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EARLY MEDIEVAL SETTLEMENTS BETWEEN THE SAVA AND DRAVA RIVERS – A FEW EXAMPLES OF THE VILLAGE IN THE 9TH CENTURY

Abstract: During recent years, in the area between the Sava and Drava rivers in Croatia, several rescue excavations were carried out, during which the remains of several small settlements tentatively dated to the 9th century were recorded and excavated. These data are very important in understanding everyday life in the early medieval rural settlements in the area between these two rivers.

Several sites yielded interesting information. The ones where different forms of housing facilities were recognized can be singled out in one group, while the second group includes sites that offer an insight into the dynamics of the repossession of space as well as into the forms of houses.

Based on the data published so far, we can see that in the area between the two rivers two basic forms of living space used during the 9th century can be distinguished. The first form is represented by elongated semi-buried features, while the other is represented by slightly buried features with a rectangular layout.

The spatial distribution of the studied features on some sites indicates the grouping of contemporaneous archaeological units around an individual dwelling. However, according to the horizontal stratigraphy, one can observe that the spatial boundaries of the older units had been respected (late 8th and the first half of the 9th century), that is, the newly constructed and utilized structures (second half of the 9th and the early 10th century) were built in a nearby area that had not been occupied in the past.

The above examples of early medieval sites represent typical rural open settlements of dispersed type, situated by water or on slightly elevated ground surrounded by smaller watercourses and fertile soil, i.e. in an environment that had a very important role during the early Middle Ages.

In the past decade several large-scale archaeological rescue excavations have been carried out in the region between the Sava and Drava Rivers. The remains of several small early medieval settlements were documented and excavated and dated approximately to the 9th century (Map 1; Table 1). These sites are located throughout this region (14, 15, 24), to which can be added two excavated sites located

adjacent to the right bank of the Sava (2, 19), and several sites that have been systematically excavated for several years (6, 18, 21, 22, 23). The data acquired through these investigations,¹ along with modest information derived from earlier excavations (4, 7, 8, 10) or excavations of small areas (20), are extremely important for understanding everyday life in rural early medieval settlements in the region between the two rivers.

It could be said that until recently, most of what was known about the medieval period came from excavated cemeteries or individual burials, while only small areas of a few settlements from that period had been investigated, and hence the knowledge was proportionally limited. Almost nothing could be discerned from them about the forms of the dwelling space, nor the organization and infrastructure of the settlement itself, but merely information about the forms of pottery and basic characteristics of the decoration of vessels (Delovi-Grede 1 /site no. 4/ – Marković 1984, 318, Pl. 9: 2-6; Pl. 10: 1; Koprivnica-Cerine /site no. 7/ – Sekelj Ivančan 2001, 26-27, Pl. XXI, 130-136; Koprivnički Bregi-Seče /site no. 8/ – Sekelj Ivančan 2001, Pl. XVIII, 116; Peteranec-Vrtnec 2 /site no. 10/ – Sekelj Ivančan 1999, 185-197; Torčec-Blaževo pole /site no. 20/ – Sekelj Ivančan 2010, Pl. 38-39).²

In the recent period, several sites have produced interesting data. In one group can be placed those that provide new information about the types of dwelling structures, while the second group includes sites where in addition to the forms of residential structures, information was also acquired about the dynamics of spatial occupation and the organization of life in individual villages during the early Middle Ages.

1. THE FORMS OF DWELLING STRUCTURES

In the region between the two rivers, archaeological excavations have supplied evidence for two forms of dwellings utilized during the 9th century. The first form consists of elongated semi-buried structures, with or without load-bearing structural elements for a roof, while the other form consists of slightly buried houses with a rectangular plan, most often with a heat source placed in one of the corners.

Elongated-oval structures

The sites that provide information about the first form of dwelling structures are mostly located in an extensive lowland area: in the Sava River basin these include sites near Zagreb and Brod, while in the Drava River basin sites are located around Varazdin, Koprivnica, and Virovitica, and there are also sites located away from these rivers, investigated in the area of construction of a future N-S highway connecting via Đakovo two far sections of the Republic of Croatia.

Examples of the elongated-oval form structures can be found at the site of **Stari Perkovci – Debela šuma I** (Map 1: 14, Table 1: 14), where two half-buried structures with an oval-rectangular form were documented, one of which had postholes for the tent-like structure of the roof (SJ 022), two on one side, and one on the opposite narrower side of the structure (Fig. 1). The other structure was built of interwoven wattle that was later coated with daub (SJ 007) (Fig. 2). They are interpreted as dwelling structures that were a part of some workshop assemblage during the 8th and 9th centuries, and their reconstruction has been suggested, one as a semi-buried house with a hemispherical roof of wattle, and the other as a semi-buried house with a wooden tent-like structure (Filipec et al. 2009, 21, 32-35).

The Varaždin vicinity offered significant data about the forms of dwelling structures utilized during the (8th) 9th century. At the site of **Varaždin-Brezje 1** (Map 1: 22, Table 1: 22) a semi-buried house was recognized

with a load-bearing beam buried perpendicularly in the soil in the deepest central part of structure J15, dated to the end of the 8th and in the 9th centuries (complex of burials J 8, 9, 10, 12, and 15 - J 9: C¹⁴ BP 1220 ± 47/calAD 790 ± 69) (Bekić 2013b, 246-248), but also structure J7 with the remains of a central column and hearth (Bekić 2009, 208, 210, Fig. 2) (Fig. 3). At the nearby site of **Brezje IV** a spacious, slightly buried, elongated structure oriented E-W was excavated, with a hearth in the western part of the dwelling space (SJ 12). The hearth consisted of numerous burnt pebbles, and according to the preliminary report, the structure can be dated to the 8th and 9th centuries (Bekić 2010, 192, fig.).³

At the site of **Šemovec-Šarnjak jug** (Map 1: 18, Table 1: 18) two pit-dwellings and a pit in the vicinity of one of them were excavated. The first, elongated structure (4.8 x 2.1 m, depth 34 cm) was oriented E-W, and its C¹⁴ date was very early (SJ 09: C¹⁴ BP 1302 ± 26/calAD 710 ± 39). After analysis of the pottery finds, it was concluded that it actually should be dated to a somewhat later period, to the end of the 8th and beginning of the 9th centuries (Bekić 2008, fig. 5-7; 2011, Pl. 43-47; 2013a). The second excavated structure was also an elongated pit-dwelling (3.2 x 1.4 m, depth 20 cm), dated to a somewhat later period (SJ 10: BP 1175 ± 30/calAD 842 ± 45). It was finally concluded after the analysis of all discovered objects, which included a small belt clip decorated with S-shaped tendrils from the late Avar period, that the excavated structures belonged to the period of the

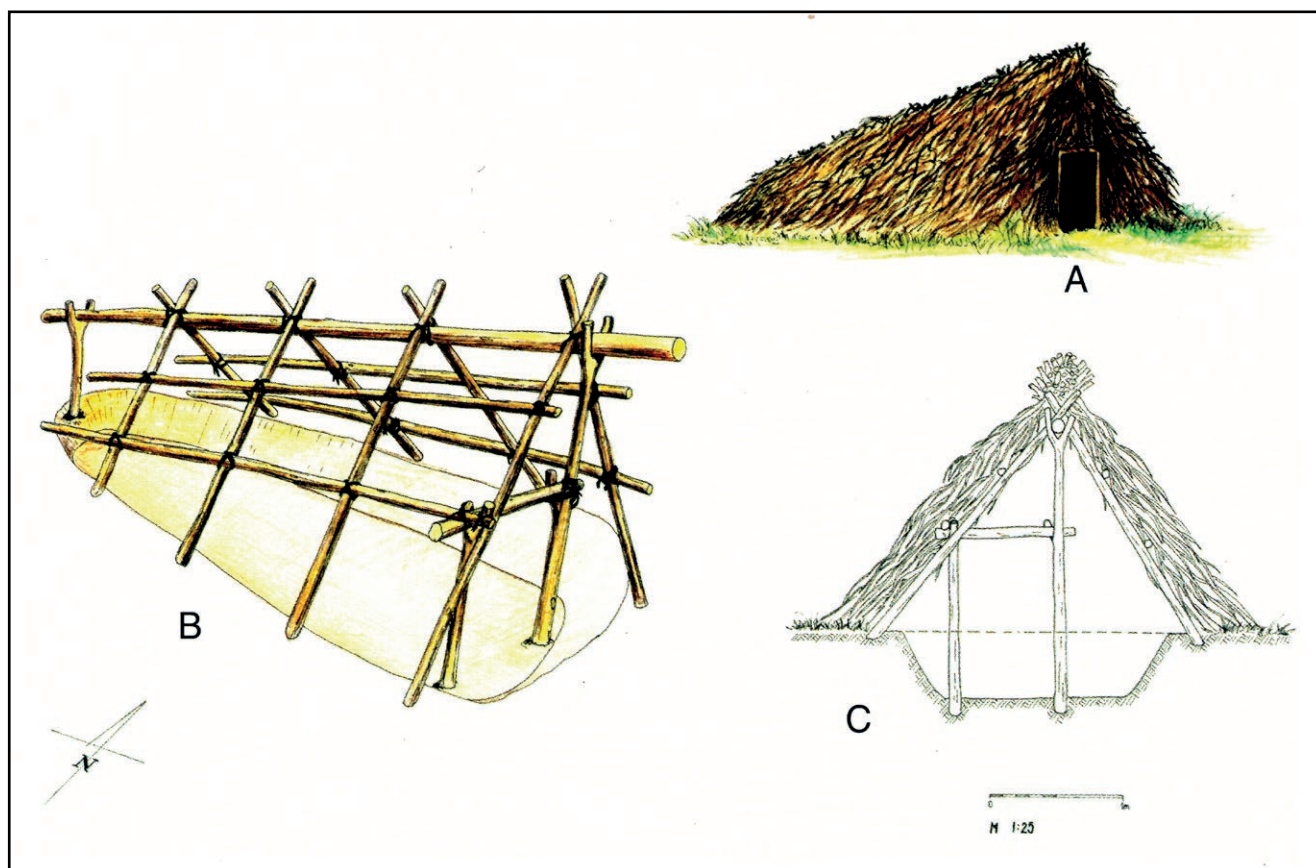


Fig. 1 – Stari Perkovci-Debela šuma, suggested reconstruction of structure SJ 022 (from: Filipec et al. 2009, 35, Fig. 28).

