

Ülle TAMLA

2002. aasta arheoloogiliste välitööde tulemused
Results of archaeological fieldwork of 2002

Alvi KRIISKA, Kristiina JOHANSON, Ülle SALUKÄR and Lembi LÕUGAS

The results of research of Estonian Stone Age in 2002
Eesti kiviaja uurimise tulemused 2002. aastal

Valter LANG, Andres IVADIK and Tanel SAIMRE

New results from the hill-fort of Keava
Uued tulemused Keava hüüdnime kaevamistelt

Marek KONTA, Valter LANG and Leire LÕDLAID

Settlement site III of Linnaste from archaeological complex of Keava
Linnaste III asustatult Keava arheoloogilises kompleksis

Helvi VÄIK

Excavations in Viljandi: new data about the final period of Iron Age
the beginning of 1223
Kaevamised Viljandis uusi andmeid rauaaja lõppajaga ja 1223. aastast

Arvi BÄTZ

Excavations in Viljandi Castle of the Teutonic Order
Arheoloogilised uurimused Viljandi ordulinnusel

Ain LÄVI

The hill-fort of Ripuka-Panama
Ripuka-Panama

Early TEGER

Archaeological excavations in Kabori and Lagedi villages
Arheoloogilised kaevamised Kaboris ja Lagedi külas

Mare AUN and Arvi KRIISTAJA

Archaeological fieldwork in Setuma
Arheoloogilised välitööd Setumaal

Mati MÄRK

Archaeologische Ausgrabungen im Landkreis Lääne-maa
Kaevamised Läänemaal

Erno VISTAL

Archaeological investigations of the Laiuse castle
Arheoloogilised uurimused Laiuse linnusel

Kristin ILVES

Underwater archaeological fieldwork in southeast Estonia
Allveearheoloogilised välitööd Kagu-Eestis

**ARHEOLOOGILISED
VÄLITÖÖD
EESTIS**

**ARCHAEOLOGICAL
FIELDWORK
IN ESTONIA**

2002

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ARCHAEOLOGICAL INVESTIGATIONS IN PÄRNU

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INTRODUCTION

In the period 1990–2001 excavations and monitoring have been carried out on about 30 different sites in Pärnu. Most of that work (17) has been at least referred to in the annual fieldwork reviews, but an article has been published on only the four bigger sites (Tamla 1992; Udam 1992; 1994; Vunk 1994). Presentation of research results of the Pärnu cog (Mäss 1992) and survey of studies with Ground Penetrating Radar (Vissak & Vunk 1996) could be added to the list. Some special studies have used single kinds of artefacts and osteological data (Maldre 1997; Russow 2001; Vunk 1991; 1996; 1997; 1998; 2000). Research papers have been completed on only the four bigger sites regrettably (Sepp & Käsi 1991; Talvar 1998; Tamla 1991; Udam 1995) and two papers reflect the results of limited monitoring (Kriiska 1993; 1998). Using archaeological data of New-Pärnu by potential researchers is rather complicated in the situation depicted.

Salvage excavations during 2002 have been carried out in several places in medieval New-Pärnu (Fig. 1: 1–7). Studies in the territory of the former castle of the Livonian Order and in the northern, western and southern districts of medieval town New-Pärnu will be subsequently described. The authors of the research papers have written the respective paragraphs. Erki Russow has studied the artefacts and Krista Sarv specifically the leather finds of all the sites. The altitudes presented in the text are all in the Baltic system.

In addition to the sites subsequently described, limited preliminary investigations took place to ascertain the exact location of the NW tower of the castle (Fig. 1: 7; Kadakas 2003) and at the corner of Pikk and Nikolai Streets the northern wall of former St. Nicholas Church was observed in a small trench for a phone cable (Fig. 1: 8; Saluäär 2003).

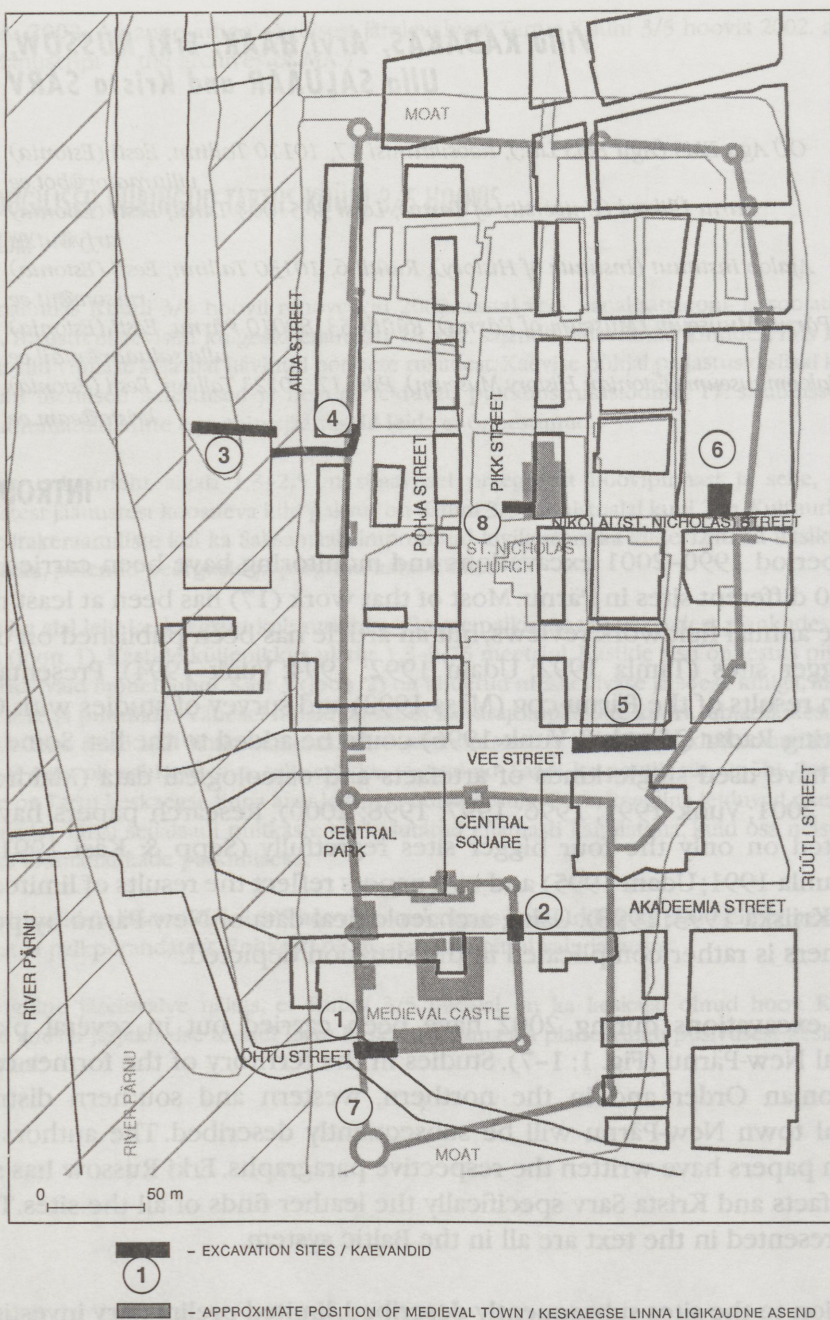


Fig. 1. Archaeological investigations in Pärnu during 2002. Situation plan. 1: 4000.
Joon. 1. Arheoloogilised uurimistööd Pärnus 2002. Asendiplaan. 1: 4000.

STUDIES IN THE TERRITORY OF PÄRNU CASTLE

In connection with building the Central Library of Pärnu two trenches were dug for water and sewerage pipes under archaeological monitoring between Õhtu and Akadeemia Streets (Fig. 1: 1, 2; Saluäär 2002a). In those trenches sections of walls of the medieval Pärnu castle were found in December 2001. Parts of the western, northern and southern outer walls of the inner courtyard were cleaned out only to the depth needed for placing the pipes. The trenches did not produce any artefacts.

