1<sup>st</sup> century BC and in the Augustan period.<sup>43</sup> For example, it is absent in the Fornače deposit from the first third of the 1<sup>st</sup> century BC<sup>44</sup> and in the Late Republican layers of Sermin.<sup>45</sup> According to these observations, the pot from San Rocco suggests a dating into the 2<sup>nd</sup> or early 1<sup>st</sup> century BC.

The base of the cooking pot (*Fig. 13: 16*) of orange pottery with the grey outer face contains abundant small white inclusions. This fabric is similar to fabric K3 from Razdrto (Odra), characteristic for a special group of Late Republican cooking ware used in the areas of the eastern Veneto, Friuli, and Carnia.<sup>46</sup>

The majority of amphora fragments were made of soft to hard pottery and of light colours (reddish yellow, pale yellow, pink) and have rare inclusions. This

is the fabric typical for the several amphora types that originate in the Adriatic region.<sup>47</sup> All amphora rims (*Fig. 13: 17,24–26*) belong to the Lamboglia 2 type produced in the western Adriatic between the third quarter of the 2<sup>nd</sup> and the third decade of the 1<sup>st</sup> century BC.<sup>48</sup> The rim with a narrow cross-section (*Fig. 13: 26*) seems to represent the late phase of the Lamboglia 2 development in the 1<sup>st</sup> century BC.<sup>49</sup> However, several fragments of amphorae and cooking ware rich in black and shiny particles and most probably imported from Tyrrhenian Italy were also found in Trench 1.<sup>50</sup>

## CONCLUSIONS

Trench 1 revealed a terrace consisting of a platform of sandstone blocks, supported by two underlying layers and a front wall. According to the small finds (*Fig. 13: 5,16,17,19–26*), the terrace was constructed and used during the Late Republican period. Several nails have been found below the stone platform (*Fig. 13: 1–4,6–12*). One of them belongs to the Alesia type D hobnail (*Figs. 13: 6; 14: 1*), which could narrow the chronology of the terrace construction from the very end of the 2<sup>nd</sup> to the second third of the 1<sup>st</sup> century BC. The other nails are of small size and without any marks on the underside (*Fig. 13: 1,2,7–9*). They are similar to those very frequent at the Baecula battlefield in Spain dated to the end of the 3<sup>rd</sup> century BC and possibly used as hobnails.<sup>51</sup> On the other hand, small nails or hobnails have not been reported from the Grociana piccola Outer Camp, or from the other Roman military sites in the hinterland of *Caput Adriae* dated to the second third of the 1<sup>st</sup> century BC.<sup>52</sup> Therefore, an earlier beginning of the terrace construction in San Rocco might be suggested – perhaps even in the 2<sup>nd</sup> century BC.

The glass bowl (*Fig. 13: 18*) seems to be the evidence of a sporadic site frequentation in the 1<sup>st</sup> century AD.

<sup>35</sup> E.g. Horvat, Bavdek 2009, 57–72.

<sup>36</sup> The group *ceramica a vernice rossa interna*. Leotta 2005, Form 2. The form does not appear outside Italy from the mid-Augustan period on (Schindler Kaudelka 1986, 281).

<sup>37</sup> Olcese 2003, 80–81.

<sup>38</sup> Riccato 2020, 27–28.

<sup>39</sup> Cassani 2008b, 110; Riccato 2020, 27–28, 93–94.

<sup>40</sup> The pot: Cassani 2008b, 110–111, CCg 34–35. About deposit US 2136: Buora 1991; Buora 1995; Fasano 1995; Cassani 1995; Horvat, Bavdek 2009, 64.

<sup>41</sup> Horvat, Bavdek 2009, 75.

<sup>42</sup> Riccato 2020, 28.

<sup>43</sup> Donat 2009, 122–124; Riccato 2020, 28.

<sup>44</sup> Stokin 1992.

<sup>45</sup> Horvat 1997.

<sup>46</sup> Horvat, Bavdek 2009, Fabric K3, 74–81, 169–170; Žerjal et al. 2021, 128. The jars with an anepigraphic stamp on the base (or Venetic cooking jars) are the typical product of this group: Donat 2009, 121–123.

<sup>47</sup> Horvat, Bavdek 2009, 83–85.

<sup>48</sup> Carre, Pesavento Mattioli 2003, 269–271; Panella 2010, 17–21; Carre et al. 2014.

<sup>49</sup> Horvat 1997, 60–74, Forms A 9, A 11; Horvat, Bavdek 2009, 84–89, Form A 11.

<sup>50</sup> There are no drawings. Cf. Horvat, Bavdek 2009, 78–81; Bernardini et al. 2021b.

<sup>51</sup> Quesada Sanz et al. 2015, 381.

<sup>52</sup> Bernardini et al. 2018; Istenič 2019.

## TRENCH 2

Trench 2 (SDV21SRO2), approximately 10 x 3 m in size, investigated the north-western rampart of Camp 2 situated on the top of the hill (Fig. 2: E; 15–18).

### STRATIGRAPHY

#### Stratigraphic units (SU) according to phases

##### Bedrock (Fig. 15):

SU606: Marly-arenaceous bedrock.

##### Inner walking surface, Phase 1 (Figs. 15; 17: A):

SU609: Thin clayey layer covering the bedrock (SU606). It contained a few pottery fragments: grey ware bowl or *mortarium* (Fig. 17: 1) and Adriatic amphora walls.

##### Fortification structure, Phase 1 (Figs. 15; 17: B):

SU607: Earth clayey yellowish layer, about 6 m wide and just over 0.5 m thick. It contained rare fragments of Roman pottery: a small vessel, a bowl, and a lid (Fig. 17: 2–4) as well as fragments of Italian cooking ware and Adriatic amphora walls.

SU608: A line of stones, preserved only in the south of the trench.

SU601: An approximately 2-m-wide accumulation of sandstone blocks that partly covered US607 (Fig. 15: SU601 – grey). The stones were arranged in an orderly manner only at its western edge (Fig. 15: SU601 – yellow). Fragments of Adriatic amphorae (Fig. 17: 12) were found among the stones on the top of the layer.

##### Fortification structure, Phase 2 (Figs. 15; 17: C):

SU602: The earth layer in the central-eastern part of the trench covering the structures attributed to Phase 1 (SU601, SU607, and SU608). It contained rare pottery fragments (Fig. 17: 7,8) and a hobnail (Figs. 17: 5; 18: 1).

SU605: Charcoal and burnt sandstone concentration in the eastern top part of SU602 (not visible in Fig. 15).

**Collapse of the fortification structure (Figs. 15; 17: D, 9–11):**

SU604: Yellowish clayey layer containing large stones. It corresponds to the collapse of stone structure SU601 towards the outside of the fortification. It contained two hobnails (Figs. 17: 9,10; 18: 2,3). At the base of the collapse, large amphora fragments were found (Figs. 16; 17: 11).

**Topsoil:** SU600.

### INTERPRETATION

A rampart was built in Phase 1. It consisted of an earth core about 6.5 m wide (SU607). Along the eastern (inner) side it was supported by low wall SU608. A large accumulation of stones (SU601), about 2 m wide, cov-

ered the western part of the earth core and had probably the function of supporting and buffering the structure from the outside. The rampart could be interpreted as a low fortified walkway. Walking surface SU609 formed on the bedrock in the inner side of the fortification.

In Phase 2, the Phase 1 rampart was partly covered with layer SU602. This activity has been interpreted as a rearrangement of the fortification structure.

SU604 represents the collapse of stone accumulation SU601 towards the outside and should be connected with the abandonment of the fortification.