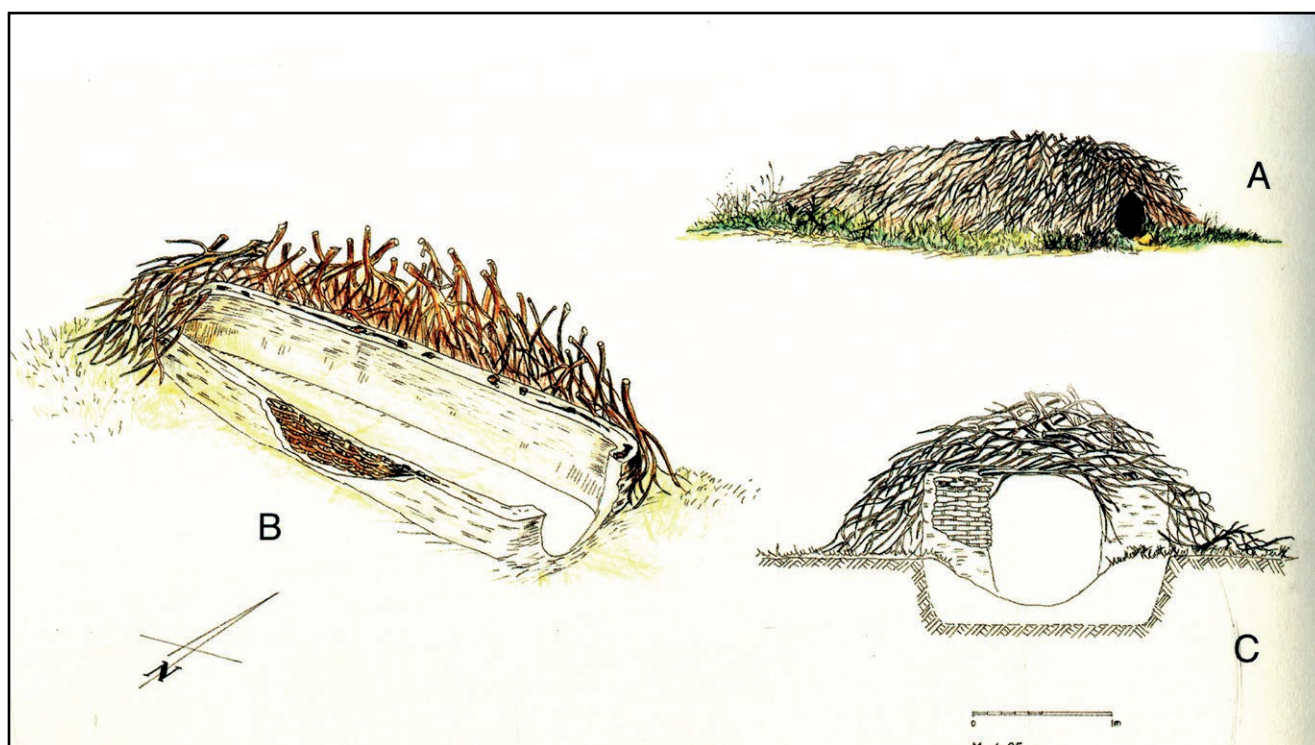


Fig. 2 – Stari Perkovci-Debela šuma, suggested reconstruction of structure SJ 007 (from: Filipec et al. 2009, 34, Fig. 25).

second half of the 8th and first third of the 9th centuries (Bekić 2013a).

These finds can be joined by one structure from the site of **Jakopovec – Blizna** (Map 1: 6, Table 1: 6), dated to the 9th century (SJ 31: C¹⁴ BP 1200 ± 21/824 ± 37), but lacking precise information about its appearance (Bekić 2008, 109, Fig. 4; Bekić 2013b, 244-246).

Somewhat more to the south along the Drava River, in the Đurđevac vicinity, at the site of **Virje–Volarski breg** (Sekelj Ivančan 2011, 51, fig. 1) three early medieval structures were investigated, while at the nearby site of **Sušine** (Map 1: 23, Table 1: 23) another two structures were excavated, one of which can reliably be placed at the end of the 8th and in the first half

of the 9th centuries (SJ 320: C¹⁴ BP 1216 ± 23/calAD 811 ± 41). Alongside the large, elongated-oval very shallow structure (6.07 x 3.11 m) was a hearth (0.76 x 0.57 m) (Fig. 4-5). The situation as found indicates that the hearth was located by a contemporary structure, but because of its nearness to the structure, the possibility should not be rejected that it had been part of a unified living space (Sekelj Ivančan 2014, 102, Fig. 4).

Several sites were also excavated in the lowland areas by the Sava River. One structure from the site of Šepkovčica–Gradići (Map 1: 19, Table 1: 19) was published that according to the C¹⁴ dates could be placed in the 9th century (Fig. 6) (SJ 700/701: C¹⁴ BP 1213 ± 22/calAD 814 ± 39), as well as a somewhat later pit (J 289: C¹⁴ BP 1150 ± 20/calAD 896 ± 40). According to the author, this was a type 1 dwelling structure – a dugout pit-dwelling, in the form of an irregular oval pit of 6 x 3 m, dug some 70 cm into the sterile soil and surrounded by eight postholes that could represent a fence around the house. The remaining published structures and pits from this site come from a later period, and a regularity was noted in the placement of all structures parallel to the direction of the stream bed in this settlement, which has a continuity to the 15th century (Bugar 2008, 181-183, 190, Fig. 4: 1), while the organization of households could not be determined in this phase of publication.



Fig. 3 – Varaždin-Brezje 1, structure J7 with the remains of a central beam and hearth (from: Bekić 2009, 208, 210, Fig. 2).

Such elongated-oval structures, with or without load-bearing structural elements for a roof, would belong to types 2 and 3 according to the typology of P. Šalkovský (2001, 18, 52-53, Abb. 1:3-3, Map 7, 8, Abb. 26-27).

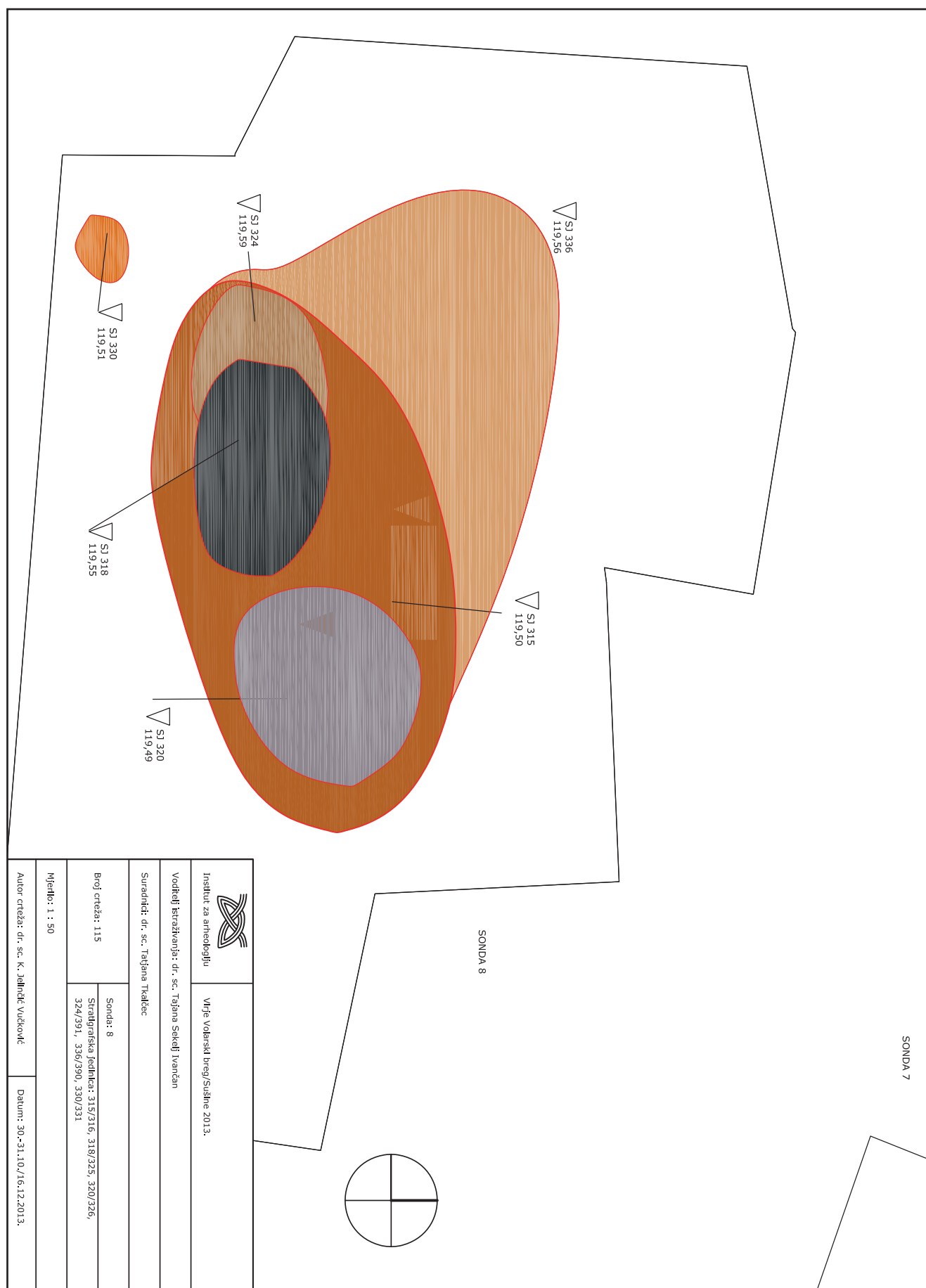


Fig. 4 – Virje-Sušine, an early medieval elongated-oval structure with various kinds of fill within it (photo and drawing: Kristina Jelinčić Vučković).