Trench at Õhtu Street. The trench was 15 m long and 0.6–2 m wide running from north to south. The depth of the trench varied between 1.5–2.35 m from the level of the present street (altitude 3.1–3.35 m). The western wall of the inner courtyard appeared at the western side of the trench 11.5 m long. It is built of granite stones using lime mortar with pieces of brick. The wall had preserved up to the altitude 2.7 m and was cleared out only for the height of 2–3 stone layers. The foundation was not reached. In the northern end of the trench the western wall crosses the northern wall of the castle, which was measured 1.75 m wide. The upper part of the northern wall had to be demolished in a 2 m wide segment to place the pipes, but the crossing could be spared. At the bottom of the very southern end of the trench a section of a diagonally intersecting (SE–NW) wall at the eastern side was detected. It could belong to some building near the western wall of the inner courtyard, but the situation found was too fragmentary to draw conclusions. Strata deposited only after demolishing the castle walls could be observed at the side of the trench, but earlier layers were reached in one test pit and while breaking through the northern wall. Similarly in both pits, directly south from the northern wall and approximately in the middle of the trench, two different layers containing pieces of wood separated by a layer of mortar were documented. These were all deposited after the corresponding castle walls were erected.

Trench at Akadeemia Street. The 1.5 m wide southern wall of the inner courtyard of the Pärnu Castle was documented in a 2.5 m wide trench under the sidewalk in front of the building Akadeemia Street 3. The wall was erected of big granite stones using lime mortar and pieces of brick. It had preserved up to altitude ca 3.6 m. Three uppermost layers of stone were cleaned out while the foundation was not reached. A fragment of a brick vault of an early modern building was partially cleared on the SE side of the wall. Different layers of debris could be observed on and around the wall. A layer of charred wood was found south of the wall under mixed debris. A 2.5 m wide opening was broken in the wall down to the altitude 4.25 m to place the pipes. Thus the foundation of the wall remained intact.

PRELIMINARY INVESTIGATIONS UNDER NEW CONCERT HALL AT AIDA STREET 4

A 42 m long trench was dug through the building site of the Concert Hall during preliminary investigations in March 2002 (Fig. 1: 3; Saluäär & Vunk 2002). It was 1.5–3.5 m wide and as deep as 2.25 m. Supposedly a natural island formed of a dune, observed until the end of the 17th century, had been situated in the territory of the site as interpreted from 17th century town plans (Kivimäe *et al.* 1998, 81). A 17th century bastion had reached this island from the south, depicted on some contemporary town plans. It is difficult to determine exact locations of the objects depicted on historical town maps as these represent rather construction projects, and the planned objects might have been executed not exactly according to the project. A railway station with a storage yard for props was situated on the site in the 19th–20th century.

Geological studies and studies with GPR had been carried out in the territory. The nature of the topography before the 18th century was the object of the GPR studies, and the structure of the ground was the object of geological boring (Saluäär & Vunk 2002, 3; ill. G1–G6 by M. Lell, Rei Geoteknika Ltd.).

The cultural layer connected with town fortifications was not detected in the trench. Remains of medieval or earlier settlement were not found either. Historic relief could still be identified. At the bottom of the northernmost 7.5 m long section of the trench, a layer of grey sand containing lots of organic remains and bits of brick was observed under the upper modern filling layers (Fig. 2: 7). It probably extends below the water table (groundwater level). Natural yellow sand lies in the rest of the trench under modern fillings (Fig. 2: 6). It reaches the altitude 1.3 m at the northern end of the trench and even 2.5 m at the southern end. The situation depicted probably allows to identify the northern bank of the supposed island but the southern bank can not be followed in the territory of the trench. The result corresponds to a town plan from 1658. There is no island depicted, but rather a peninsula with two ponds connected with the river by ditches.

ARCHAEOLOGICAL INVESTIGATIONS AT AIDA AND PÕHJA STREETS

In October 2002 archaeological investigations (Haak 2003) in the area were necessitated by the construction of a freshwater and sewerage pipeline to the house Põhja Street 3 (Fig. 1: 4). The total length of the planned pipeline was ca 70 m, situated both inside and outside the town wall that should be crossed at some place.

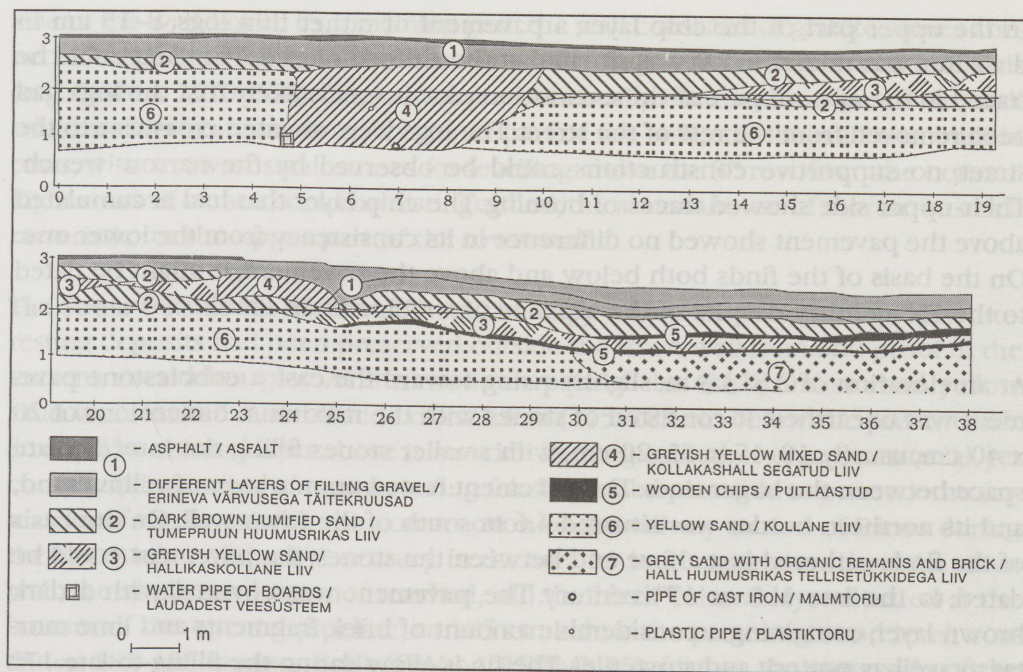


Fig. 2. Pärnu Concert Hall site (Aida Street 4). Western profile of the trench.

Joon. 2. Pärnu Kontserdimaja ehituskruundile (Aida t. 4) arheoloogiliste eeluuringute käigus kaevatud põhja-lõunasuunalise tranšee lääneseina profiil.

Area Inside the Town Wall. The earliest layers that had deposited upon virgin yellow sand, situated at an altitude of 1.40 m, could be investigated with two sondages. The earliest strata were dark brown in colour, and contained numerous chips of wood, as well as dung, pebbles and straw. The deposits were uneven in their composition: lenses of yellow mixed sand could be distinguished inside the layer at least at three levels, 20–30 cm above each other. Of the finds, a few fragments of imported wares from the 14th century (PäMu A 2570: 350–352), as well as fragments of wooden vessels and leather should be pointed out; a candlestick (PäMu A 2570: 332) was an outstanding metal object. The high level of ground water seeping into the sondages explained the good preservation of organic matter.

Above the altitude of 2 m, the chip layer showed no significant differences for 50–60 cm. The existence of animal dung, wood chips and straw remained unchanged, while sand could be distinguished in thin lenses only. The fact that the layer had deposited over a longer period was shown that its lower part containing mostly 14th – early 15th century stoneware, while its upper part also included 16th century finds.

In the upper part of the chip layer, a pavement of rather thin logs, 8–15 cm in diameter, was unearthed. It was situated at the altitude of ca 2.75 m and could be traced in the eastern part of the excavation plot; it seems likely that the logs had been removed from the rest of the street. The logs were situated crosswise to the street; no supportive constructions could be observed by the narrow trench. Their upper side showed traces of burning. The chip layer that had accumulated above the pavement showed no difference in its consistency from the lower one. On the basis of the finds both below and above the pavement, it might be dated to the 15th century, despite of the absence of a radiocarbon date.