### SMALL FINDS

#### Catalogue (Fig. 17)

##### Phase 1 walking surface – SU609 (Fig. 17: A):

1. Frag. of a bowl (probably a *mortarium*). Pottery. Thin grey layer on the surface; core grey and orange. Hard, smooth surface. Inclusions: dark grey shiny mica particles and crushed pottery, fine, moderate density. The incisions on the rim might be intentional. No. 609. SU609.

##### Phase 1 fortification – SU607 (Fig. 17: B):

2. Frag. of a small vessel. Pottery: orange, hard, no visible inclusions. No. 607/02. SU607.
3. Frag. of a lid. Pottery: orange, soft, powdery. Inclusions: dark grey, fine to coarse, moderate density; white, very fine, abundant. No. 607/01. SU607.
4. Frag. of a bowl. Pottery: orange, soft, powdery. Inclusions: dark grey, fine to coarse, moderate density; white, very fine, abundant. No. 607/03. SU607.

##### Phase 2 fortification – SU602 (Fig. 17: C):

5. Iron hobnail. Alesia type C or D; pattern of dots is only visible in micro-CT virtual slices. Fig. 18: 1. No. 602/3. SU602.
6. Frag. of a possible iron hobnail. No. 602/2. SU602.
7. Frag. of a lid. Pottery: orange and grey, hard, powdery. Inclusions: dark grey, fine to coarse, moderate density. No. 602/4. SU602.
8. Frag. of a Lamboglia 2 amphora. Pottery. Inclusions: coarse fragments of pottery and fine dark grey particles, moderate density. No. 602/1. SU602.

##### Phase 1 or 2 – SU604, SU601 (Fig. 17: D):

9. Iron hobnail. Alesia type D; pattern of cross and dots is visible clearly only in micro-CT virtual slices. Fig. 18: 2. No. 604/01. SU604.
10. Frag. of an iron hobnail. Alesia type D; pattern of cross and dots is visible only in micro-CT virtual slices. Fig. 18: 3. No. 604/02. SU604.
11. Frag. of a Lamboglia 2 amphora. Pottery. No. 604/03. SU604.

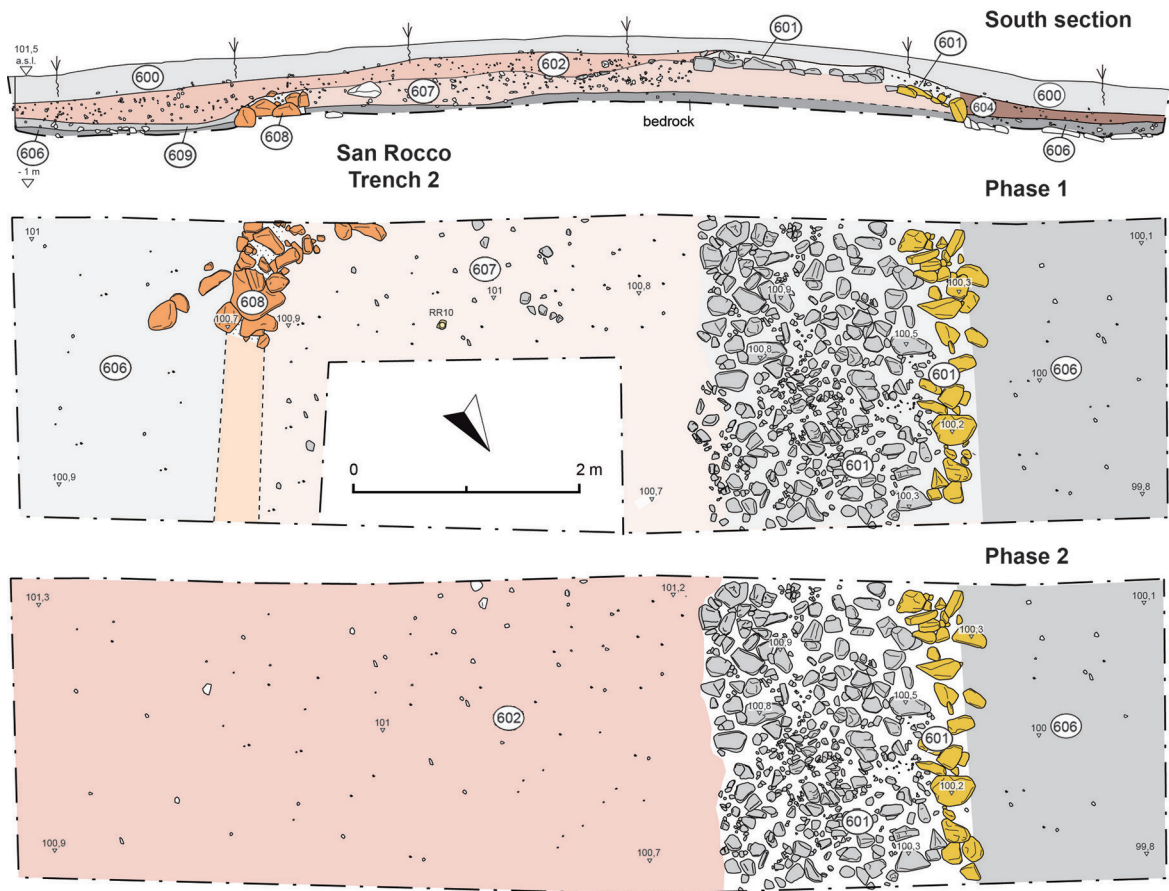


Fig. 15: San Rocco. Trench 2. Southern cross-section and ground plans of Phases 1 and 2.



Fig. 16: San Rocco. Trench 2. View of the rampart towards the southeast: rampart SU601. Several large fragments of amphorae belonging to SU604 in front of the rampart are indicated by white arrows.