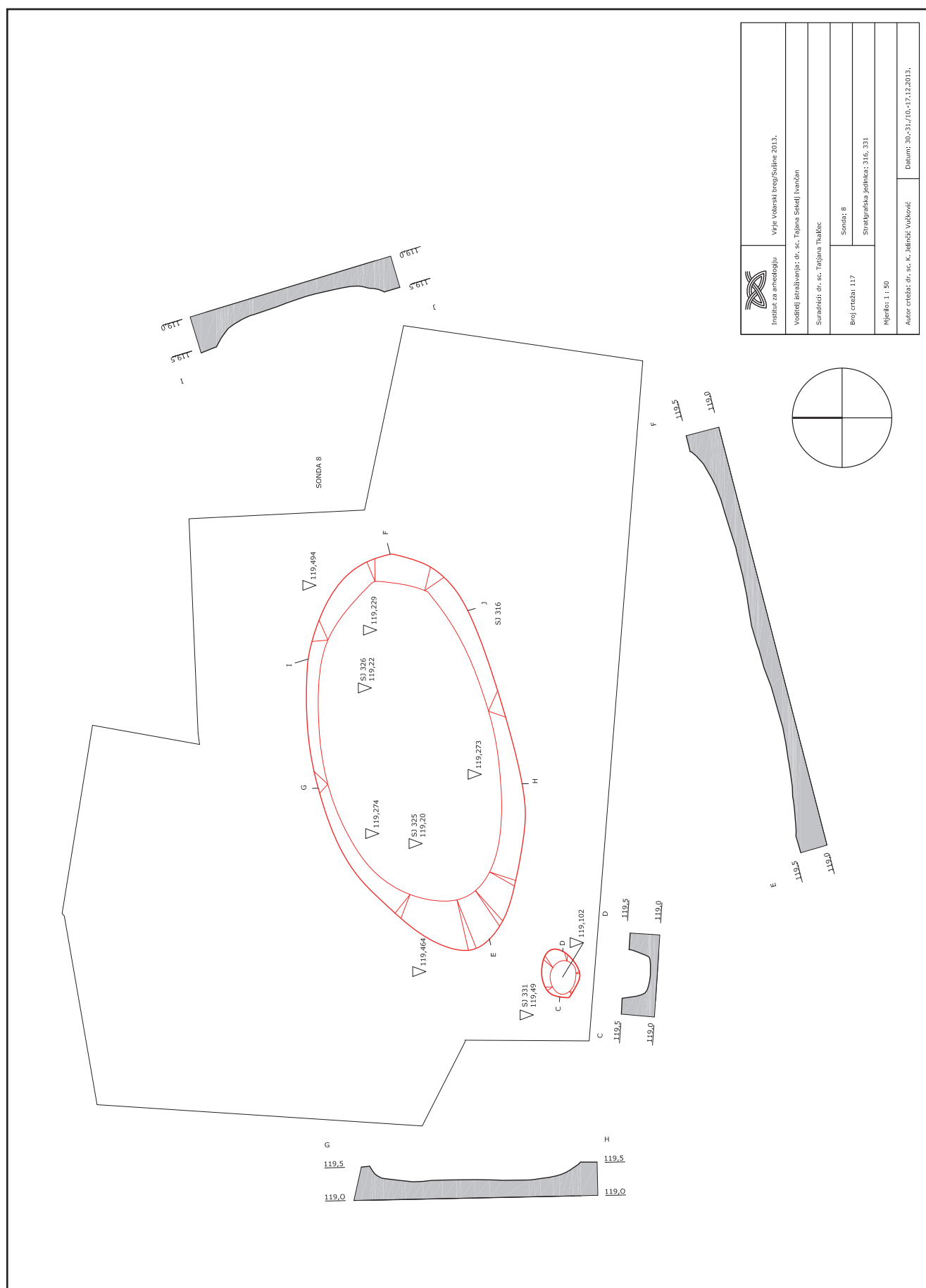


Fig. 5 – Virje-Sušine, plan of the structure and hearth with cross-sections (photo and drawing: Kristina Jelinčić Vučković).

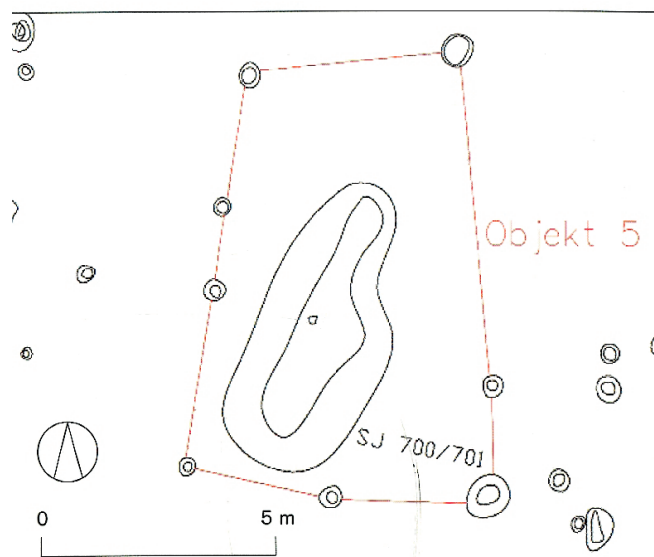


Fig. 6 – Šepkovčica-Gradići, an early medieval structure with postholes around it (from: Bugar 2008, 181-183, 190, Fig. 4: 1).

Rectangular structures

Two sites follow where along with an elongated-oval form of dwellings, there are structures that in their shape closely approximate a regular rectangular form of a house. These are the site of Buzin in the vicinity of Zagreb, which can be joined by Stružani in the vicinity of Slavonski Brod.

At **Buzin** (Map 1: 2, Table 1: 2), elongated-oval forms predominate, as is visible from the published plan of the site (Fig. 7), among which should be emphasized the unit SJ 109/110(115) (□ F10/G10), of large dimensions with remains of a stove in the eastern part (SJ 109: C¹⁴ BP 1270-1060/calAD **680-890**) (Radman Livaja et al. 2011, 265-266, fig. 3). However, the unit called SJ ¾ (□ I8, 9/J8, 9), might represent the remains of a slightly buried rectangular structure. A large concentration of soot and broken stones, probably the remains of a hearth, were noted at the base of the structure (SJ 3: C¹⁴ BP 1290-1080/calAD **660-870**), although all were missing structural elements that would have served as supports for the roof structure. Although both assemblages exhibit close dated in terms of C¹⁴ analysis, the typological-chronological analysis of the pottery fragments from their fill showed that structure SJ 109 has earlier elements than SJ 3, which is dated from the 8th to the 10th centuries, and where, according to the author, a complete lack was noted of pottery from group 1, otherwise abundant in SJ 109 (Sečkar 2011, 276, 285).

The other site where both forms of dwellings structures can be found, according to the available published data, is **Stružani** in Slavonia (Map 1: 15, Table 1: 15). At the present level of publication of this early medieval settlement, it can be noted that two basic forms of dwelling structures were present. One type appeared as an oval pit with approximate dimensions of 2 x 4 m, and a depth of ca. 0.50 m, probably rep-

resenting the remains of a semi-buried house covered with a tent-like structure of branches and thatch (Fig. 8) (Lozúk 2011, 17), with the second type consisted of rectangular forms with postholes (3.5 x 3.3 m), probably the remains of an above-ground structure whose walls of wattle or planks were connected to larger load-bearing wooden beams for the roof (Fig. 9). Some of the 14 early medieval structures at Stružani were probably from the period of the 9th century considering the pottery material presented in the exhibition catalogue of this site that existed in the same position from the 7th-8th centuries (Miklik-Lozúk 2012, 43-58).

Both of the above examples have pointed out the existence, in addition to elongated-oval structures, of one more form of dwelling space utilized in the early medieval period, although the first publications lacked information about a more precise dating. Nonetheless, it can be claimed with certainty that the second form of dwelling space consisted of slightly dug-in structures with a rectangular plan. This is supported by the most recent find of a slightly buried rectangular house discovered at the site of Suhopolje-Napast 1 (Fig. 10), a site that is not precisely dated, but according to available information it should be considered in the context of the early medieval period, perhaps even in the period of the 9th century (Bajkai 2012, 33-34, 41, Fig. 7: 6; Fig. 9: 1). This was a structure with an almost square plan with straight corners (3.10 x 2.65 m, depth 0.25 to 0.56 m) whose walls run vertically onto a mostly flat base where no traces of a floor were found. Between two concave hollows located in the northern part of the structure was a row of four postholes, arranged N-S, while in the southern part of the pit there was also a row of postholes in the same direction whose function had not yet been defined. In the southern part of the structure four large pits, probably the remains of wooden support beams (Ø 0.23-0.34 m), enclose a rectangular space that extends across the entire width of the structure. An oven of oval shape (0.60 x 0.45, height 0.28 m) was located in the northwestern part of the structure, whose preserved walls were placed perpendicularly on the base of the structure (Galiot 2013, Fig. 5). The collected charcoal samples and future analysis of the material will provide a more precise time for the functioning of this structure, but considering the very small number of dwellings structures with a rectangular plan, at least two of which are more precisely dated, as will be seen in the following text, the period of the 9th century can in fact be considered, when according to P. Šalkovský houses began to be built (more frequently) with blocks and support beams (Šalkovský 2002, 57, Abb. 4:10-13), although the possibility of some other period of the early Middle Ages cannot be excluded. The spatial image of the distribution and the appearance of the rectangular structures that were utilized in the early medieval period in the region between the Drava and Sava will certainly be supplemented by the examples from the site of Đakovački Selci-Kaznica-Rutak (see n. 1).

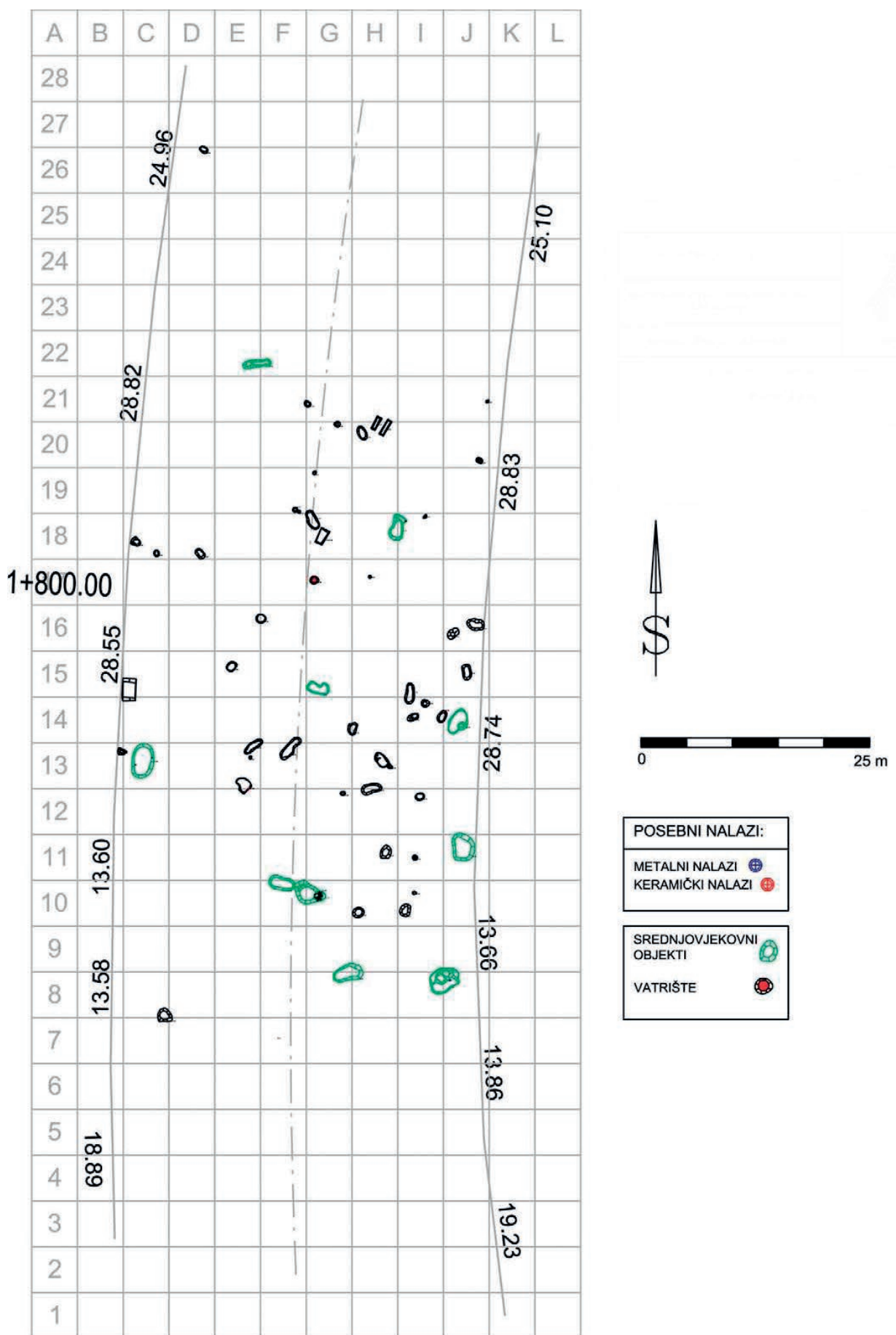


Fig. 7 – Buzin, plan of the excavated early medieval structures marked in green (from: Sečkar 2011, 278, Fig. 1).