At an elevation of 2.8–3.3 m, slightly rising toward the east, a cobblestone pavement was unearthed. It consisted of stones with the maximum dimensions of 20 x 40 cm, usually 10–15 x 15–20 cm, with smaller stones filling the intermediate space between the larger ones. The pavement rested upon a layer of yellow sand, and its northern border was situated 4.6 m south of the town wall. On the basis of the finds gathered just above and between the stones, the pavement could be dated to the late 16th or 17th century. The pavement was covered with a dark brown layer, containing a considerable amount of brick fragments and lime mortar, as well as pottery and stove tiles. The finds allow dating the filling to late 17th or 18th century. In the upper part of the filling, 19th century items could be distinguished. The formation of the layer might be connected with the destructive effects of the Northern War.

North of the paved street and just next to the town wall, a number of thin wooden logs were distinguished, forming a rather even layer at an altitude of 2.4 m. These were covered with a 10 cm layer of lime mortar containing granite stones that was slightly rising towards the town wall. A fragment of a glass vessel (PäMu A 2570: 354) was the only find within the mortar. The construction can be interpreted as a floor or a walking horizon. Whether the wooden floor or pavement is actually older than the town wall cannot be stated for sure, as its radiocarbon dating failed.

The Town Wall. The part of the town wall that was to be crossed with the current track was not discernible above ground. The remaining part of the wall with east-west direction lay 50–60 cm below the present ground level, and had a height of ca 2 meters and a thickness of 1.35–1.5 meters. For the construction of the pipeline, a breakthrough had to be made down to the elevation of 2.50 m.

The bottom of the town wall lay at an elevation of 1.90 m. The two lower rows of stones formed the foundation part, which protracted for 40 cm at the inner

side of the wall. For all its remaining part, the wall consisted of granite stones connected with lime mortar, the joints containing fragments of bricks and roof tiles (e. g. PāMu A 2570: 356). Larger stones were usually used at the edges of the wall while smaller stones formed the inner part of the wall, still the wall was built in rows, with a row of small stones for levelling above the 3rd row from the bottom. Eight rows of stones could be distinguished; the abundant use of mortar was characteristic for the upper part of the town wall.

The Strata Outside the Medieval Town. The supposition that archaeologically interesting deposits had been preserved outside the town wall found no proof in the current excavation plot. At the northern part of the track, undisturbed yellow sand was reached at an altitude of ca 1.4 m (175–185 cm below the present Aida Street). The cultural layer above it was rich in dung and other organic material, yet contained fragments of tarred roofing felt. It seemed plausible to connect the formation of the layer with the construction of the railway station of Pärnu during the last quarter of the 19th century. In the area up to 20 meters north of the town wall, the virgin sand was not reached, and the black cultural layer situated at the bottom of the opened pipeline, ca 185 cm below the present ground level, contained 18th–19th century finds (PāMu A 2570: 7–15). Just on the outer side of the town wall, a layer of wood was distinguished at the elevation of the lower edge of the town wall. It seems likely that the construction of the earthen fortifications, the bastions have demolished the possible medieval settlement remains during the 17th century. The existence of green glass, post-medieval glazed red-ware etc. indicates a rather late deposition period, however the finds were scanty, especially in comparison with the filling above the cobblestone pavement inside the town wall.

Finds. The finds from Aida Street can be clearly divided into two separate periods:

a) some early pottery sherds from the 14th century. Ca 30 of the early pottery sherds are mostly typical to Pärnu – stoneware from Siegburg in Rhineland and from southern Lower Saxony. There was one exceptional artefact – a quarter of a green glazed dripping pan probably from North Germany with no parallels from Pärnu so far.

b) rest of the finds from the 2nd half of the 16th century till the beginning of the 19th century. No finds typical to the 2nd half of the 19th century or the 20th century were noticed.

The other group overwhelmingly consists of local and southern-Baltic post-

medieval redware – sherds of tripod cooking pots, pans, painted plates and stove-tiles. There are sherds of faience from the Low Countries in addition. A few groups of pottery from the turn of 16th-17th centuries are represented by single fragments, e.g. plates of weseaware and decorated stoneware jugs from Waldenburg in Saxony and bohemian painted grayware. In addition to pottery there are some other artefacts from 17th-18th centuries: a whetstone, a broken horseshoe, splinters of glass windows, bottles and beakers including one *Roemer*.

ARCHAEOLOGICAL SALVAGE EXCAVATIONS AT VEE STREET

Late in the autumn of 2001 in connection with reconstruction and extension work on theatre “Endla” it appeared necessary to build a water-supply system under Vee Street (Fig. 1: 5). The work began in December, but appearance of limestone foundations just under the pavement stopped it until archaeological salvage excavations. Another objective of the construction work was to find out the best location for the water pipes, by which the archaeological remains would be damaged the least.

Archaeological salvage excavations at Vee Street between Pikk and Uus Streets took place in April and May of 2002 (Saluäär 2002b). A 49 m long and 2.8 m wide trench was dug under the first lane of Vee Street (Fig. 3). The trench was 1.9–3.4 m deep from the present pavement. The altitude of the present street was ca 4.75 m.

Limestone foundations of two houses destroyed during the WW II were cleared out (Fig. 3: 2, 5). The remains of former Malmö Street (Fig. 3: 6) were studied down to the level necessary for the water pipes at the northern end of the trench. Strata between the two former houses were studied deep in a test pit till natural deposits. A crossbeam cesspit (Fig. 3: 4) was found under the northern house and a section of the medieval town wall (Fig. 3: 3) under the southern house. A corner of a third house was reached at the southern end of the trench (Fig. 3: 1).

Strata under Former Malmö Street. In its northern end under former Malmö Street the trench was dug just deep enough for the water pipes. A 55–85 cm thick filling of dark brown soil containing wooden chips lay under present pavement. In this soil six horizontal 0.5–1.9 m long sticks with diameter of 6 cm were found lying at 4–14 cm distance from each other in north-south direction at the altitude 3.7–3.9 m. They were set on a 10–25 cm thick layer of grey clay which contained several granite stones and limestones measuring between 10–34 cm. Filling layers

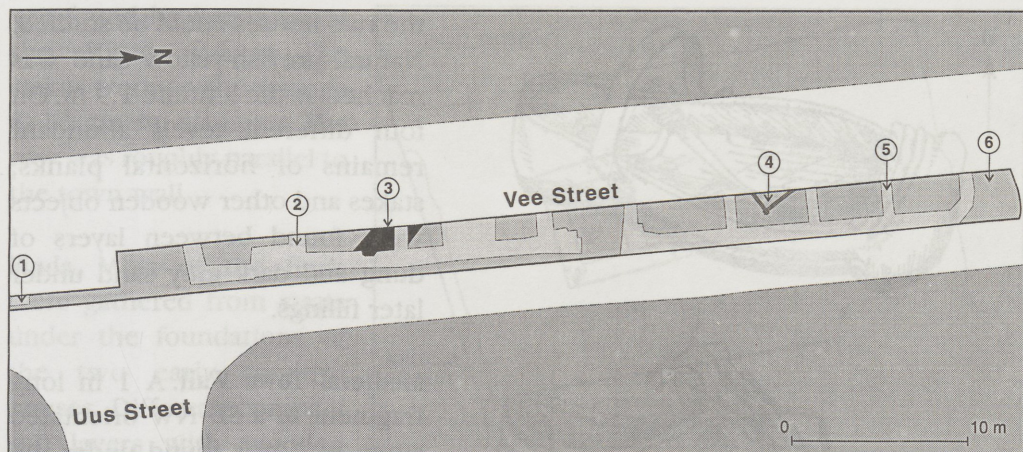


Fig. 3. Site in Vee Street.

Joon. 3. Arheoloogiliselt uuritud ala Vee tänaval.

containing dung with wooden chips and brick debris could be observed under clay down to the bottom of the trench (altitude 2.7 m). A single wooden pole with 30 cm diameter was found standing 1.5 m north from the northern house, broken at the clay level.