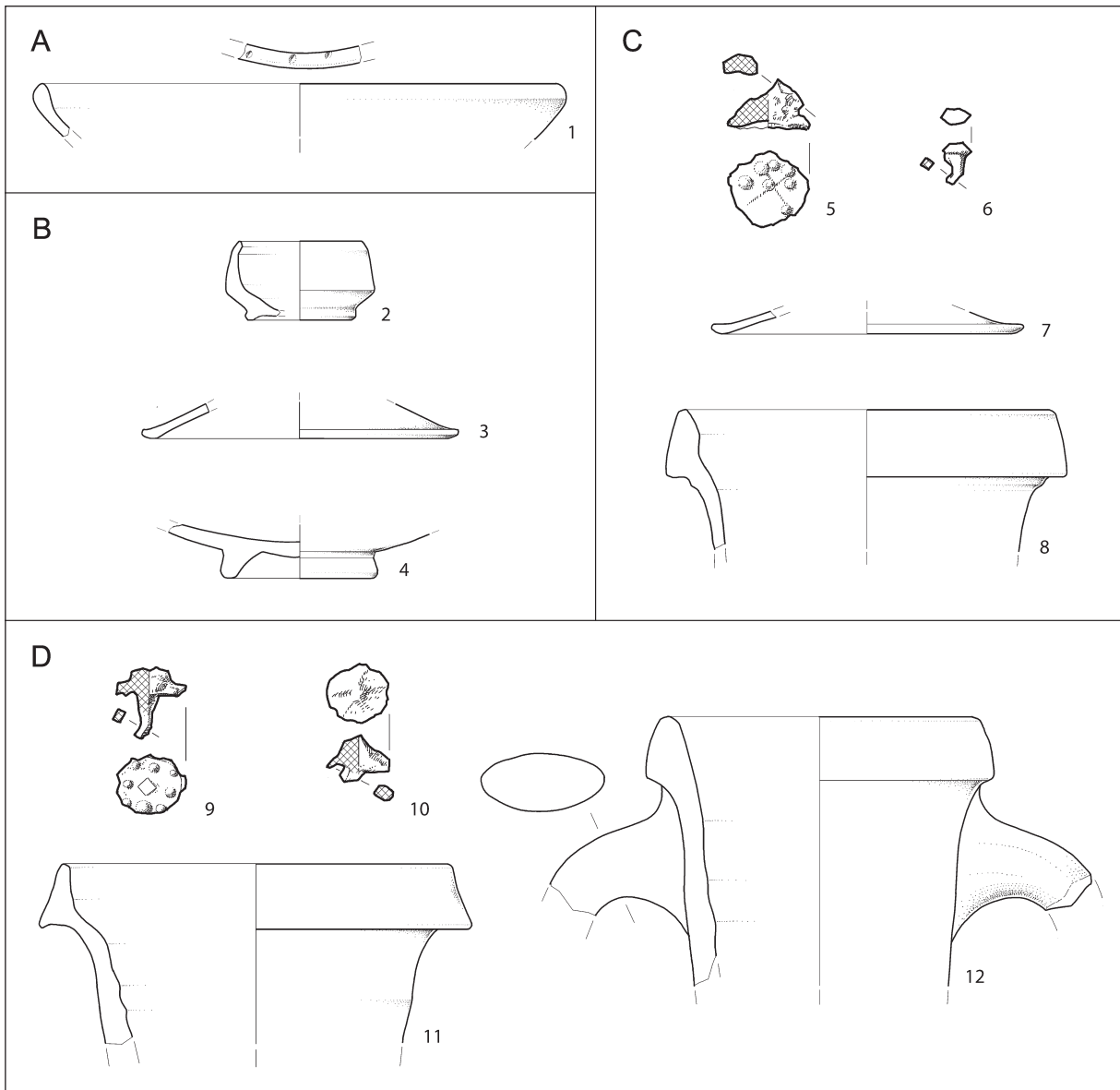


Fig. 17: San Rocco. Trench 2. A – Phase 1 walking surface, B – Phase 1 fortification, C – Phase 2 fortification, D – Phase 1 or 2. 5–6, 9–10 iron; rest pottery. Scale 5–6, 9–10 = 1:2; rest = 1:3.

12. Frag. of a Lamboglia 2 amphora. Pottery. No. 601. SU601 (top).

#### ANALYSIS

Two hobnails of Alesia type D (Figs. 17: 9,10; 18: 2,3) and a hobnail of Alesia type C or D (Figs. 17: 5; 18: 1) are generally dated to the second third of the 1<sup>st</sup> century BC,<sup>53</sup> with the possible beginning of type D at the end of the 2<sup>nd</sup> century BC.<sup>54</sup>

A bowl (Fig. 17: 1) is made of fabric similar to the grey ware characteristic for the territory of the Veneti from the 4<sup>th</sup> century BC to the first half of the 1<sup>st</sup> century AD.<sup>55</sup> The form of the rim corresponds to type XIII of the *mortaria* from Padova from the late 3<sup>rd</sup> to the 1<sup>st</sup> century BC.<sup>56</sup> During this period, grey ware was widespread along the communication lines in the territory of Aquileia<sup>57</sup> and in northern Istria.<sup>58</sup> The bowl (Fig. 17: 4)

<sup>53</sup> Bolzoni 2014.

<sup>54</sup> Gamba, Ruta Serafini 1984, 46–49, 75–76, Fig. 10: 370–371; Fig. 18.

<sup>55</sup> Cassani et al. 2007, 262–273; Cassani 2008a; Horvat, Bavdek 2009, 72–73; Donat 2009, 117–119.

<sup>56</sup> Horvat 1997, 106–107; Donat, Merlatti 2008.

<sup>53</sup> Istenič 2019, 273–279.

<sup>54</sup> Deyber, Luginbühl 2018, 158, 160–61, Fig. 14.3.



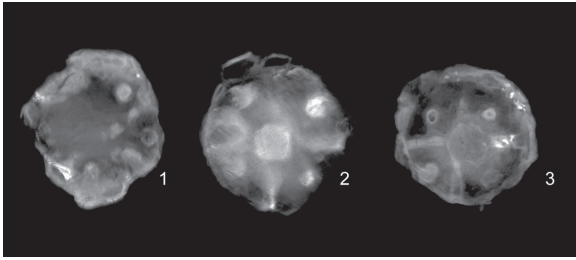


Fig. 18: San Rocco. Trench 2. X-ray micro-computed tomography – virtual slices of iron hobnails (1 = Fig. 17: 5; 2 = Fig. 17: 9; 3 = Fig. 17: 10).

of oxidation fired pottery without slip imitates the forms of black slip pottery. Such type of pottery was in use in northern Italy during the Late Republican period.<sup>59</sup> A small fragment (Fig. 17: 2) might be from a wheel-turned Republican oil lamp with a biconical body and without slip.<sup>60</sup> The Lamboglia 2 amphorae (Fig. 17: 8,11,12) are dated between the third quarter of the 2<sup>nd</sup> and the third decade of the 1<sup>st</sup> century BC.<sup>61</sup>

## CONCLUSIONS

Two phases of use have been recognised in Trench 2. A low fortified walkway was built in Phase 1. It is characterised by an earth embankment about 6.5 m wide and about 0.5 m high (SU607), reinforced by a modest alignment of stones on the inside (SU608) and a consistent accumulation of stones along the outer side (SU601) of the fortification. The Phase 1 rampart and the first walking surface provided Late Republican pottery (Fig. 17: A, B). The absence of hobnails might suggest a dating before the second third of the 1<sup>st</sup> century BC or even earlier.

In Phase 2, the inner part of the rampart was modified by an earth deposit (SU602) that partly covered the earlier embankment. The presence of a type D or C Alesia hobnail (Figs. 17: C, 5; 18: 1) dates Phase 2 into the period from the very end of the 2<sup>nd</sup> to the second third of the 1<sup>st</sup> century BC.

The collapse of the stone accumulation (SU 604) to the exterior side of the fortification can be connected to either Phase 1 or Phase 2. It offered two Alesia type D hobnails (Figs. 17: 9,10; 18: 2,3) and a Lamboglia 2 amphora (Fig. 17: 11), indicating that the collapse could be dated in the period from the end of the 2<sup>nd</sup> to the mid-1<sup>st</sup> century BC.

According to the absence of modern finds, the area was not settled after the 1<sup>st</sup> century BC.

<sup>59</sup> Horvat, Bavdek 2009, 73–74.

<sup>60</sup> Typological attribution was not possible. Cf. Di Filippo Balestrazzi 1988, Vol. II,1, p. 23–26; Vol. II, 2, p. 243–345.

<sup>61</sup> Carre, Pesavento Mattioli 2003, 269–271; Horvat, Bavdek 2009, 83–90; Panella 2010, 17–21; Carre et al. 2014.

## TRENCH 3

Trench 3 (SDV21SRO3), approximately 15 x 4 m in size, investigated the northern rampart of Camp 1 of San Rocco (Fig. 2: B; 19–24).

## STRATIGRAPHY

### Stratigraphic units (SU) according to phases

#### Bedrock (Figs. 19–21; 24: 1):

SU819: Marly-arenaceous bedrock. A fragment of a pot was found on the top of the layer (Fig. 24: 1).