Examples of rectangular houses, along with those of elongated-oval form, can also be found at the Drava basin sites of Torčec-Prečno pole and Virovitica-Kiško-rinja jug, which are discussed separately as they also offer additional data about the spatial organization of the settlement.

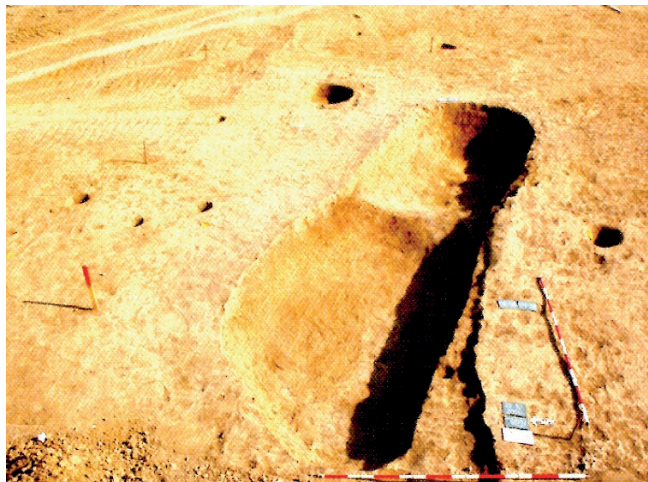


Fig. 8 – Stružani-Vrtlovi, an elongated-oval early medieval structure (from: Lozuc 2011, 17, figure).

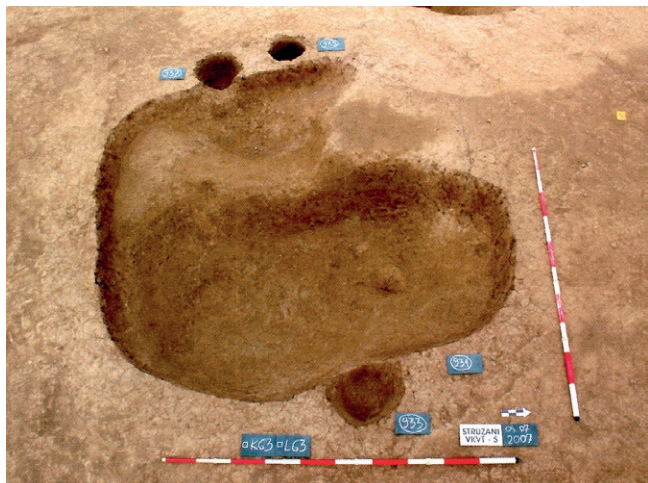


Fig. 9 – Stružani-Vrtlovi, an early medieval structure of rectangular plan with two beams (from: Miklik-Lozuc 2012, 47, figure).



Fig. 10 – Suhopolje-Napast 1, a square slightly buried structure with an oven in the corner (from: Galiot 2013, Fig. 5).

At **Torčec** (Map 1: 21, Table 1: 21) several phases of occupation have been distinguished at the position of Prečno pole, and here attention should be paid to phase III that encompasses the period from the end of the 8th to the beginning of the 10th centuries, divided into two sub-phases (Sekelj Ivančan 2010). In this manner, the structures of the third phase of the settlement at Prečno pole are divided into two groups. One characteristic of the earlier group (IIIa) is the appearance of medium and large rectangular semi-buried structures, two of which were very well preserved, both located on the edge on an old meander of the Drava River. In the excavated section, the first has an irregular rectangular form in the eastern half and oval in the western section (4.62 /I-Z/ x 2.14 m /S-J/; part remained unexcavated) (Fig. 11). It was elongated in the E-W direction, and a small hollow 0.22 m in diameter was probably the remnant of a wooden post that served to support the roof structure. Although part remained unexcavated, it is presumed that this was the remnant of the rectangular shallowly dug-in structure, whose semicircular part on the western side might represent the remains of a hearth that partially extends beyond the rectangular footprint of the house. The house is dated by the radiocarbon method from the end of the 8th to the middle of the 9th centuries (SJ 031: C¹⁴ BP 1206 ± 23 /calAD 819 ± 38).

The next, contemporary structure located along the edge of the meander, had a regular square plan (3.55 m /E-W/ x 3.49 m /N-S/) (Fig. 12). Heaps of gravel and broken pebbles were found in its southeastern part (0.98 m /E-W/ x 0.79 m /N-S/), which were interpreted as a hearth or fireplace located within the dwelling area. Within the outline of the structure in its north-western part, the remains were recorded of a deeply buried post (Ø 0.29 m), which served as the support of the roof construction above the dwelling area. A slightly semicircular widening along the eastern part of the house, opposite the above large post perhaps represents the remains of (another) support for the roof structure merely placed flat on the ground on the opposite side, and in that case it would be possible to conceive of some kind of slanted roof above this structure, as was suggested by Šalkovský (2001, 88-89, Abb. 49:5,6; Abb. 50:1). If such a solution were to be accepted, at least a somewhat triangular (buried) surface of the structure would be expected (Sabján 2002, 323-324, Fig. 8, Fig. 9), however, the house displayed a regular square shape. The entrance area, considering the arrangement of posts and the location of the hearth, was probably in the western, gabled part of the structure. Since the walls to be north side and part of the east side descended relatively vertically towards the base of the structure, the house probably belonged to a version with an inner low framework of above-ground walls (only slightly raised above the ground surface) (Šalkovský 2007, 306-307, Fig. 2:2). Here should be mentioned the contemporary (according to the pottery material) structure SJ 033/ SJ 034 (4.40 x 2.50 m, depth 39 cm), relatively regular, partially rectangular (?) in plan, but semicircular

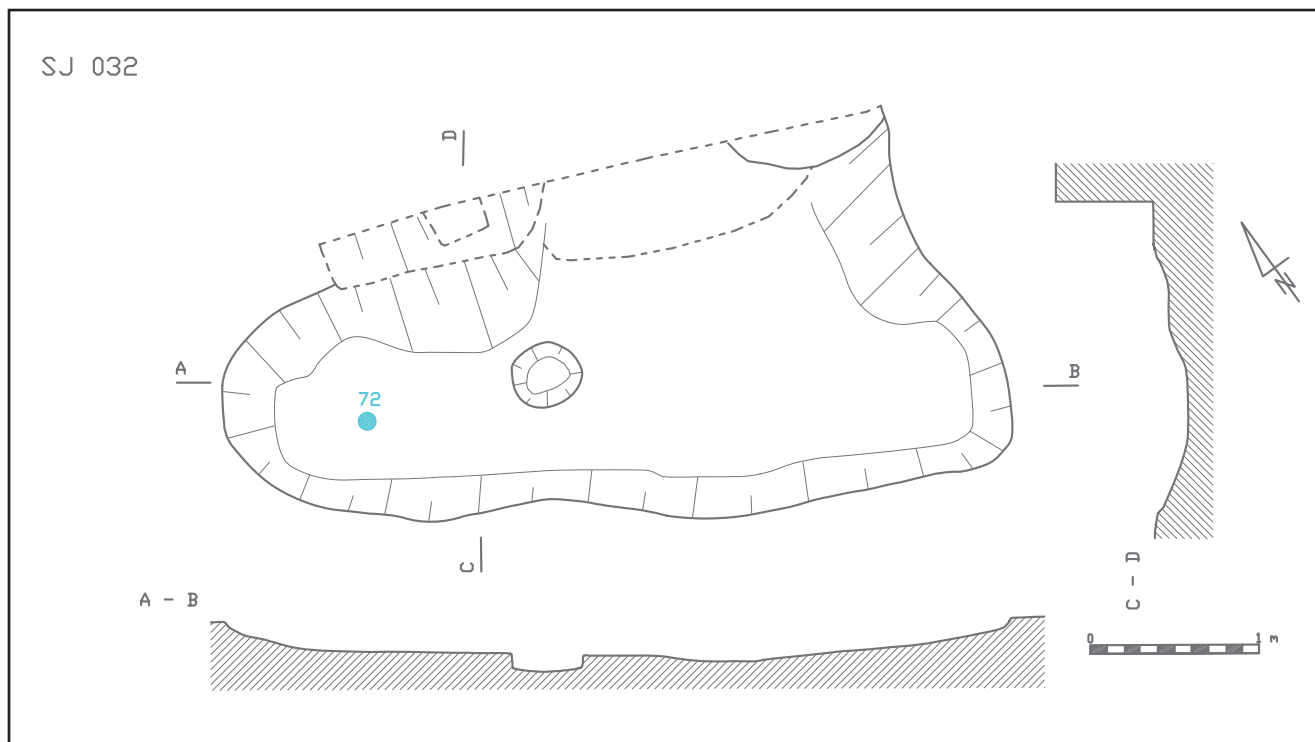


Fig. 11 – Torčec-Prečno pole, drawing of part of excavated structure SJ 032/033 with cross-sections (photo: Tatjana Tkalčec; drawing: Siniša Krznar) (from: Sekelj Ivančan 2010, 34, sl. 13).