Cross-beam Cesspit. The eastern corner of a crossbeam cesspit was found just under the floor of a cellar in the northern house. Minimally it measures 1.5–1.25 m in its ground plan. Seven layers of beams with diameter 20–25 cm had preserved between altitudes 1.55–2.9 m. Only the uppermost layer of beams was removed for placing the water pipes, the rest remains in the ground. Outside the cesspit, natural sand reached the altitude 1.9 m. The upper 0.5 m of the cesspit was filled with debris containing pieces of wood and ceramic building materials. The lower 1 m was filled with rather liquid dung.



Fig. 4. Vee Street. North-Holland slipware (PäMu A 2559:50) and weserware (below; PäMu A 2559:41).

Joon. 4. Vee tänav. Põhja-Hollandi ja Alam-Saksi maalitud taldrikud.

Area between two houses. A 1.2–1.75 m long and 2.75 m wide (width of the trench) test pit was dug directly south of the northern house. Strata earlier than



Fig. 5. Examples of shoe types found from Vee and Põhja Street: 1 - Cowmouth, 2 - Front-Laced Shoe, 3 - Laced Shoe (Redrawn after Goubitz, Driel-Murray & Groen-man-van Waateringe 2001, 276, Fig. 1a; 199, Fig. 14; 297, Fig. 1).

Joon. 5. Näiteid Pärnust, Vee ja Põhja tänavalt leitud kingatüüpidest: 1 - lehmamokk, 2 - nööriking, 3 - hõlmking.

the two houses could be studied. Natural greyish-yellow sand was reached at the altitude 1.9 m. On four different levels abundant remains of horizontal planks, stakes and other wooden objects were found between layers of dung and dark grey sand under later fillings.

Medieval Town Wall. A 1 m long fragment of a SE-NW orientated stone wall was found under the southern building. It is built of granite, limestone and bricks using lime mortar. The lower part is 2.3 m and the upper part 1.7 m wide with a step on both sides. The outer (southern) step is at the altitude 3.05 m and the inner (northern) step at 2.6 m. The wall had been broken down at altitude 3.5–3.7 m. It was lowered further down to the altitude 2.95–3.05 m for placing the water pipes. Studying the lower part of the wall was much hindered by ground water. Probably the wall has been founded approximately at the altitude 1.8 m. Considering this to be true, the wall would have been preserved 1.9–2.0 m high before excavations.

Test pits were dug on both sides of the town wall. On the north-

ern side of it 0.6 and 0.9 m away from the wall two wooden stakes were found at a 5 cm distance from each other. They had been broken down at the altitude ca 2 m. On the southern side of the town wall ca 2 m away a row of six stakes

was found, broken down at the altitude 2.6 m. The stakes were on the average 8–12 cm in diameter. The row was roughly parallel to the town wall.

Finds. Most of the finds were gathered from strata under the foundations of the two early modern houses. Different compact soil layers with wooden chips and sand layers contained a lot of leather and wooden finds besides pottery and metal artefacts. The earliest finds date from the 1st half of the 16th century (stoneware from Siegburg and Cologne) and the latest from the 1st half of the 20th century (different industrial wares, including one relatively recent Italian faience bowl. Most of the artefacts belong to the period between the last quarter of the 16th century and the 1st half of the 18th century.

Thus the find complex from Vee Street generally resembles the one from Aida Street quite significantly (glazed redware and faience). Still there are some differences. First, there is much more redware from the Low Countries (tripod cooking pots, pans, bowls) and luxurious tableware at Vee Street. In addition to one plate sherd of westerware (Fig. 4 below) there are several sherds of North Holland slipware (Fig. 4 above; Clevis & Smit 1990, cat. Nr 32) and pieces of early decorated plates of 17th century majolica with *Kraak*-style decoration (PäMu A 2559: 30, e.g. Bartels 1999, cat. nr. 931) from the Low Countries. Pieces of richly ornamented stems of mid- 17th century clay pipes (PäMu A 2559: 16; Duco 1981, cat. nr. 134)

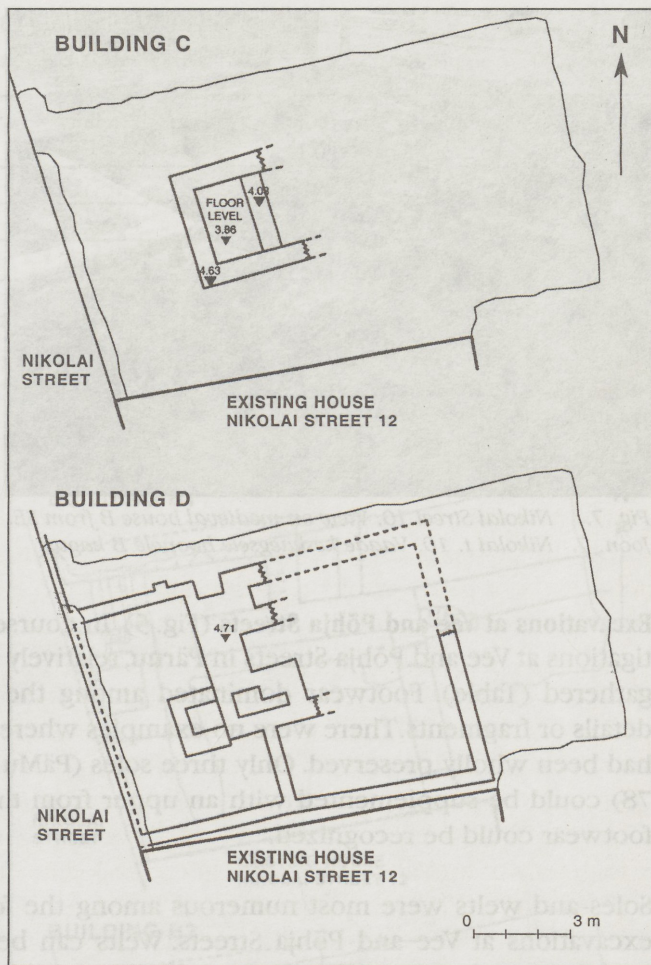


Fig. 6. Nikolai Street 10. Ground plans of buildings C and D. 1:200.

Joon. 6. Nikolai t. 10. Hoonete C ja D põhiplaanid. 1:200.

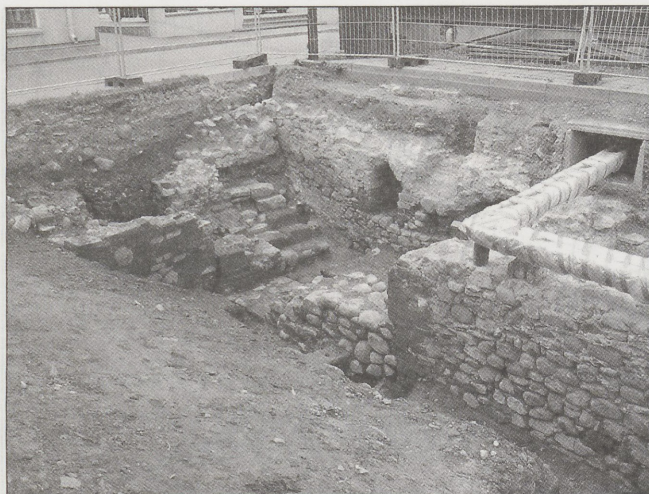


Fig. 7. Nikolai Street 10. View on medieval house B from SE.
Joon. 7. Nikolai t. 10. Vaade keskaegsele hoonele B kagust.

from the Low Countries are not frequently encountered either. Some fragments of bottles and of tall polygonal beakers or so-called Passglass typical to the 1st half of the 17th century (PäMu A 2559: 23, Henkes 1994, cat. nr. 37, 3) and a fragment of window glass with painted gothic letters from the 16th century are particularly noteworthy among the glass finds (PäMu A 2559: 40).

Leather Finds from the

Excavations at Vee and Põhja Streets (Fig. 5). In course of the archaeological investigations at Vee and Põhja Streets in Pärnu, relatively numerous leather finds were gathered (Table). Footwear dominated among the findings, mostly in form of details or fragments. There were no examples where both the sole and the upper had been wholly preserved. Only three soles (PäMu A 2559 N 11, 24, 28; A 2570: 78) could be supplemented with an upper from the finds gathered. No pair of footwear could be recognized.