#### Fortification structure, Phase 1 (Figs. 19, 20, 22, 23):

It consisted of four parallel defensive lines situated along the slope of the hill. The lines are described from the interior to the exterior of the fortification.

##### First line – fortified walkway with a ditch:

SU804: A line of unworked sandstone blocks and slabs (maximum dimensions up to about 0.4 m). Fragments of amphora walls or coarse tableware were found among the blocks.

SU805: A line of unworked sandstone blocks and slabs (maximum dimensions up to about 1 m). The alignment has partly slipped to the north – down the slope. Some blocks are heavily fire-altered and red in colour.

SU806: A rather compact layer composed mainly of small stones and a sandy matrix, burnt by the fire up to a depth of approximately 0.3 m. It contained small fragments of Adriatic amphora walls.

SU824: The lower part of layer SU806, characterised by the absence of burnt material. It contained small fragments of Adriatic amphora walls and coarse tableware.

SU813: A layer of grey-yellowish colour composed of a silt-sandy matrix and abundant blocks of sandstone in which ditches SU814 and SU816 have been cut.

SU814: A short ditch about a little less than 2 m long and about 0.3 m deep, cut in SU813 and filled by SU815 and SU807. The abundance of charcoal remains at this spot within SU807 indicates a wooden construction founded in the ditch.

SU815: Basal filling of SU814 (not visible in Figs. 20, 21), a few cm thick and without burnt material.

##### Second line – ditch:

SU816: A ditch, about 0.4 m wide and 0.2 m deep. It was cut into SU813.

SU809: Alignment of sandstone blocks with a maximum size of 0.4 m, located immediately south of ditch SU816 and surviving only in its western section.

SU810: Alignment of sandstone blocks and slabs up to 0.7 m in size, located immediately north of ditch SU816.

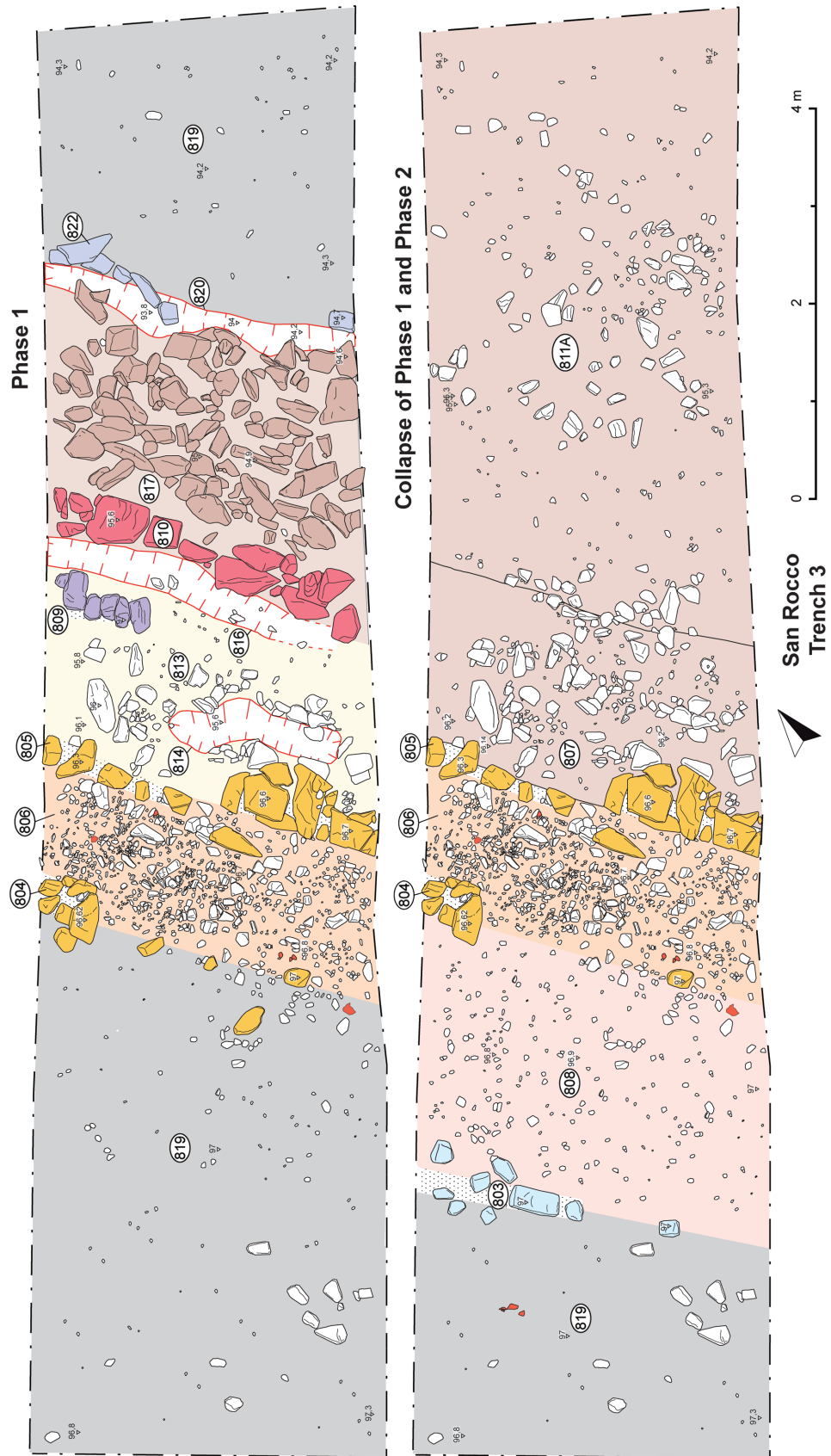


Fig. 19: San Rocco. Trench 3. Ground plans of Phase 1 and of the collapse of Phase 1 and Phase 2.

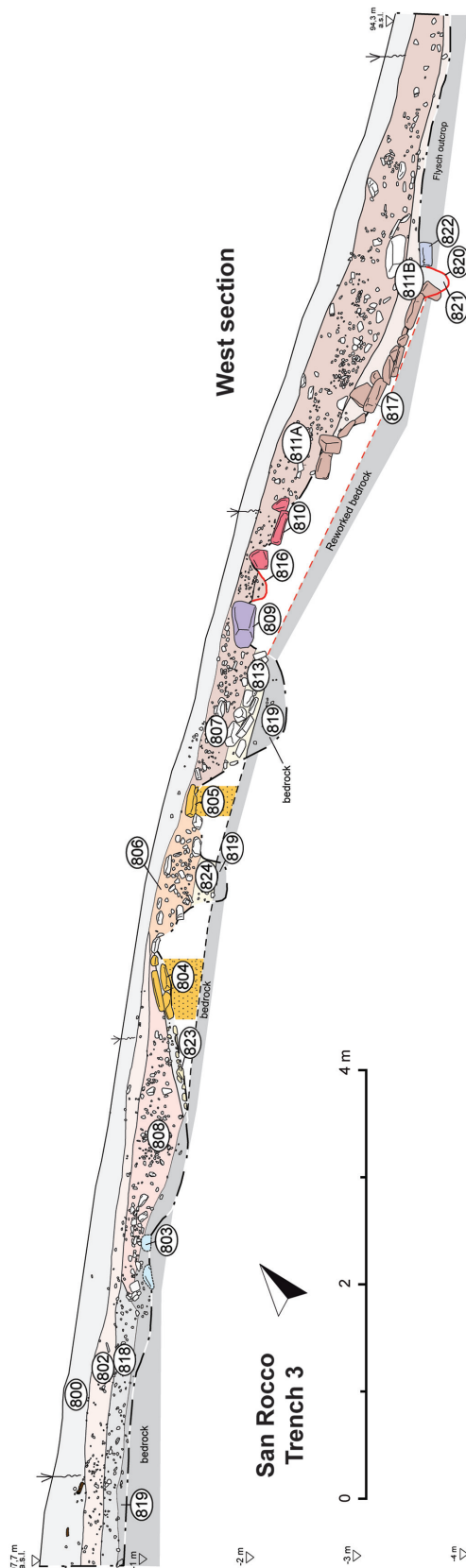


Fig. 20: San Rocco. Trench 3. West cross-section.