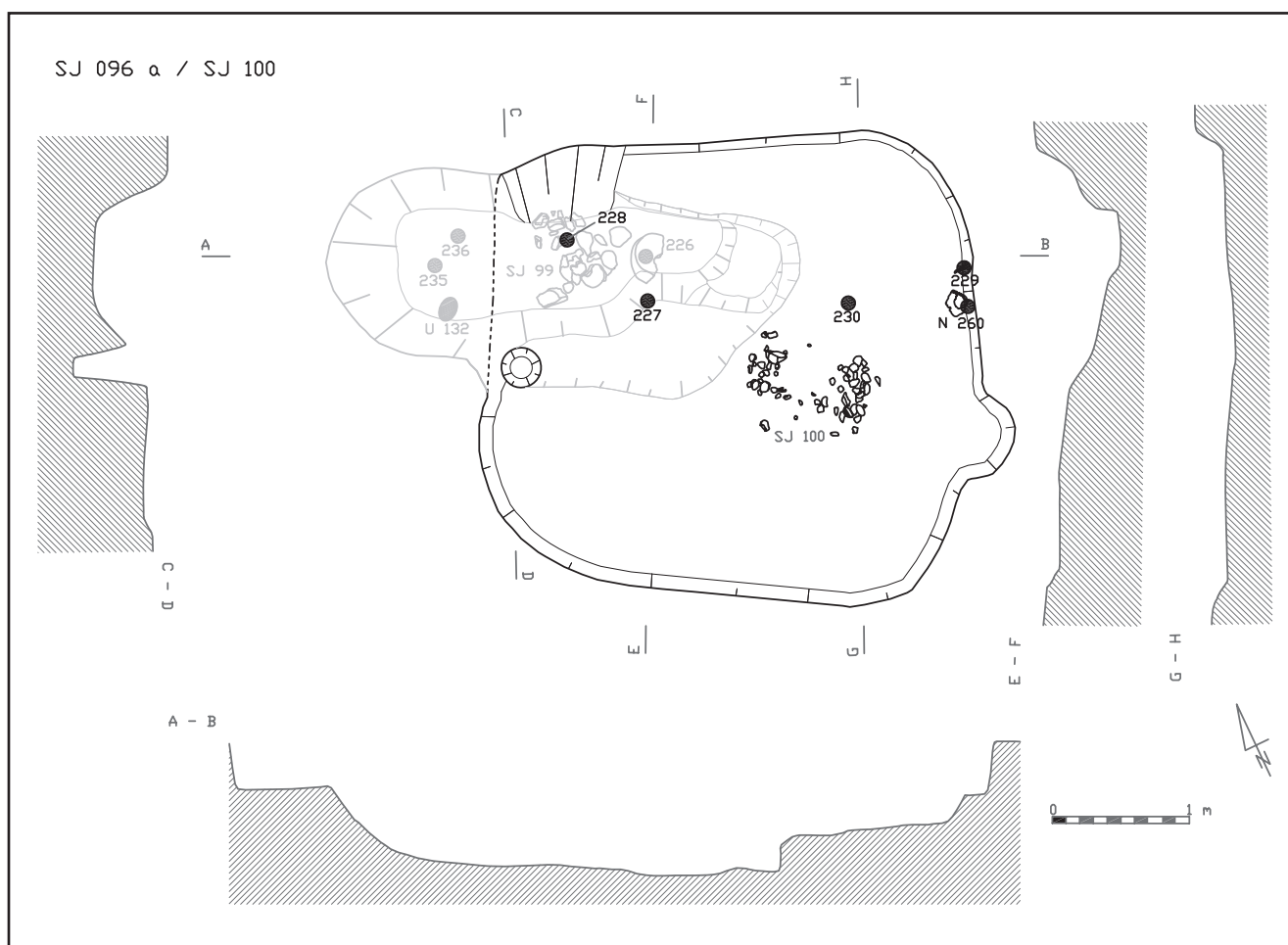


Fig. 12 – Torčec-Prečno pole, drawing the excavated structures SJ 096a and SJ 100 with cross-sections (photo: Tatjana Tkalčec; drawing: Siniša Krznar) (from: Sekelj Ivančan 2010, 47, sl. 38).

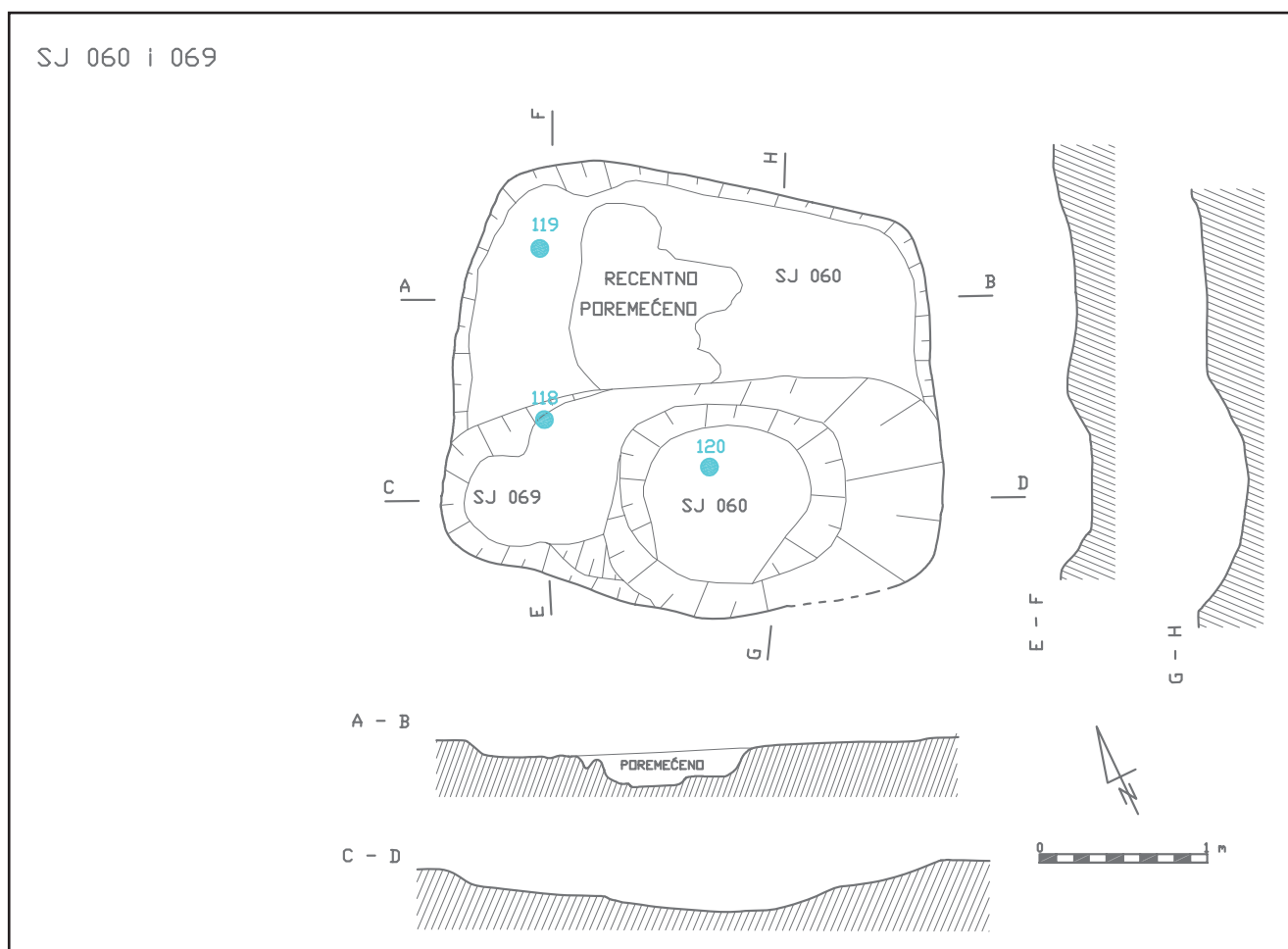


Fig. 13 – Torčec-Prečno pole, drawing of part of excavated structures SJ 060 and SJ 069 with cross-sections (photo: Tatjana Tkalcčec; drawing: Siniša Krznar) (from: Sekelj Ivančan 2010, 41, sl. 25).

in the southwestern part. At the base of the northern and deepest part of the structure, which extended E-W, a large piece of burnt house daub was found with one side completely smoothed and other bearing visible traces of a wooden construction in a width of ca. 8-10 cm (17 x 22 x 8 cm). This find indicates that the structure in which it was found had been built with a wooden construction of logs or probably planks with a width of ca. 10 cm, as is shown by the traces on one side of the daub with which the wooden structure was coated, which was carefully smoothed on the outer side, examples of which have already been noted (Šalkovský 1993, 67; Šalkovský 2006, 124, Obr. 11).

The latter two houses, although one is only partially preserved, exhibit certain similarities of form, as massive support beams for the roof appear, and according to the typology established by Šalkovský they would belong to one of the variants of type 1Ba1 with a single support beam for the roof (2001, 30-31; Abb. 1:1Ba, Map 3, Abb. 7:8; Abb. 8:3,7), or one of the variants of type 1Ba2 with two support beams (2001, 32-33, Map 4; Abb. 9:3, 7). It is with such wooden supports for the roof it is presumed that they had walls that were raised slightly above the walking surface, and the roof did not reach the ground, but was rather supported by the walls. Oak was mainly used as the material for their construction, as is indicated by the only remains

of wood at the two excavated dwellings structures of phase IIIa (SJ 031 and SJ 033) (Culiberg 2010, 390-391, Table 1). The oak planks or boards were probably stacked well, as is indicated by the find of house daub with impressions of them.

A feature of the later phase (IIIb) is the appearance of rectangular semi-buried structures of small dimensions with a hearth in one of the corners of the house. One such structure was found (3 x 2.62 m) that in the southwestern part had semicircularly placed large pieces of sandstone that marked the edge of the hearth with a diameter of 0.80 m (hearth SJ 068: C¹⁴ BP 1172 ± 24/calAD 843 ± 39) (Fig. 13). The hearth was fired from the area of the structure itself, from the northern side, where the semicircular row of sandstone had a break, and its belonged to one of the basic known types of devices for heating interior spaces (Šalkovský 2001, 94, Abb. 52:2,3). The dimensions, shallowly dug but clearly visible square edge, and hearth in the SW section clearly show that this archaeological assemblage represented a simple, one-room semi-buried hut of square shape, preserved in the deepest southern section, which extended E-W at a depth of 33 cm. The entrance to the house most probably was located on the eastern side, somewhat protected from inclement weather and cold, as had been noted for other examples (Herold 2004, 95, 105).

In terms of the documented elements of this structure, according to the typology of P. Šalkovský, this house would belong to one of the variants of the type of slightly buried huts without wooden supports for the roof – type 1A (2001, 18, 24-27; Abb. 1:1A, Map 1, Abb. 3-6).

The above forms of structures show that during the 9th century in the region between the Drava and Sava Rivers elongated-oval houses existed, along with those with a rectangular plan. As this was a lengthy chronological period of 100 years the question arises whether any given form of dwelling space could be placed more precisely in a specific segment of that century. What can be clearly seen at first glance, for instance at the site of Buzin (2.c) as well as sites from the Varaždin area (22.b and 18.a?), is that the elongated oval forms could be somewhat earlier and that they have more connections to the period of the 8th century, while the houses with a rectangular plan, with or without load-bearing structural elements, are from a somewhat later period and can be tied to the full 9th century. This is supported by the discovery of an archaeological assemblage at the site of Prečno pole in Torčec (21.a), which was dated by the radiocarbon method (SJ 014: C¹⁴ BP 1234 ± 22 / calAD 771 ± 53), and which are presumed the represent the remains of the dwelling structure of elongated-oval form (Sekelj Ivančan 2010, 30-32, 114).