Soles and welts were most numerous among the footwear details found at the excavations at Vee and Põhja Streets. Welts can be described as thin strips of leather, sewn between the sole and the upper in order to increase its durability and weather endurance. The uppers found were fragmentary and thus yielded rather little information.

In addition to details directly connected with footwear, rather numerous strips and pieces of leather without traces of sewing had been collected. The residues forming during the production of leather items can be divided into secondary waste, which had formed during the manufacturing of the items, and tertiary waste, i.e. longer thin strips or pieces of leather, formed during the finishing procedures of the item. Finds that could be interpreted as primary waste, i.e. residues of processing untanned leather, such as skins and hides with teats from the belly area as well as not fully dehaired pieces, were missing.

Table. Leather items found at Vee and Põhja Streets.

Tabel. Vee ja Põhja tänavalt saadud nahaleiud.

	sole	upper	welt	pouch	cloth ending	other item	residues
Vee Street	134	86	71	1	8	3	88
Põhja Street	18	7	7				34
Total	142	83	78	1	8	2	122

Only a very few non-footwear items were recognized among the leather finds. A pouch (PäMu 2559 N 2) and presumable cloth endings (PäMu 2559 N 2, 28) could be distinguished, a third item (PäMu A 2559 N 12) may be interpreted as a car-tridge pouch.

Uppers and Soles. Among the footwear finds from Vee Street, two items with a very wide forepart belong to the type called cowmouth or tudor shoe. The first of these (PäMu A 2559 N 24) is a shoe of low-cut model with a rounder forepart. The forepart of its upper covered only the toes, on the basis of the surviving detail. Traces of sewing on the forepart of the sole might indicate its decoration with a leather strip or top ending. Another find (PäMu A 2559 N 28) stands out for its prominent toe section. Such predominating prominent foreparts give the shoe the appearance of an ox head, yet the type is called horned shoe (Goubitz, Driel-Murray & Groenman-van Waateringe

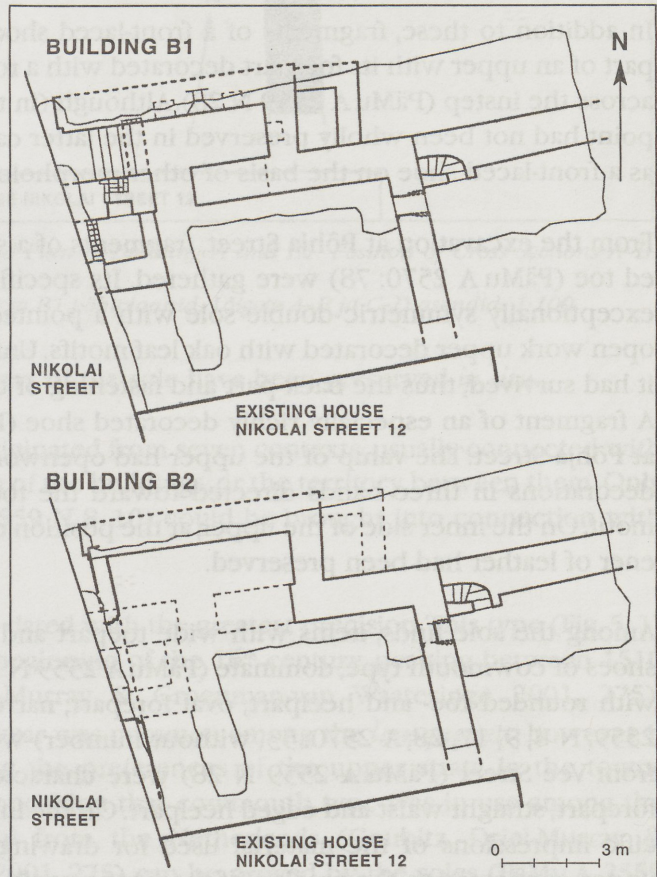


Fig. 8. Nikolai Street 10. Ground plans of buildings B1 and B2. 1:200.

Joon. 8. Nikolai t. 10. Hoonete B1 ja B2 põhiplaanid. 1:200.

2001, 275). The item found represents an even more open and low-cut form, with the upper only scarcely covering the toes. Unfortunately, both uppers lack the backpart, thus the fastening cannot be determined. In addition to the finds mentioned above, a forepart of an item of the same type (PäMu A 2559 N 15) that had been preserved only fragmentarily was gathered at Vee Street; it had belonged to a child.

Five fragments of a latchet shoe form another group. One vamp (PäMu A 2559 N 25), with a deeper cut on both edges indicates a shoe with open sides; it is supplemented with four quarters of the uppers (PäMu A 2559 N 9, 10, 29 (2 ex)). The quarters having strap-like extensions (latchets) that meet on the instep and are fastened with tie-lace or buckle have given the type its name.

In addition to these, fragments of a front-laced shoe (PäMu A 2559 N 2, 3), and part of an upper with its forepart decorated with a row of 1 cm slashings running across the instep (PäMu A 2559 N 28). Although (in the latter case,) the fastening point had not been wholly preserved in the latter case, it might still be classified as a front-laced shoe on the basis of other morphological features.

From the excavation at Põhja Street, fragments of a shoe with low cut and pointed toe (PäMu A 2570: 78) were gathered. Its specific features include a narrow, exceptionally symmetric double sole with a pointed toe section, as well as the open work upper decorated with oak leaf motifs. Unfortunately, only a forepart of it had survived, thus the back part and fastening of the shoe remains unknown.

A fragment of an especially richly decorated shoe (PäMu A 2570: 78) was found at Põhja Street. The vamp of the upper had openwork decoration, with leaf-form decorations in three bands directed toward the toe being the main ornament motif. On the inner side of the upper, at the position of the heel, a trapezoidal stiffener of leather had been preserved.

Among the sole finds, items with wide toepart and straight waist, belonging to shoes of cowmouth type, dominate (PäMu A 2559 N 2 (5 ex.), 24, 28 (2 ex.)). Soles with rounded toe- and heelpart, oval forepart, narrowing at the waist (PäMu A 2559: N 8, 9, 17, 28; A 2570: 53, without number) were also common. Two soles from Vee Street (PäMu A 2559 N 28) were characterized by a narrower, edged forepart, straight waist and edged heelpart. On the inner side of one of these, specific impressions of the material used for drawing the lasting margins of the upper, connected to the bracing of the upper, could easily be traced. This type of sole is characteristic of latchet shoes with edged forepart. All the soles from Vee street are multilayered. On one of these (PäMu A 2559: N 17), the wooden pins

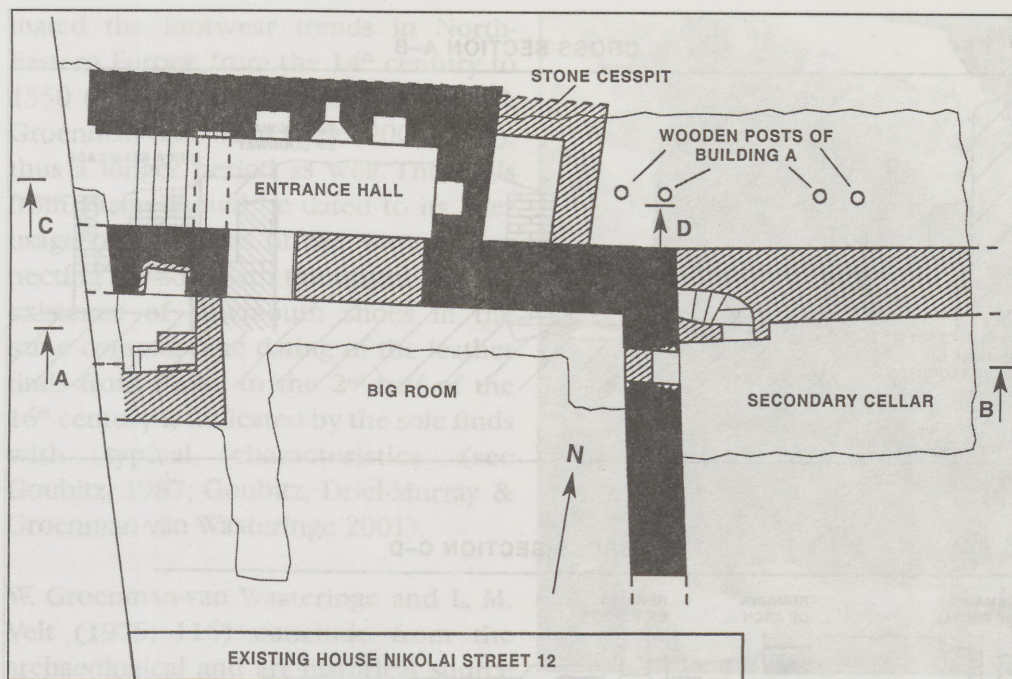


Fig. 9. Nikolai Street 10. Ground Plan of Building A and B1. Position of Cross Sections A–B and C–D. 1:100.