*Third line – escarpment:*

SU817: An approximately 2-m-wide layer of sandstone slabs and blocks with maximum dimensions up to about 0.5 m arranged without any order. It is inclined down the slope, so that the difference in level between the upper and the lower parts is about 1.5 m.

*Fourth line – ditch:*

SU820: Ditch at the base of escarpment SU817, about 0.5 m wide and about 0.4 m deep.

SU821: Fill of ditch SU820 characterised by the presence of small and rare fragments of burnt sandstone.

SU822: A line of stone slabs located immediately north of ditch SU820 and surviving only in the western part of the trench.

**Destruction and collapse of the Phase 1 fortification (Figs. 19–23; 24: A 2–4):**

SU823: A layer containing fragments of burnt sandstone and rare fragments of Adriatic amphora walls. It probably represents the collapse of wall SU804 to the south (to the interior of the fortification).

SU807: Collapse layer characterised by abundant fragments of burnt sandstone and silt-sandy matrix of a bright red colour, located north of the fortified walkway (SU804–806). It contained fragments of cooking ware (Fig. 24: 3) and Adriatic amphora walls. Layer SU807 sealed the underlying stratigraphic units of the Phase 1 fortification: the short ditch of the first line (SU813, SU814) and the structures belonging to the second line (SU809, SU816, SU810), the identification of which was made easier by the clear difference in colour (Fig. 21).

SU811: Collapse layer corresponding to the continuation of SU807, but separated from the latter because it is less rich in burnt lithic fragments. However, upper horizon SU811A contains more burnt material than lower horizon SU811B. Layer SU811 sealed the underlying stratigraphic units of Phase 1: the third line – escarpment (SU817) and the fourth line – ditch (SU820, SU822), the identification of which was made easier by the clear difference in colour. SU811 contained fragments of a cooking pot (Fig. 24: 2), part of a Tyrrhenian amphora (Fig. 24: 4), large fragments of Adriatic amphora walls, and coarse tableware.

**Fortification structure, Phase 2 (Figs. 19, 20, 22, 23; 24: B):**

SU808: Silt-sandy soil layer about 3 m wide and more than 0.5 m thick, consisting of sandstone blocks with maximum dimensions up to about 10 cm and not burnt by fire. It covered SU804 and its collapse (SU823), both characterised by heavily burnt sandstone. SU808 contained several large Lamboglia 2 amphora fragments (Fig. 24: 5,6,8,9) and some fragments of coarse tableware.

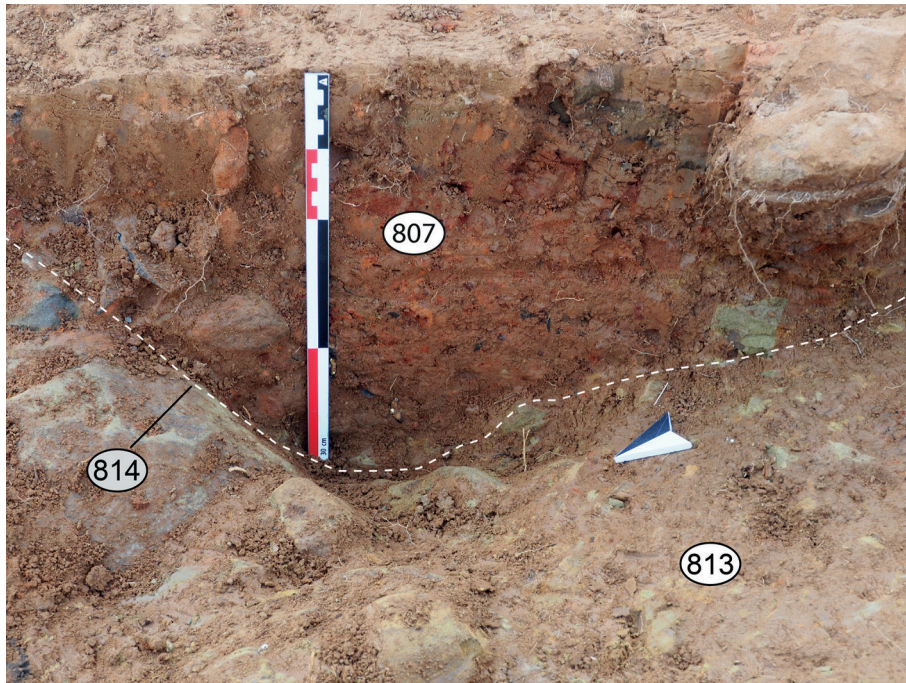


Fig. 21: San Rocco. Trench 3. View of the cross-section with collapse layer SU807, reddish in colour and very rich in burnt materials and charcoals. It covers ditch SU814, which was cut into SU813. The lowest filling (SU815) of ditch SU814 is not visible in this area.

SU803: An alignment of stones, including large ones (SU803) that supported SU808.

SU818: Silt-sandy layer containing sandstone fragments and large Lamboglia 2 amphora fragments.

SU802: Silt-sandy layer with a skeleton consisting of small sandstone fragments. It has probably been thickened by relatively fine material washed away from the overlying part of the hill. It contained fragments of Lamboglia 2 amphorae (Fig. 24: 7) and coarse tableware.

**Topsoil** (Figs. 19, 20, 22, 23; 24: C):

SU800: It contained some Roman artefacts: a cooking pot (Fig. 24: 10) and Lamboglia 2 amphora fragments.

INTERPRETATION

A fortification structure about 6.5-m-wide was constructed in Phase 1. It consisted of four parallel lines which are described down the slope, from the south to the north.

The first line was made of two revetment walls (SU804 and SU805) and the core of small stones in a sandy matrix (SU806, SU824). The upper 0.3-m-thick part of the core (SU806) and the northern revetment wall (SU805) were heavily altered by fire. The line is interpreted as a low walkway with a wooden superstructure which was later burnt. The walkway is associated on the northern side with layer SU813 in which short ditch SU814 (parallel to revetment wall SU805) was cut.

The abundance of charcoal remains in SU807 above and within the ditch indicate that it was a foundation for a palisade next to the walkway.

The second line was formed by an additional ditch (SU816), bordered to the south and to the north by two regular alignments of stones (SU809, SU810). It probably served as a foundation and support of wooden obstacles.

The third line is represented by an approximately 2-m-wide escarpment intentionally covered with large stones with no order (SU817). It is likely that the bedrock in the area of the escarpment was cut with the aim to make the natural slope steeper and to obtain building material. The escarpment was probably constructed to make a possible assault difficult.

A ditch (SU820) situated at the base of the escarpment served as the fourth line. Limited to the north by a line of stones (SU822), it was probably used for housing a palisade or wooden obstacles.

The destruction of the Phase 1 fortification by fire is visible in its first line by the fire-altered structures (core of rampart SU806 and northern revetment wall SU805) down to a depth of 0.30 m and by the very abundant large charcoals from US807. Layers SU807 and SU811, which contain burnt stones, probably represent the collapse of the fortification down the slope which followed the fire. The collapse towards the south is visible in layer SU823.