2. THE SPATIAL ORGANIZATION OF SETTLEMENTS AND THE DYNAMICS OF SPATIAL OCCUPATION

Individual archaeological formations, assembled and arranged as free-standing structures in an area (yard?) near a residential building, viewed as a whole and recognized and interpreted as farms, are far more common in later segments of the Middle Ages, primarily from the time of the 13th century and later, when the very construction of buildings shows significant technological advances and changes in the forms of dwellings, which then have floor plans consisting of several rooms (Ježek et al. 2002, 349-352). These changes, which can be archaeologically traced and documented throughout the entire European region (Nekuda 2006, 3-12), are connected to new social and economic conditions. However, even in the early medieval period it is possible to recognize certain groupings around defined dwelling areas, such as was recognized at the site of Komjatice-Štrkovsko during the 9th century, where surrounding one rectangular dwelling structure were several structures of irregular plan interpreted as auxiliary farm buildings (Nekuda 2004, 374, Abb. 9, b).

In the case of the Torčec-Prečno pole settlement, it can be noted how the dynamics of spatial occupation are reflected in the clustering of groups of excavated structures and the other archaeological assemblages only for one example from Faze IIIa of the settlement,

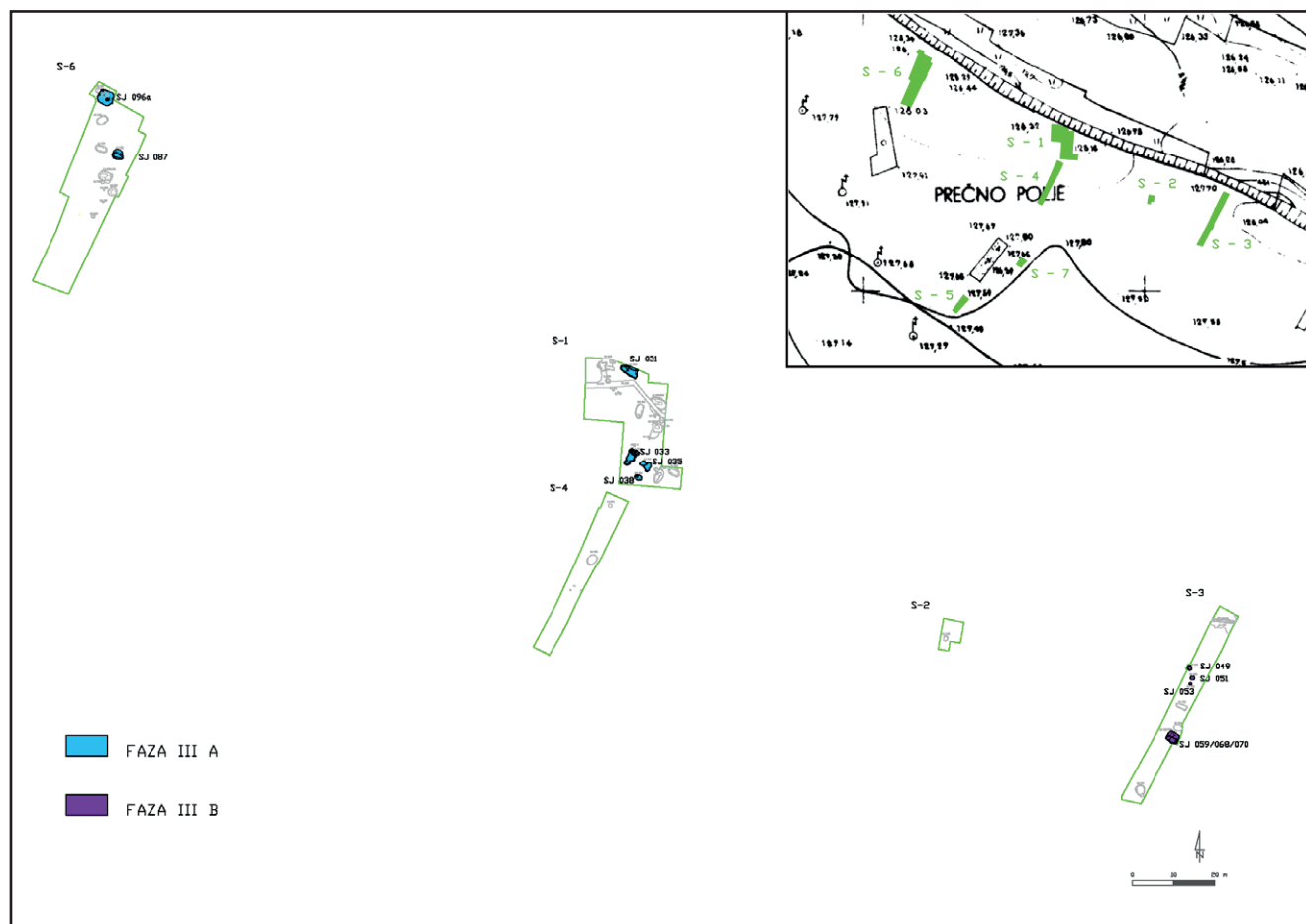


Fig. 14 – Plan of the excavated structures along the Drava meander at the site of Torčec-Prečno pole – phase III of the settlement (photo: Tatjana Tkalc̃ec; drawing: Siniša Krznar) (from: Sekelj Ivančan 2010, 156, sl. 103).

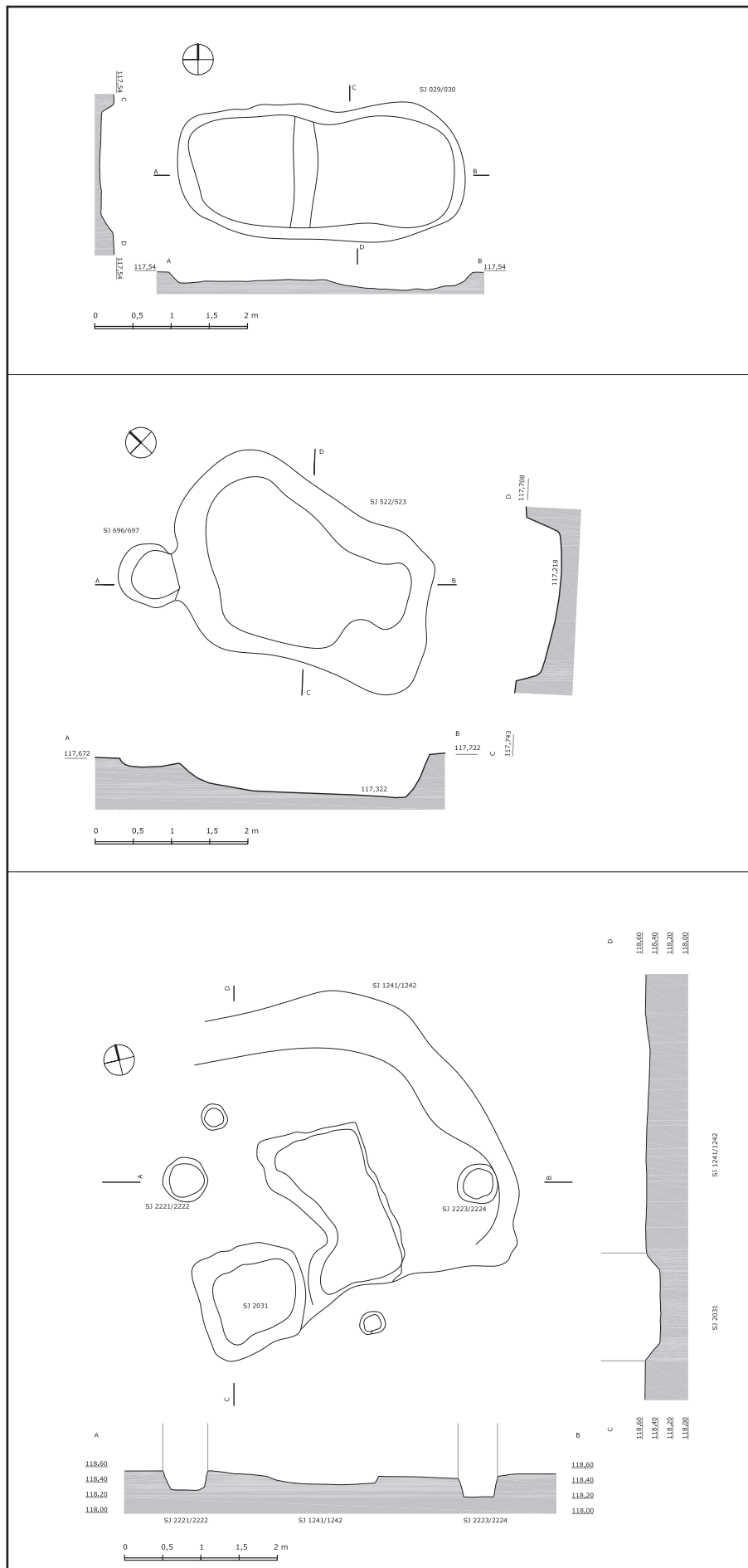


Fig. 15 – Virovitica-Kiškorija-jug, drawing - 3 structures: SJ 029/030; SJ 522/523, SJ 1241/1242.