Joon. 9. Nikolai t. 10. Hoonete A ja B1 põhiplaanid. Lõigete A–B ja C–D asendid. 1:100.

connecting the different layers of the sole have been preserved *in situ*.

The Datings. Datable finds originated from seven contexts, usually connected with the immediate surroundings of the buildings, or the territory between them. Only two of the finds (PäMu A 2559 N 8, 10) could be brought into connection with the northern building.

The cowmouth type can be dated with the greatest precision. This type (Fig. 5: 1) became fashionable at the beginning of the 16th century, peaking between 1510 and 1550 (Goubitz, Driel-Murray & Groenman-van Waateringe 2001, 275). Originally, this type of footwear was common among the *lansquenets*; however, it soon found its place among the preferences of the upper strata in the towns (Schnack 1993, 67). The supposition that cowmouth type was in use among the children, based on material from the Netherlands (Goubitz, Driel-Murray & Groenman-van Waateringe 2001, 275) can be proved by the soles (PäMu A 2559 N 2) and forepart of the upper, found at Vee Street in Pärnu and originating from children's footwear. The dating of latchet shoes is a question of greater uncer-

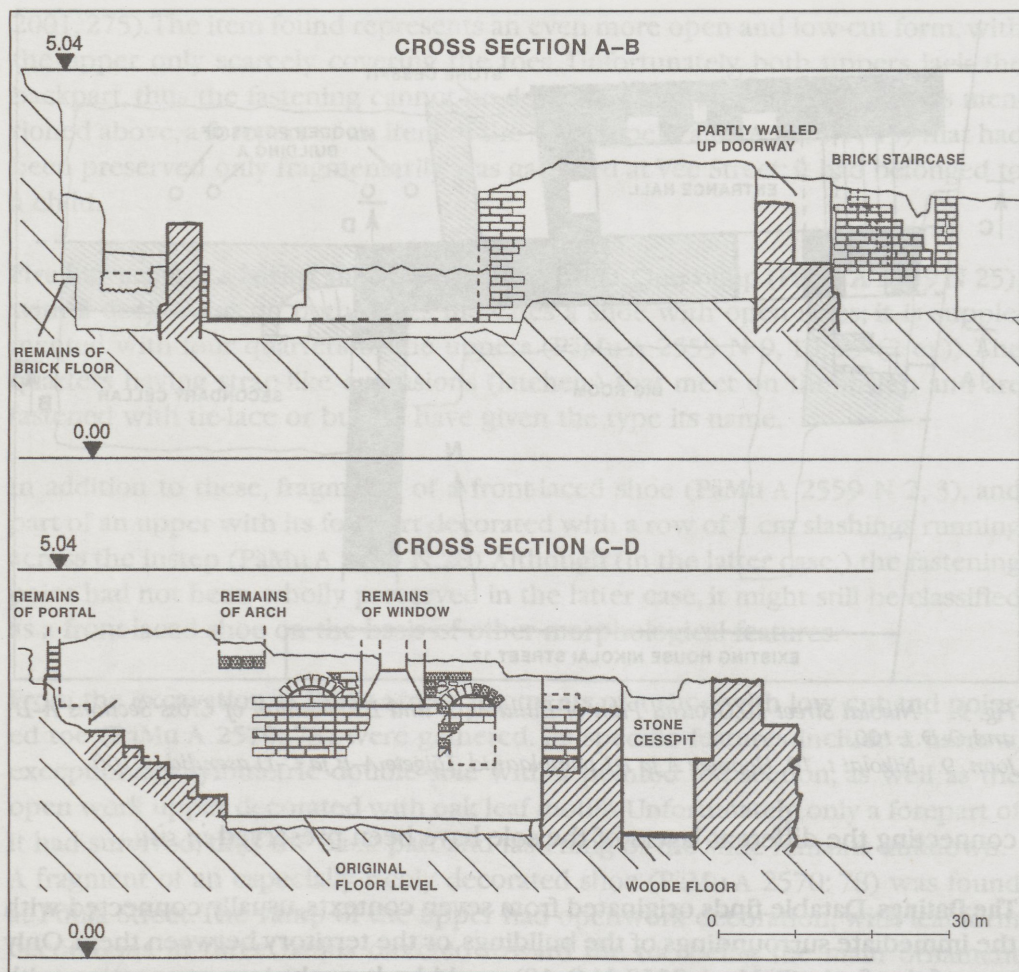


Fig. 10. Nikolai Street 10. Cross Sections A-B and C-D. 1:100.
Joon. 10. Nikolai t. 10. Lõiked A-B ja C-D. 1:100.

tainty. This type first appears during the 14th century, but remains in use until the 18th (Fig. 5: 3; Goubitz, Driel-Murray & Groen-man-van Waateringe 2001, 281). The sewing and nailing traces on the soles, uppers and welts allow tracing constructional and technical details that were used in the shoemakers' practise during the 16th century on the material from Vee Street. The use of multilayered soles does not allow an earlier dating than 1500. Two fragments of a latchet shoe (PäMu A 2559 A 10, 25) have a good parallel in the material from Nieuwe (Niedorp), dated between 1675 and 1725 (Goubitz, Driel-Murray & Groen-man-van Waateringe 2001, 297. Fig. 1), and in the ethnographic collections of Estonian History Museum (TAAM 9226 E121) dated to the 18th century. The front-laced shoes dom-

inated the footwear trends in North-Eastern Europe from the 14th century to 1550 (Fig. 5: 2; Goubitz, Driel-Murray & Groenman-van Waateringe 2001, 195), thus a longer period as well. The finds from Pärnu should be dated to its later usage on the basis of the way of connecting the sole with the upper, and the existence of cowmouth shoes in the same contexts. The dating of the leather finds from Pärnu to the 2nd half of the 16th century is indicated by the sole finds with typical characteristics (see Goubitz, 1987; Goubitz, Driel-Murray & Groenman-van Waateringe 2001).

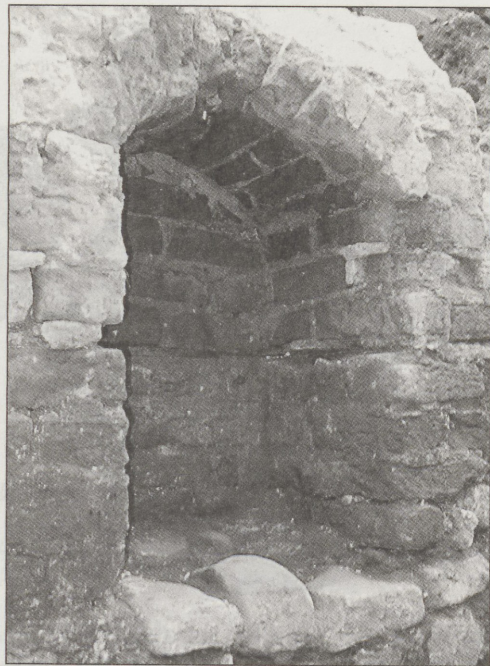


Fig. 11. Nikolai Street 10. A shelf niche in the northern wall of the entrance hall.

Joon. 11. Nikolai t. 10. Riiulinišš eeskoja põhjaseinas.