During Phase 2, the earlier walkway was restored and enlarged towards the interior of the fortification by adding earth deposit SU808 and alignment of stones



Fig. 22: Photograph of the San Rocco hill taken by a drone, a view from the north. Trench 3, Phase 1 (1–2: first line – rampart and associated ditch; 3: second line – ditch; 4: third line – escarpment; 5: fourth line – ditch) and Phase 2 (6: enlargement of the walkway).



Fig. 23: San Rocco. Photograph of Trench 3 by a drone, a view from the north with the indication of several stratigraphic units.

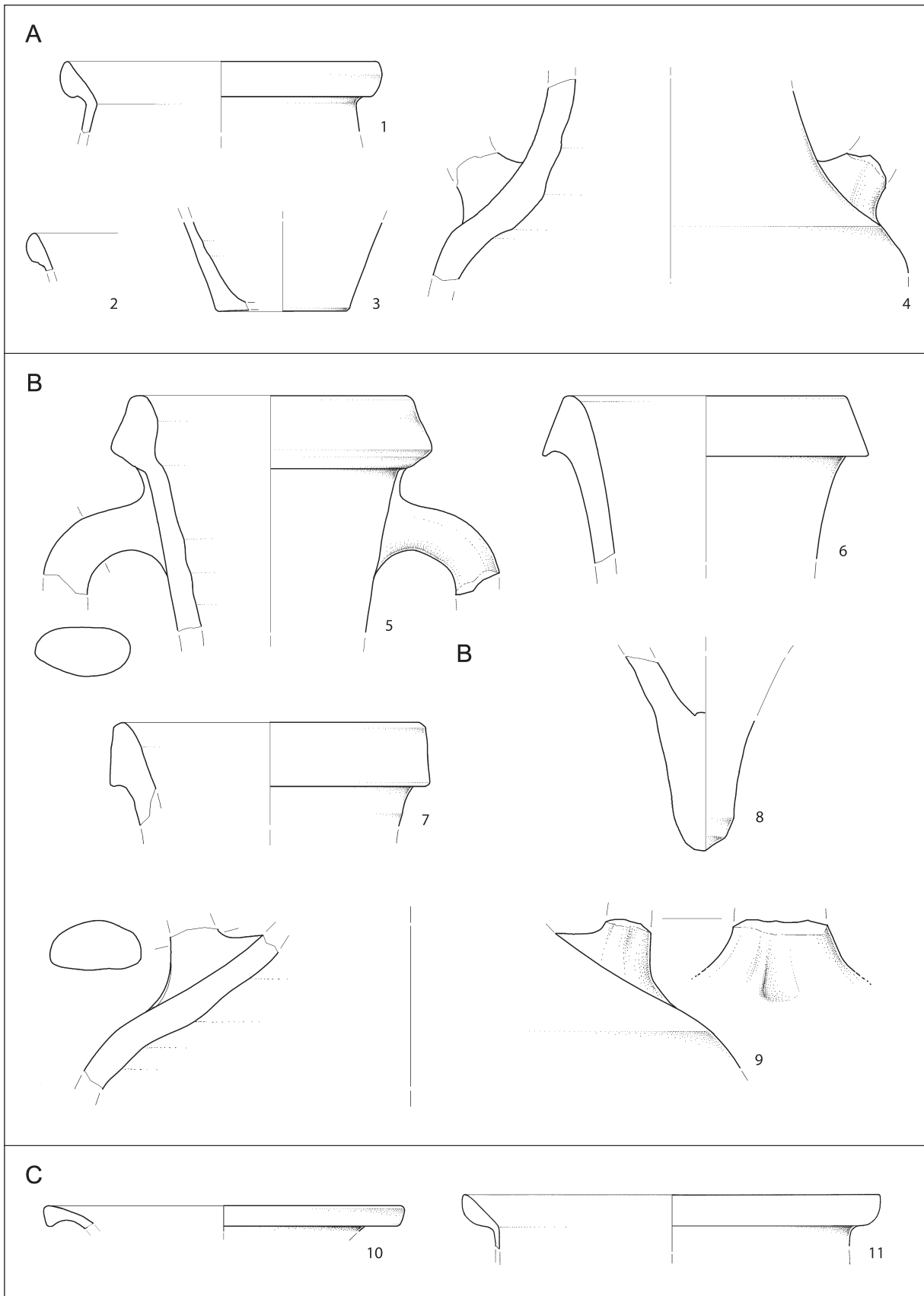


Fig. 24: San Rocco. Trench 3. A - Phase 1, B - Phase 2, C - topsoil. Pottery. Scale = 1:3.

SU803. Overlying layer SU818 could derive either from the collapse of layer SU808 or can be related to the use of the area. Layer SU802 might be interpreted as a voluntary spreading of fine material above SU808.

Due to the absence of earlier structures and small finds, the area of Trench 3 was not occupied after the abandonment of the Phase 2 structure.

#### SMALL FINDS

##### Catalogue (Fig. 24)

*Collapse of the Phase 1 fortification – US807, US811A, US811B, US819 (top) (Fig. 24: A):*

1. Frag. of a pot. Pottery: orange, soft, powdery surface. Inclusions: dark grey, fine to coarse, moderate density; white, very fine, abundant. No. 819. SU819 (walking surface of Phase 1 or collapse of the fortification).
2. Frag. of a pot. Pottery: orange, soft, powdery surface. Inclusions: dark grey, fine to coarse, moderate density; white, very fine, abundant. No. 811B. SU811B.
3. Frag. of a pot. Pottery: orange surface, grey in the core; hard, coarse surface. Inclusions: dark, very fine, moderate density. No. 807. SU807.
4. Frag. of an amphora. Pottery: orange, soft, powdery surface. Light-brown surface layer, poorly preserved. Inclusions: white and light grey, very fine, very abundant; dark grey and fragments of pottery, fine, moderate density; fine black volcanic minerals. No. 811A. SU811A.

*Phase 2 fortification – US802, US808 (Fig. 24: B):*

5. Frag. of a Lamboglia 2 amphora. Pottery. No. 808/01. SU808.
6. Frag. of a Lamboglia 2 amphora. Pottery. No. 808/03. SU808 or SU802.
7. Frag. of a Lamboglia 2 amphora. Pottery. No. 802. SU802 or SU808.
8. Frag. of a Lamboglia 2 amphora. Base. Pottery. No. 808/02. SU808.
9. Frag. of an amphora. Pottery. Fabric similar to Lamboglia 2 type. Inclusions: fragments of pottery, fine to coarse, abundant; dark grey, fine, moderate density. No. 808/04. SU808 or SU818.

*Topsoil – US800 (Fig. 24: C):*

10. Frag. of a pot. Pottery, orange, the outer surface is grey; soft, powdery surface. Inclusions: dark grey, fine to coarse, moderate density; white, very fine, abundant. No. 800. SU800.
11. Frag. of a pot. Pottery, orange, hard, a bit powdery surface. Inclusions: white, very fine, moderate density. No. SUP 03. Accidental surface find, north of Trench 3 (Stanko Flego, 2019).