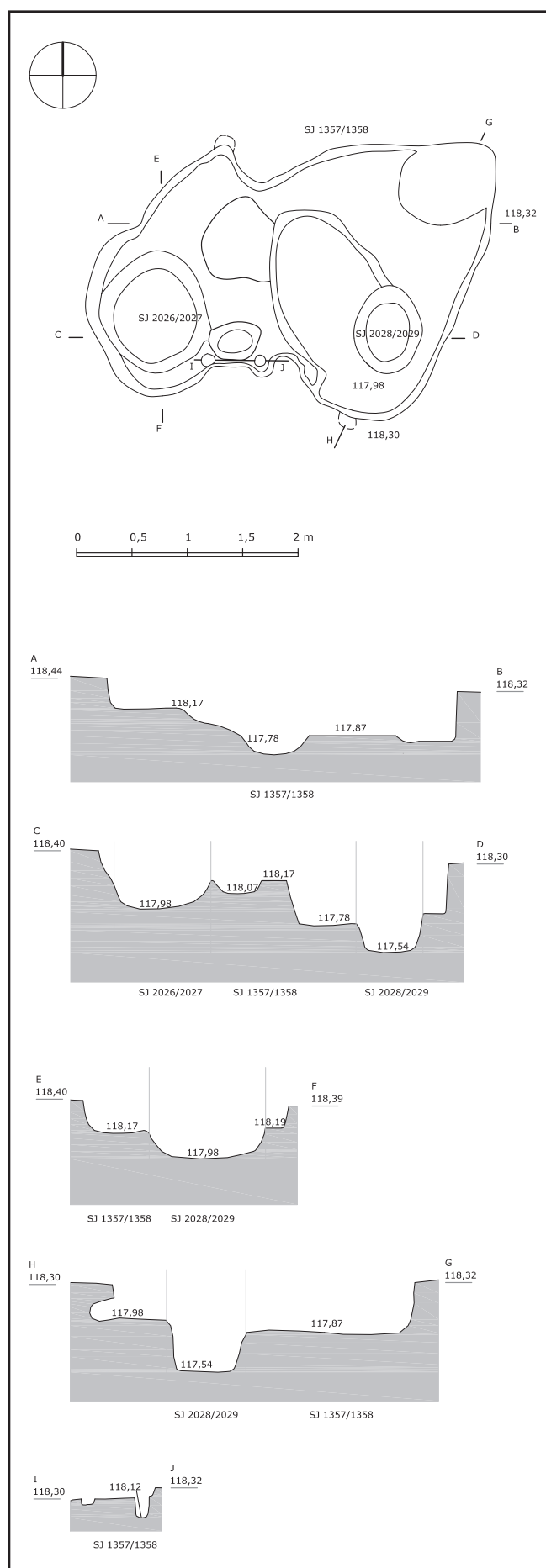


Fig. 16 – Virovitica-Kiškorija-jug, drawing - 1 structure: SJ 1357/1358

visible around possible structure SJ 033 and the contemporary assemblage in S-1 (Fig. 14). In terms of the arrangement of structures at that site, what is apparent, without reference to their form or date, is their concentration along the bank of the meander. A certain regularity in the placement of structures parallel to the direction of the bed of the meander is not unusual, but rather is almost a rule in the early medieval period and later. A similar density along the bed of a stream was also noted in a section of the earlier horizon of the Velika Gorica-Šepkovčica-Gradići settlement, dated from the 9th to the 13th centuries (Bugar 2008, 181, Fig. 2). The orientation and position of the dwelling structures in line with a watercourse is also retained later, during the high and late Middle Ages (Nekuda 2005, 278, Abb. 15), although the density and organization of structures can also occur on the basis of some other principle, such as the concentration of houses around a central square or some other central place in a settlement (Nekuda 2004, 377, 396, Abb. 10, B; 23, b).

Fig. 15

A good example of spatial organization of a settlement in the region between the Sava and Drava Rivers can be found at the site of **Virovitica – Kiškorija jug** (Map 1: 24, Table 1: 24). Several archaeological assemblages at this site were assigned to the period of the 9th century (Sekelj Ivančan, Tkalčec 2008: 115-116). The earliest phase of settlement (I) was represented by a house dated from the end of the 8th to the end of the 9th centuries, with a square plan (4.45 x 4.40 m) and a hearth (1.41 x 1.43 m) in the southwestern corner, and within the outlines of the structure two postholes for large beams (Fig. 15a, Fig. 17). These beams (Ø 50-55 cm), probably located in the middle of each gabled wall, formed the load-bearing basis for the roof (Sekelj Ivančan, Tkalčec 2010; 2015), and the discovered situation presents a fine example of a square house from the period of the 9th century. An oven and several nearby irregular or elongated elements are dated to the same time (SJ 1211: C¹⁴ BP 1242 ± 24/calAD 756 ± 46), probably representing auxiliary areas by the structure. Given this, it is possible to suggest that this entire assemblage belonged to a single household.

Another group of contemporary elements is located to the north within the excavated area. Among them could be recognized an elongated-oval dwelling structure (3.80 x 1.80 m) (SJ 029: C¹⁴ BP 1196 ± 27/calAD 825 ± 39), and several unidentified elements (SJ 118: C¹⁴ BP 1224 ± 34/calAD 787 ± 63), probably also auxiliary areas for a village household by the dwelling (Fig. 15b, Fig. 17).

Other than these two earlier houses, one more dwellings structure fully preserved in plan was discovered, but with an irregular form (3.40 x 2.55 m) and from a somewhat later phase of settlement at this site (IIa). The house was dated by the radiocarbon method to the second half of the 9th century (SJ 1357: C¹⁴ BP 1168 ± 29/calAD 859 ± 54). It was divided into a western part with a deep pit of circular form and an eastern part with three oval and circular pits, with a

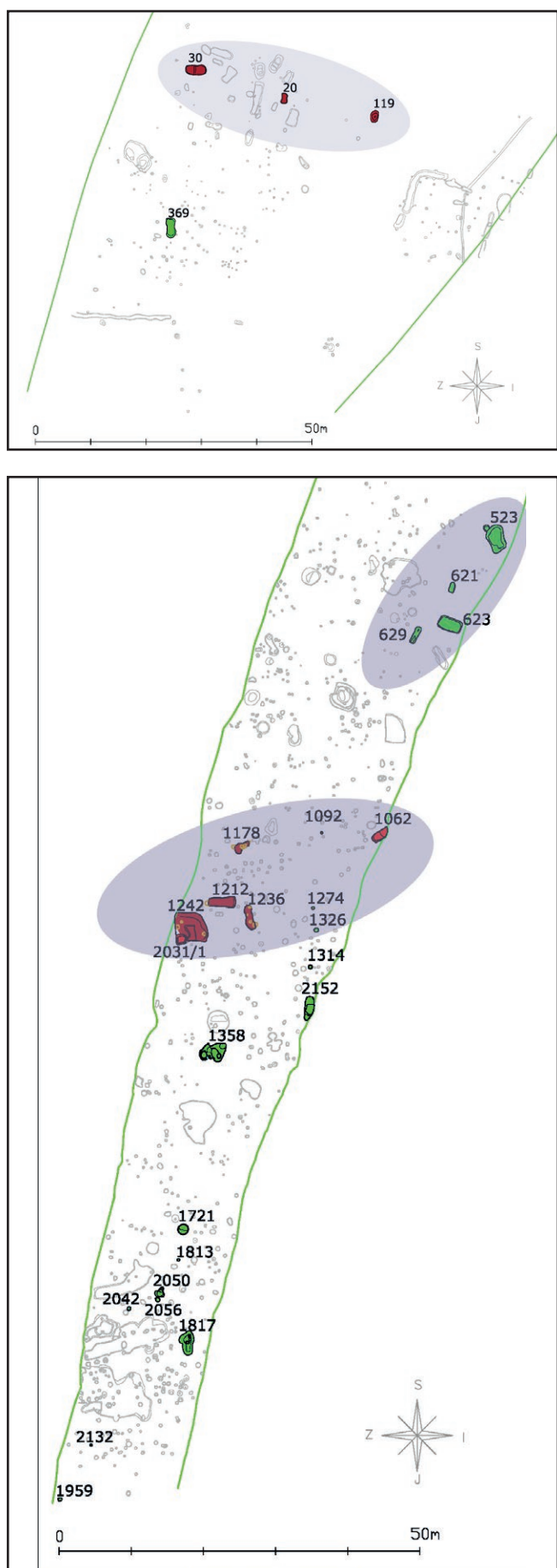


Fig. 17 – Plan of the excavated structures at the site of Virovitica-Kiškorija-jug, with prominent early medieval structures according to groups.

flattened raised area between them (Fig. 16, Fig. 17). It was bordered on the edge with obliquely placed post that were probably the remains of an eave or some kind of roof structure. To the east of the structure was an oven, and to the south several archaeological elements of undefined function (Sekelj Ivančan, Tkalčec 2008, 113-128). The last and latest group of archaeological remains is from the second half of the 10th century, and is concentrated in the northern part of the excavated area. The plan of one assemblage might represent a dwelling structure (SJ 523), such as are characteristic of the upcoming time (Takács 2001, 54), and it was surrounded by smaller elements (Fig. 15c, Fig. 17).

From the spatial arrangement of all excavated structures at the site of Kiškorija-jug in Virovitica a grouping can be perceived of contemporary archaeological assemblages, perhaps auxiliary areas for a household around an individual dwelling structure (Fig. 17). Such groupings can be noted at least for two certain examples, around house SJ 1242 and around house SJ 30, and at the somewhat later assemblage SJ 523. According to the discovered horizontal stratigraphy, it can be seen that areas where earlier assemblages had existed at that spot were respected, and the newly built structures with auxiliary units were moved to a nearby new area that had not been used in the immediate past. As is evident from the above, in the case of Kiškorija-jug, this was a typical rural open settlement of the scattered type.

On the basis of data published to the present about early medieval settlements in the region between the Drava and Sava Rivers, the sites can be classified into two groups. One group contains those sites where various forms of dwelling areas were recognized, while the second group includes sites where in addition to the forms of houses, knowledge was gained about the dynamics of spatial occupation and/or the spatial organization of the settlement. Hence it is visible how two basic forms of dwelling structures were utilized during the 9th century in the area between these two rivers. The first form consists of elongated semi-buried structures, while the second was represented by slightly dug-in structures with a rectangular plan, and both with or without structural elements that would represent load-bearing components for a roof. Given the very small amount of available information, it is not possible to present a final conclusion as to whether both forms of houses appear simultaneously or a chronological gap between them exists. It was noted only for a few examples that the elongated-oval forms were dated by the radiocarbon method to a slightly earlier period than those with a rectangular or square plan, but only future investigations will uncover their real relationship within the early medieval period.

From the spatial distribution of the excavated structures at some sites, a grouping can be perceived of contemporaneous archaeological assemblages around individual dwelling structures, indicating that these

were individual households within a settlement. According to the horizontal stratigraphy, a respect was noted towards the areas of earlier assemblages (end of the 8th and first half of the 9th century), meaning that newly built and utilized structures (second half of the 9th and beginning of the 10th centuries) were moved to nearby new areas, that had not been occupied in the recent past, as was exhibited at the sites of

Torčec-Prečno pole and Virovitica-Kiškorija-jug. In addition to these two sites, for all the other noted examples of early medieval sites it can be established that these were typical rural open settlements of the scattered type, located by water or on a gentle elevation with minor watercourses and fertile soil in the vicinity, surroundings that played a very important role in the life of the inhabitants during the early Middle Ages.