W. Groenman-van Waateringe and L. M. Velt (1975, 116) conclude from the archaeological and art historical source material that the tradition of shoemaking in most of Europe underwent similar development in the Modern Period, with only minimal local peculiarities. This statement might support the datings presented above. Unfortunately, the fragmentary nature of the finds from Pärnu as well as scarcity of archaeological literature focusing on the post-medieval footwear does not allow the analysis of the Pärnu finds in a broader context, which might result in determining the local peculiarities or their absence.

ARCHAEOLOGICAL INVESTIGATIONS AT NIKOLAI STREET 10

The owner of the site plans to build a new house instead of a wooden 19th century house, which burnt to the ground during the soviet air attack in September 1944. Salvage excavations were carried out during September and October by Agu EMS Ltd (Fig. 1: 6; Mäll *et al.* 2002).

The excavated area covered ca 175 m² at the eastern side of the present as well as medieval Nikolai (St Nicholas) Street. Due to location close to the former Gates of Riga, at the main road leading from Riga to the town church and marketplace



Fig. 12. Nikolai Street 10. Stoneware from Cologne (PäMu A 2569: 17).

Joon. 12. Nikolai t. 10. Kölni kivikeraamika.

of medieval New-Pärnu, traces of abundant human activity and prominent architecture were to be expected.

Early Modern Buildings D and C (Fig. 6). Just few centimeters underground the foundations of a 19th century wooden house (Building D) emerged, the northeastern part of which was demolished for a central heating system of the soviet period. The house has been situated close to the street with the gate and a passageway to the courtyard on the northern side. Foundations of several ovens and possibly of a mantel-chimney have divided the house into two major blocks of rooms.

Building D had no cellar but an earlier cellar (Building C) emerged after

removal of its foundations in the center of the site. It had been laid about 1 m deep underground using clay instead of lime mortar. It was built of granite stones and various types of bricks with remains of lime mortar indicating secondary use. The eastern part of the cellar was demolished for the central heating system. No traces of a staircase or an entrance were found in the preserved part. A secondary inner wall divided the cellar into two rooms.

The cellar (Building D) was not abandoned before the beginning of the 19th century as indicated by a coin (2 kopeck of the Russian emperor Paul 1800 AD; PäMu A 2569: 157) found from the filling. It was not built before the 2nd half of the 17th century as indicated by abundant pottery finds from the filling debris of Building B2 under Building D. Probably the cellar of Building D was built during the reconstruction of the town in the last quarter of the 17th century or after the Northern War.

Original Cellar of a Medieval Stone House – Building B1. Not until removal of Building D cellar walls did it become obvious that most of the site consisted of filling debris of a cellar system of a medieval stone house (Building B; Fig. 7–11).

Only the northeastern corner of the site has once been outside this house where different deposits in the territory of the former courtyard with traces of its former ground levels could be linked with the stratigraphy of the house itself. Thus only pottery sherds from the former ground levels of the courtyard could resolve the absolute chronology of the different building stages of the house.



Fig. 13. Nikolai Street 10. Set of weights in Polish weight system. 1st half of 17th century (PäMu A 2569: 243).

Joon. 13. Nikolai t. 10. Kaaluvihtide komplekt poola süsteemis. 17. saj. I pool.

The first stage of Building B1's cellar had been built about 80 cm deep into the original ground and it covers about a half of the whole site. Lime mortar had been used to build the granite stone walls in which no limestones can be observed. The corners and openings have been finely laid with bricks measuring 8-9 x 15 x 29 cm. The earliest cellar (Figs. 8; 9) consisted of at least two rooms. A big room covers the southwestern part of the site. It extends beyond the borders of the excavation site towards west under the present street and towards south under the presently neighbouring house. Obviously the present street is not exactly on the same spot as the medieval one and the façade of the medieval house probably lies somewhere under the present street.

A smaller narrow room lies to the north and probably originally served as an entrance hall to the big room. A lot more details have been preserved in it than in the big room. It had once been divided in two parts by a segment arch of which some bricks are preserved on the northern wall. The western part of the entrance hall once included a staircase up to the street, of which traces were found on the northern wall after removal of later stairs. Probably six steps led to the street. Some bricks have preserved of the northern jamb of a simple portal.

The eastern part of the entrance hall had two segment arched shelf niches (Fig. 9-11) in the northern wall and one in the eastern wall. They have all been similar, 60 cm wide, 45 cm deep and ca 90 cm high with a groove for a wooden shelf in the middle. Only the western one in the northern wall has fully preserved (Fig.

11). A window had been exactly between the two niches in the northern wall. Only the lower part of it, the windowsill, sloping inwards, has preserved.

The entrance hall and the big room had been connected by a 3.6 m wide opening situated exactly opposite to the two niches and the window in the northern wall of the entrance wall. Obviously the architect has thoroughly planned the view from the big room to the entrance hall. Whether the opening had once been covered with an arch (or arches) could not be determined, because its sides have been badly damaged and the bottom covered with later filling.

Nothing had preserved of the floors of the cellar. The floor was probably covered by ceramic floor-tiles which were obviously gathered before abandoning and filling the cellar. Several pieces of various floor-tiles, glazed and unglazed, were found from the filling debris, but they may have nothing to do with this building. The walls are not preserved high enough to say anything about the ceiling. Anyway, there are no indications of vaults.

A stone cesspit directly behind the entrance hall has probably been planned with the house itself already, although it is stratigraphically a later addition.

The first stage of Building B1 is characterized by high quality of masonry and thorough architectural planning in comparison to the later stages. Still this does not help much to date the building. The earliest layer of human activity (SU: stratigraphical unit 2) in the courtyard territory, partially destroyed by building of the original cellar, could be dated to the 1st half of the 14th century by 2 sherds of stoneware from Lower Saxony. Building B1 cannot be earlier. A filling layer (SU 4) deposited in the territory of the courtyard subsequently after building the cellar walls and the stone cesspit included some pottery sherds which could be dated to the 14th century. However, the original Building B1 may not have been built so early.

Later Additions to the Medieval Cellar – Building B1. A long use of the medieval stone house is obviously indicated by several later constructions added at different times. Major additions are:

a) a secondary cellar built behind the house. It extends towards south and east from the site. A prominent feature is a brick staircase that led to the ground floor. Only this secondary addition can be dated by finds from a ground layer (SU 8) in the courtyard territory. Sherds of Siegburg stoneware date the building of the annex to the 15th – 1st half of the 16th century;

b) a presumable kitchen-complex in the NW corner of the big cellar. A L-shaped complex of walls had most probably supported a mantle chimney on the ground floor. At least on the cellar floor of the complex there had been two secondary ovens, of which little has preserved;

c) the large opening between the big cellar and the entrance hall had been mostly walled up leaving a simple doorway at the western side of it;

d) the original staircase to the street had been demolished and a new one built a bit higher using rough limestone slabs.

According to finds from the filling layer (SU 14) from the cellar complex, the medieval house was not abandoned before the 1st half of the 17th century. Presumably it was connected with the devastating effect of the long-lasting war between Sweden and Poland. As remains of later buildings were removed during excavations, the walls of Building B1 were spared and still waited for conservation while writing this article in April 2003.

Reuse of the Upper Part of the Cellar – Building B2. Still parts of the medieval house remained in use. The walls of the kitchen complex and the inner wall between the big cellar and the former entrance hall were demolished (Fig. 8). Thus only the outer walls were spared and the cellar complex filled up to altitude ca 3.00 m, using only the upper part later. The exact position of the street was probably changed as well because a new façade wall was built. All this work had definitely followed major destruction during which the upper floors had been totally removed. After some time the cellar complex had been completely filled, the walls above ground demolished and memory of the house lost for centuries. Building C was erected during the reconstruction of the town in the last quarter of the 17th century or during the 18th century. The abandoning of Building B2 is probably linked with that work.

Building A – Posts of a Wooden or a Framework Building (Fig. 9). The earliest remains of construction found were two pairs of vertical posts of ca 20 cm diameter in the NE corner of the site. They had probably supported a wooden or a framework building the walls of which had been parallel to the stone house Building B. The distance between the two pairs of posts is 268 cm which corresponds almost exactly to 6 Roman ells. Nothing more specific could be said about it. Building A can be dated to the 1st half of the 14th century by finds from the earliest layer of human activity (SU 2). Although it could not be determined if the layer refers to demolition or use of Building A.