#### ANALYSIS

The pots with almond-shaped rims (Fig. 24: 1,2,11) can be dated to the 2<sup>nd</sup> and 1<sup>st</sup> centuries BC. While they are rare in the 1<sup>st</sup> century BC sites of *Caput Adriae*, they suggest a dating to the 2<sup>nd</sup> century BC.<sup>62</sup> The fabric (Fig. 24: 1,2) indicates a probable origin from the Tyrrhenian part of central Italy (orange with dark inclusions). Similar characteristics of the fabric are shared with a cooking pot rim (Fig. 24: 10) and a base (Fig. 24: 3) as well as with an amphora shoulder, where some black and shiny volcanic minerals have been identified (Fig. 24: 4). The paste of the latter is closely comparable with that of the late Greco-Italic Tyrrhenian amphora rim found on the surface in the area of Trench 1 (Fig. 9: 1).<sup>63</sup>

The Lamboglia 2 amphorae (Fig. 24: 5–8) were produced in the western Adriatic area between the last third of the 2<sup>nd</sup> and the third decade of the 1<sup>st</sup> century BC.<sup>64</sup>

#### CONCLUSIONS

Two phases of use have been recognised.

Phase 1 is represented by a complex defensive structure about 6.5 m wide. Four construction lines made of stones and wood were positioned along the northern slope of the hill:

1. The topmost and the main defensive line was a low embankment with two revetment walls and a core of small stones and soil. It was protected along the exterior side by a wooden palisade, founded into a short ditch. The heavy fire damage visible on the surface layers indicates that the line was actually the foundation of a massive wooden structure – likely a palisade.
2. A narrow ditch, bordered by two alignments of stones, probably served to house wooden obstacles.
3. An artificial and steep escarpment covered with large stones arranged with no order.
4. A ditch, probably used for housing a palisade or wooden obstacles, formed the lowest defensive line.

The first line was destroyed by a fire so violent that a large part of the structure was altered by high temperatures. Stones and soil were coloured red and some fragments of sandstone and pottery partially melted. This suggests that the wooden structures associated with the line were probably significant and not limited only to the palisade.

Phase 1 is characterised by the presence of pottery most probably imported from central Italy as well as by pottery from the western Adriatic region (Fig. 24: 1–4).

<sup>62</sup> See above in Trench 1. Olcese 2003, 80–81; Donat 2009, 122–124; Riccato 2020, 27–28.

<sup>63</sup> Riccato 2020, 92–93; Bernardini et al. 2021b.

<sup>64</sup> Carre, Pesavento Mattioli 2003, 269–271; Horvat, Bavdek 2009, 83–85; Panella 2010, 17–21; Carre et al. 2014.

Pots with an almond-shaped rim indicate a dating into the 2<sup>nd</sup> century BC.

In Phase 2, the destroyed first line of the Phase 1 fortification was widened towards the south by depositing an earth bank about 3 m wide and more than 0.5 m thick. It was supported along the interior side by an alignment of stones. The external lines of the earlier fortification were probably abandoned. The renovated rampart can be interpreted as a broad walkway with no traces of any associated palisade.

Few fragments of Lamboglia 2 amphorae produced in the western Adriatic area are connected to Phase 2 (Fig. 24: 5–8). The absence of very early and very late rim forms of Lamboglia 2 type and the total absence of hobnails seem to narrow the time span of Phase 2 from the end of the 2<sup>nd</sup> to the beginning of the 1<sup>st</sup> century BC.

## DISCUSSION AND CONCLUSIONS

### MILITARY CAMPS OF SAN ROCCO

The field survey and the trenches show that the occupation of the San Rocco hill was limited to the Late Republican period. There is only very sporadic evidence of frequentation in the 1<sup>st</sup> century AD (only in Trench 1; Fig. 13: 18). The investigation of the ramparts (Trenches 2 and 3) confirmed the existence of two different Roman military structures, Camp 1 and Camp 2. Trench 1 revealed that the orthogonal structures on the south western slope are the remains of an ancient terracing system with the same orientation as Camp 2.

In spite of the limited quantity, small finds allow a more detailed chronology of individual structures. The absence of large military hobnails with the raised relief pattern on the underside (the Alesia types B, C and D) seems to have a chronological significance in San Rocco. In this way, Phases 1 and 2 of Camp 1 and Phase 1 of Camp 2 might predate the introduction of these hobnail types. They were in use in the period from the very end of the 2<sup>nd</sup><sup>65</sup> to the mid-1<sup>st</sup> century BC.<sup>66</sup> Hobnails of the Alesia types C and D appear only in Phase 2 of Camp 2 (Figs. 17: 5,9,10; 18: 1,2,3). On the other hand, small nails from the terrace in Trench 1 (Fig. 13: 1,2,7–9) are similar to the small hobnails discovered at the presumed site of the battle that the Romans and Carthaginians fought in 208 BC at Baecula in southern Spain.<sup>67</sup> Their presence might suggest an early dating of the terrace – perhaps as early as in the 2<sup>nd</sup> century BC.

Camp 1 of San Rocco was built during the 2<sup>nd</sup> century BC (Phase 1 of Trench 3).<sup>68</sup> The 6.5-m-wide

rampart traversed the northern slope of the hill. It consisted of four defensive lines, which combined a low stone rampart with two revetment walls and a wooden superstructure, two additional lines of wooden obstacles and a stone escarpment. Besides the fragments of Roman ceramics produced in the Adriatic region, a significant number of ceramic finds probably has its origin in the Tyrrhenian part of central Italy. This indicates that Camp 1 was supplied from the eastern as well as from the western part of central Italy.

After its destruction by fire, the rampart of Camp 1 was partly restored by adding an earth bank in Phase 2. The reconstructed rampart was relatively short-lived between the end of the 2<sup>nd</sup> and the beginning of the 1<sup>st</sup> century BC. Lamboglia 2 amphorae produced in the Adriatic area prevail in Phase 2 indicating a change in supply connections.

Camp 2 differs from the Camp 1 in orientation, smaller size, rectangular outline, and in the different building technique (Trench 2). The rampart was constructed of a low earth embankment and stone accumulations in Phase 1, dated to the end of the 2<sup>nd</sup> or to the first half of the 1<sup>st</sup> century BC. It was modified by the deposition of an earth layer in Phase 2 in the second third of the 1<sup>st</sup> century BC. All the pottery finds from Camp 2 (Phases 1 and 2) have their origin in the Adriatic area.

The terrace in Trench 1 was constructed in the second third of the 1<sup>st</sup> century BC or even earlier. It was part of an orthogonal terrace system covering an area of at least 150 x 150 m on the south-western slope of San Rocco. The same orientation and chronology indicate that the terraces and Camp 2 might be contemporary.

Camp 2 was abandoned before the Augustan period. Correspondingly, the small finds collected during surface surveys and from the mixed upper layers in Trench 1 are all dated from the 2<sup>nd</sup> to the mid-1<sup>st</sup> century BC. This indicates that the settlement of the San Rocco hill was abandoned before the beginning of the Augustan age.

### MILITARY ARCHITECTURE

San Rocco stood in the centre of the fortification system facing northern Istria. Having a key position in the Bay of Muggia, it was flanked by at least two smaller military sites on the elevated locations, Grociana piccola and Monte d' Oro.<sup>69</sup> Grociana piccola is situated 4km northeast of San Rocco and its function was to control the Karst plateau. Two military structures have been researched there – named according to their position as the Inner and Outer Camps. The Inner Camp is dated

<sup>65</sup> Type D hobnails from the probable battlefield of Arausio, 105 BC: Deyber, Luginbühl 2018, 158, 160–61, Fig. 14.3.

<sup>66</sup> Istenič 2019, 273–276.

<sup>67</sup> Fernando Quesada et al. 2015.

<sup>68</sup> When the paper was already completed, we obtained

a C14 dating of charcoals from Phase 1, which dates it to the first half of the 2nd century BC.