NOTES

- 1 It should be mentioned here that several newly excavated settlements have only recently been defined as early medieval (RSV – early medieval), without any more precise dating, and they may potentially include settlements from the period of the 9th century. These are site in the vicinity of Slatina – the sites Brodišće (11), Lipa (12), and Lipik 2 (13) (Galiot 2009), and Suhopolje - Napast I (17) (Galiot 2013), as well as remains of an early medieval settlement at the position of the new airport outside Zagreb (25) (MDC 2013). They can be joined by a site located between the Slavonian Stružani and Svilaj – Popovača (16), where one assemblage, with finds from earlier periods, was dated by the C¹⁴ method to the end of the 8th and the 9th centuries (Galiot 2011), as well as the still unpublished settlements at Čepinski Martinci – Dubrava (3), Selci Đakovački – Kaznica, Rutak (5), and the site of Kuševac – Topolina (9), which were dated in preliminary reports to the 9th – 11th centuries. The preliminary report on the settlement at Đakovački Selci mentions an excavated square house (Hršak, Pavlović 2007, 17), and future detailed analysis and publication should lead to significant data. It should also be noted that at the scientific meeting about medieval settlements held in Zagreb in June 2015, three certain dwelling structures with a square plan and ovens in one of the corners were presented, with great certainty dated to the 9th century (Šmalcelj Novaković, Hršak 2015).
- 2 Mention should be made here of the find of a hearth with several almost intact pottery vessels dated approximately to the 8th-10th century from the site of Borovljani - Srednje brdo /site no. 1/ (Sekelj Ivančan 2000).
- 3 It should be noted that at the 2nd international scientific meeting of medieval archaeology dedicated to the subject of medieval settlements, several newly investigated early medieval structures with an elongated-oval plan were presented, and contemporaneous assemblages were recognized in the vicinity that are interpreted as several small early medieval households (Bekić 2015).

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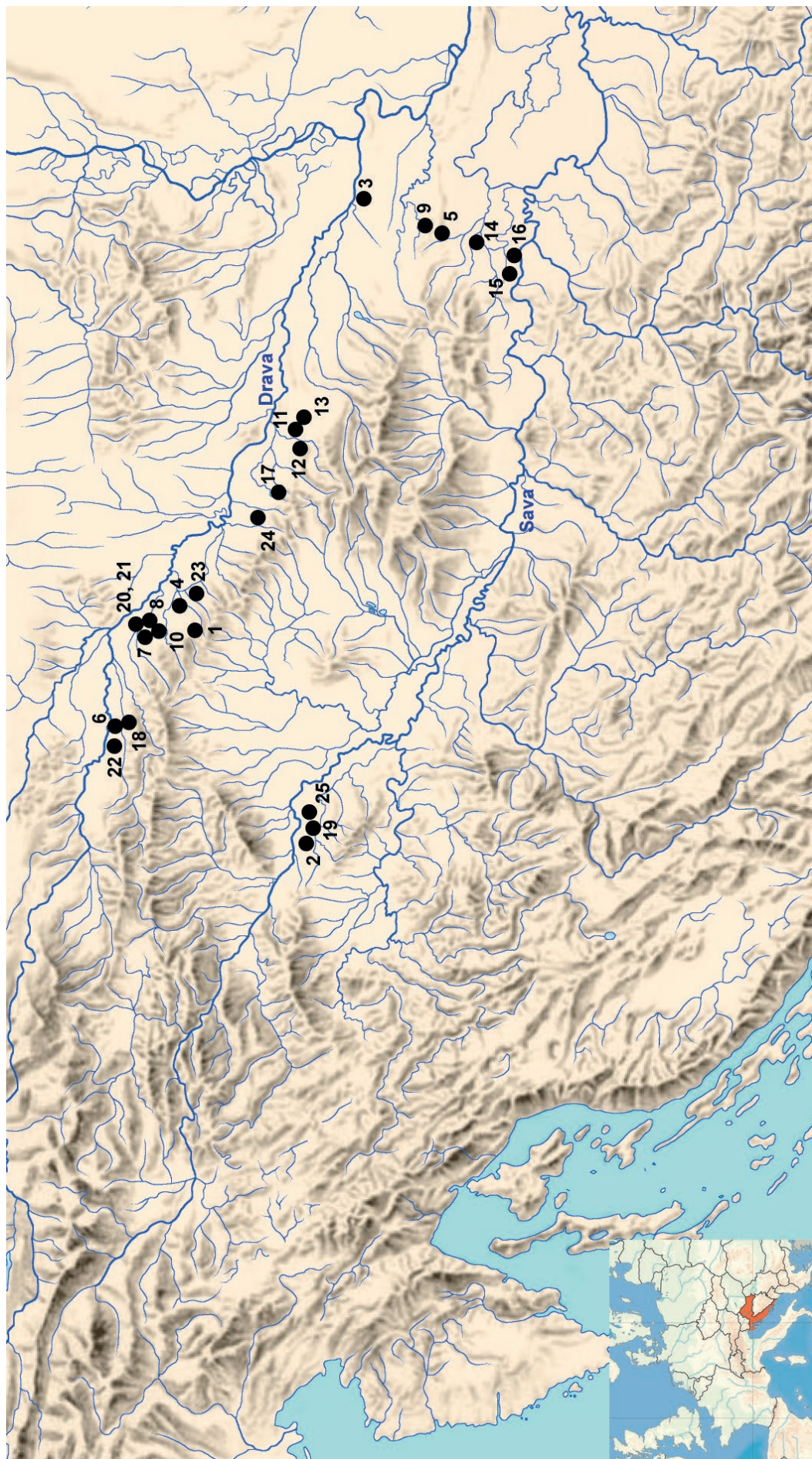
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Map 1 – Map with archaeologically excavated early medieval settlements of the 9th century.

DATA FOR EXCAVATED AND PUBLISHED DWELLINGS STRUCTURES - 9TH CENT.

No.	SITE	TOPONYM	NUMBER OF STRUCTURES WITHOUT PRECISE DATA (earlier research)	DESIGNATION	LENGTH X WIDTH (m)	DEPTH (m)	ORIENTATION	STRUCTURAL ELEMENTS
1	2	3	4	5	6	7	8	9
1.	BOROV LJANI	Srednje brdo						
2.a.	BUZIN	Buzin	24					
2.b.				SJ 003/004				
2.c.				SJ 109/110 (oven SJ 115)				
3.	ČEPINSKI MARTINCI	Dubrava						
4.a.	DELOVI	Grede I	2					
4.b.				J 6		1		
4.c.				J 22	2x1			
5.	ĐAKOVAČKI SELCI	Kaznica-Rutak			3x3	0,40	□	
6.	JAKOPOVEC	Blizna		SJ 31				
7.	KOPRIVNICA	Cerine III	1					
8.	KOPRIVNIČKI BREGI	Seče	4			0,25-0,55		
9.	KUŠEVAC	Topolina						
10.	PETERANEC	Vratnec 2	1					
11.	SLADOJEVCI	Brodišće						
12.	SLADOJEVCI	Lipa						
13.	SLATINA	Lipik 2						
14.a.	STARI PERKOVCI	Debela šuma		SJ 007				
14.b.				SJ 022				3
15.a.	STRUŽANI	Vrtlovi, Kućišta, Veliki Trstenik			2x4	0,5		
15.b.					3,5x3,3			2
16.	STRUŽANI-SVILAJ	Popovača						
17.	SUHOPOLJE	Napast 1		SJ 87	3,1x2,65	0,25x0,56	□	4

OVEN POSITION	HEARTH POSITION	ENTRANCE POSITION	FLOOR	CELLAR	C14 DATE (calAD)	OKVIRNA DATAČIJA (centuries)	CITATIONS
10	11	12	13	14	15	16	17
						8.-10.	Sekelj Ivančan 2000
						7.-9./10.	Radman-Livaja 2009
	SW ?				735 + -47		Radman-Livaja et al 2011: 262, Sečkar 2011: 276
E					735 + -47; 818 + -53		Radman-Livaja 2009: 250-251, sl. 3; Radman-Livaja et al 2011: 262, 265; Sečkar 2011: 276
						8./9.-11.	Kalafatić 2009; Dizdar 2009
						9.-11.	Marković 1984: 295-319
						9.-11.	Marković 1984: 295-319
						9.-11.	Marković 1984: 295-319
NW (E)						9.-11.	Hršak, Pavlović 2007: 17; Šmalcelj Novaković, Hršak 2015
					824 + -37		Bekić 2008: 109, Sl. 4; Bekić 2013b: 244-246
						9.-11.	Marković 1994, 114; Sekelj Ivančan 2001: 26-27, Fig. 8, Pl. XXI:130-136
			*			9.-11.	Marković 1994: 119; Sekelj Ivančan 2001: 28-30, Pl. XXII: 138-144
						9.-11.	Bojčić, Hršak 2009
	*					8./9.-10./11.	Sekelj Ivančan 1999
						RSV	Galiot 2009: 54-62
						RSV	Galiot 2009: 5-33
						RSV	Galiot 2009: 122-137
						8. i 9.	Filipec et al 2009: 21, 32-35
						8. i 9.	Filipec et al 2009: 21, 32-35
							Lozuk 2011: 17
						9.	Miklik-Lozuk 2012: 43-58
						4/4 8.- 9.	Galiot 2011
NW			* (W)			RSV	Galiot 2013: Sl. 5

No.	SITE	TOPONYM	NUMBER OF STRUCTURES WITHOUT PRECISE DATA (earlier research)	DESIGNATION	LENGTH X WIDTH (m)	DEPTH (m)	ORIENTATION	STRUCTURAL ELEMENTS
1	2	3	4	5	6	7	8	9
18.a.	ŠEMOVEC	Šarnjak		SJ 9	4,8x2,1	0,34	E-W	
18.b.				SJ 10	3,2x1,4	0,20	E-W	
19.	ŠEPKOVČICA	Gradići		SJ 700/701	6x3	0,7		
20.a.	TORČEC	Blaževo pole		SJ 029				
21.a.	TORČEC	Prečno pole		SJ 014/015 (?)	3,45x1,78	0,34	N-S	
21.b.				SJ 031/032	4,62x2,14	0,30	E-W?	1
21.c.				SJ 033/034 (?)	4,40x2,50	0,39	NE-SW	
21.d.				SJ 059/060 (hearth SJ 068/069)	3x2,62	0,33	□	
21.e.				SJ 087/088 (?)	2,80x2,46	0,43	E-W	
21.f.				SJ 096a/097 (hearth SJ 100a,b)	3,55x3,49	0,51	□	1 + 1?
22.a.	VARAŽDIN	Brezje I		J 7				1
22.b.				J 9 (SJ 8, 10, 12, 15)				1
22.c.		Brezje IV		SJ 11/12 (hearth SJ 13)			E-W	
23.a.	VIRJE	Volarski breg	3					
23.b.		Sušine	1	SJ 320	6x3,1			
24.a.	VIROVITICA	Kiškorija - jug		SJ 29	3,80x1,80			2
24.b.				SJ 523				
24.c.				SJ 1242 + 2031/1	4,45x4,40		□	2
24.d.				SJ 1357	3,40x2,55			
25.	ZAGREB-VELIKA GORICA	"Zračna luka"						

Table 1 – Fundamental published data about excavated sites in the region between the Drava and Sava Rivers, with metric and comprehensive data about structures from the 9th century.