<sup>69</sup> Bernardini 2015; Bernardini 2019; Bernardini et al. 2021a.



to the 2<sup>nd</sup> century BC. Regardless of the use of different building materials (i.e., sandstone vs limestone), its fortification is very similar to that of Phase 1 of San Rocco Camp 1 in the construction technique as well as in dating.<sup>70</sup> Both sites were defended by a low rampart of similar width (about 1.5 m) built with two revetment walls made of large blocks and a core of smaller stones in a soil matrix. They were externally protected by a palisade that at Grociana piccola was supported by a stone alignment and at San Rocco by a non-continuous ditch. The use of a stone support for the palisade at Grociana piccola instead of a ditch is easy to explain considering the hard, difficult-to-cut karst bedrock. The apparent absence of additional external defensive lines at Grociana piccola could just be due to the limited size of the trench opened in 2019. Visualisation of new high-resolution LiDAR data suggests that the Inner Camp of Grociana piccola was protected not only by the fortified rampart and related palisade but also by additional defensive lines, such as in Camp 1 of San Rocco.<sup>71</sup>

The Outer Camp of Grociana piccola is dated to the second third of the 1<sup>st</sup> century BC, as is Phase 2 of San Rocco Camp 2. However, the constructions of the ramparts are quite different. Contrary to the earth and stone embankment of San Rocco Camp 2, the Outer Camp of Grociana piccola had an inner rough and narrow stone alignment, an outer line of large stones located at a slightly lower altitude, and the space between these lines of stones filled with smaller stones and earth. It was interpreted as a low walkway possibly protected by wooden obstacles. The lack of any internal buildings or other evidence of longer occupation suggests that it was only used temporarily.<sup>72</sup>

It seems important to compare the Phase 1 fortifications of San Rocco Camp 2 and those of the Inner Camp of Grociana piccola with the Roman military architecture known from 2<sup>nd</sup> century BC Spain. In the camps of the Numantia area, mainly related to the Numantine War (154–133 BC), and in the military complex of Pedrosillo, dated to the Lusitanian Wars (155–138 BC), most of the attested ramparts show a similar building technique and modest height.<sup>73</sup> In Renieblas, the camps, probably covering a time span between the beginning of the 2<sup>nd</sup> and the early 1<sup>st</sup> centuries BC,<sup>74</sup> were defended by low ramparts composed of two low revetment walls facing a core made of earth and small stones. However, most of the ramparts in Renieblas were much wider than

<sup>70</sup> Bernardini et al. 2021a, 12–14; Bernardini, Duiz 2021, 53–60.

<sup>71</sup> Unpublished data of Federico Bernardini.

<sup>72</sup> Bernardini et al. 2021a, 14–15; Bernardini, Duiz 2021, 61–66.

<sup>73</sup> Dobson 2008; Morillo Cerdán et al. 2011; Morillo Cerdán et al. 2022; Morillo Cerdán 2014; Morillo Cerdán, Morales Hernández 2015.

<sup>74</sup> Jiménez et al. 2018, 124; Jiménez et al. 2020, 14–19.

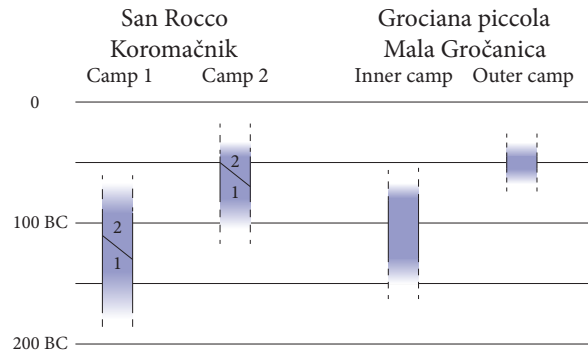


Fig. 25: Chronology of the military camps at San Rocco and Grociana piccola

those of the Trieste camps, with the exception of Camp I (width 1.75–2.3 m) and Camp II (width 1.85–2 m),<sup>75</sup> dating back to the first half of the 2<sup>nd</sup> century BC.<sup>76</sup> As far as we know, the additional defensive lines in front of the rampart of San Rocco Camp 1 do not find any analogies in other 2<sup>nd</sup> century BC Roman fortifications.

## SIGNIFICANCE

Several military conflicts are reported from the *Caput Adriae* region in the 2<sup>nd</sup> and 1<sup>st</sup> centuries BC, the most important being the Roman occupation of Istria in the 178–177 BC war, expeditions against the peoples east of Aquileia in 171 BC and 129 BC, the menace by the Iapodes in 52 BC, and the Illyrian War by Octavian 35–34 BC.<sup>77</sup>

The size and strategic position indicate that San Rocco was a central stronghold of the Roman army in northern Istria. The remains of Camp 1 are dated into the 2<sup>nd</sup> century BC, possibly reaching into the beginning of the 1<sup>st</sup> century BC (Fig. 25). Camp 2 (Phase 1) was dated to the end of the 2<sup>nd</sup> or in the first half of the 1<sup>st</sup> century BC. We presume that there was no large discontinuity between earlier and later camps. Despite the reduced size of Camp 2, the additional rampart (Fig. 2: F) attached to it and the similar orientation of the terrace system on the south-western slope of the hill (Fig. 2: H) indicate that San Rocco continued to retain a central military function in the first half and mid-1<sup>st</sup> century BC.

Phase 2 of San Rocco Camp 1 and the Grociana piccola Inner Camp were probably at least partly contemporary in the 2<sup>nd</sup> century BC. The dissimilar functions of both sites can be presumed mainly from their different sizes and strategic locations.

<sup>75</sup> Dobson 2008; Morillo Cerdán, Morales Hernández 2015.

<sup>76</sup> Jiménez et al. 2020, 14–19.

<sup>77</sup> Bandelli 2004, 102–105.

Despite the probable contemporaneity in the mid-1<sup>st</sup> century BC, there are differences in the rampart construction between San Rocco Camp 2 (Phase 2) and the Outer Camp of Grociana piccola. Also in this case, the discrepancies are probably the result of the different functions – the Grociana piccola Outer Camp was apparently intended only for temporary use, while the San Rocco structures indicate a more permanent settlement.

The significant presence of cooking ware and amphorae produced in Tyrrhenian central Italy in Phase 1 of Camp 1 and their marginality in other phases of San Rocco indicate a change in supply connections. It seems that in the 2<sup>nd</sup> century BC the army was supplied from various parts of the Italian Peninsula, from the Tyrrhenian as well as from Adriatic regions. Later, probably from the second half of the 2<sup>nd</sup> century BC (Phase 2 of Camp 1), most of the pottery was provided from the western Adriatic as well as from the production centres of north-eastern Italy and Aquileia. An origin from the same areas is also observed in pottery from the several other settlements of *Caput Adriae* in use from the last quarter of the 2<sup>nd</sup> century BC on.<sup>78</sup>

<sup>78</sup> E.g. Okra (Horvat, Bavdek 2009, 93–96), Sermin (Horvat 1997, 118–122).

It is important to note that Camp 2 of San Rocco shares the same orientation as the Karst centuriation, likely connected to *Tergeste*.<sup>79</sup> Therefore, the dating of Camp 2 suggests that this land division system has probably its origin between the end of the 2<sup>nd</sup> and the beginning of the 1<sup>st</sup> century BC.

The abandonment of the San Rocco military camp was the result of the pacification of the region and the administrative reorganisation in the second half of the 1<sup>st</sup> century BC.<sup>80</sup>

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<sup>79</sup> Bernardini et al. 2018; Bernardini, Duiz 2021, 83–85.

<sup>80</sup> Zaccaria 1992, 152–155.

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