Finds. 272 fragments of artefacts were collected. Most of them derive from 16th–17th century demolition and filling layers of Buildings B1, B2 and C. In addition some sherds of medieval pottery were found, especially from the courtyard area. E.g. some sherds of near-stoneware jugs from southern Lower Saxony (SU 2 dating Building A) and sherds of one Siegburg stoneware jug and a beaker were found (SU 4 dating Building B1). Four sherds of glazed whiteware jug from Langerwehe uncommon in Western Estonia were found in (SU 4) (Russow 2001, 32, Lisa 2). Later activities (15th–1st half of the 16th century) in Building B1 are indicated by finds from the stone cesspit (SU 8), which had deposited after extending the house. In addition to typical glazed redware (tripod cooking pots and bowls) and stoneware from Siegburg and Cologne (Fig. 12), the cesspit included one broken stoneware ointment jar from Waldenburg, a brass plaque and a fragment from the rim of a cylindrical beaker.

The earlier filling (SU 14) of Building B1 turned out to be the richest among early modern layers. In addition to common local and Dutch glazed red- and whiteware and slipware from period between the 2nd half of the 16th – beginning of the 17th century, it included a lot of different details of building ceramics: glazed floor- and stove-tiles. A Swedish örtug of Johann III (1589–1590), an iron cannonball and a set of weights in Polish weight system (pound of Krakov; identified by Ivar Leimus (EAM)) were found (Fig. 13). Finds from the filling (SU 18) of Building B2 were diverse as well. Apart from some exceptions, the majority of these finds derive from the same period as the earlier (SU 14) filling. These include stoneware (Duingen, Raeren, Frechen, Westerwald) of the 1st half of the 17th century, Russian glazed grayware of the 2nd half of the 16th century and painted Bohemian glass beakers with text. A bowl of a Dutch green-glazed clay pipe with impressed ornament is particularly noteworthy among the few finds of the 2nd half of the 17th century.

The youngest finds collected derived from the filling (SU 23) of Building C, which did not occur before the beginning of the 19th century according to coins. Probably most of the finds from this filling can still be connected with earlier periods. Mainly pottery common to 2nd half of the 16th and 17th century Pärnu dominates, including Russian and Bohemian grayware, Dutch glazed redware and abundant sherds of faience.

References

- Bartels, M. 1999.** Steden in Scherven 1–2. Vondsten uit beerputten in Deventer, Dordrecht, Nijmegen en Tiel (1250-1900)/ Cities in Sherds 1–2. Finds from cesspits in Deventer, Dordrecht, Nijmegen and Tiel (1250–1900). Amersfoort.
- Clevis, H. & Smit, M. 1990.** Verscholen in vuil. Archeologische vondsten uit Kampen 1375–1925. Vechtstreek.
- Duco, D. 1981.** De Kleipijp in de Zeventiende Eeuwse Nederlanden. Een historisch-archaeologische studie van de uit witbakkende klei vervaadigde rookpijp. – Davey, P. The Archaeology of the Clay Tobacco Pipe. V. Europe 2. Part ii. B.A.R. International Series 106 (ii). Oxford, 111–367.
- Goubitz, O. 1987.** Calceologi: a new hobby: the drawing and recording of archaeological footwear. ROB Overdrukken No. 283.
- Goubitz, O., Driel-Murray, C. & Groenman-van Waateringe, W. 2001.** Stepping through Time. Archaeological Footwear from Prehistoric Times until 1800. Zwolle.
- Groenman-van Waateringe, W. & Velt, L. M. 1975.** Schumode im späten Mittelalter. Funde und Abbildungen. – Zeitschrift für Archäologie des Mittelalters, 3. Köln-Bonn, 95–119.
- Haak, A. 2003.** Arheoloogilised uuringud Pärnus Aida ja Põhja tänaval. (Manuscript in the Archives of MA.)
- Henkes, H. E. 1994.** Glas zonder glans/Glass without gloss. – V Rotterdam Papers, 9. Rotterdam.
- Kadakas, V. 2003.** Arheoloogilised eeluuringud Pärnus Õhtu tn 1. Pärnu. (Manuscript in the Archives of MA.)
- Kivimäe, J., Kriiska, A., Põltsam, I. & Vunk, A. 1998.** Merelinn Pärnu. Pärnu.
- Kriiska, A. 1993.** Aruanne okt.–nov. 1993 toimunud arheoloogilisest järelvalvest Pärnu Eliisabeti kiriku idaküljel, Nikolai tn. 22. Pärnu. (Manuscript in the Archives of Pä Mu.)
- Kriiska, A. 1998.** Aruanne arheoloogilisest järelvalvest Pärnus Hospidali tn. 1. 7. juuli kuni 24. juuli ja 28. august 1998. (Manuscript in the Archives of MA.)
- Mäll, J., Kadakas, V. & Vaheoja, I. 2002.** Arheoloogilised uuringud Pärnus, kinnistul Nikolai 10. (Manuscript in the Archives of MA.)
- Mäss, V. 1992.** A medieval ship from the Pärnu River. – TATÜ, 41/4, 293–298.
- Russow, E. 2001.** Importkeraamika Lääne-Eestis ca 1225–1650. Magistritöö. (Manuscript in the Chair of Archaeology of TÜ.)

- Saluäär, U. 2002a.** Aruanne arheoloogilistest ülesmõõtmistöödest Pärnu Keskraamatukogu trassidel Öhtu ja Akadeemia tänaval Pärnu linnas 2001. aasta detsembris. (Manuscript in the Archives of MA.)
- Saluäär, U. 2002b.** Aruanne Vee tänaval Uue ja Pika tänava vahelises lõigus teostatud Pärnu Teater Endla veetrassi ehituse arheoloogilistest päästekaevamistest Pärnus 17.04.–04.05. 2002. aastal. (Manuscript in the Archives of MA.)
- Saluäär, U. 2003.** Aruanne kaablitrassi arheoloogilisest järelvalvest Pikal tänaval. In preparation.
- Saluäär, U. & Vunk, A. 2002.** Aruanne Pärnu Kontserdimaja (Aida tn. 4, Pärnu) arheoloogilistest eeluuringutest 12.–14. märtsil 2002. aastal. (Manuscript in the Archives of MA.)
- Schnack, C. 1993.** Lederfunde von der Schachte in Bremen. – Bremer Archäologische Blätter. Neue Folge 2 '92/93. Bremen, 61–70.
- Sepp, T. & Käsi, K 1991.** Pärnu Hansakoge allveearheoloogiliste uurimistööde ning väljatõstmise aruanne. (Manuscript in the Archives of MA.)
- Talvar, P. 1998.** Aruanne arheoloogilistest päästekaevamistest kanalisatsioonitrassi alal Pärnus Aida tn. 5/Hommiku tn. 1 krundil. (Manuscript in the Archives of MA.)
- Tamla, Ü. 1991.** Pärnu Munga t. 2 krundi arheoloogiliste kaevamiste aruanne. (Manuscript in the Archives of AI.)
- Tamla, Ü. 1992.** Archäologische Ausgrabungen in Neu-Pärnu in der Munga-Straße 2. – TATÜ, 41/4, 287–291.
- Udam, S. 1992.** Über die archäologischen Ausgrabungen in Pärnu in der Hospidali-Straße (1990–91). – TATÜ, 41/4, 284–287.
- Udam, S. 1994.** Rettungsgrabungen in Pärnu auf dem Hof von Pühavaimu-Straße 8. – TATÜ, 43/1, 68–70.
- Udam, S. 1995.** Arheoloogilised uuringud Pärnus Pühavaimu 8 kvartalis 1992.a. (Manuscript in the Archives of MA.)
- Vissak, R. & Vunk, A. 1996.** Georadari võimalustest arheoloogilise kultuurikihi uurimisel Pärnu ja Tartu näitel. – TATÜ, 45/3, 338–361.
- Vunk, A. 1991.** Ahjukahlid Pärnu arheoloogilistel kaevamistel. Diplomitöö. (Manuscript in the Chair of Estonian History of TÜ).
- Vunk, A. 1994.** Excavations in the New-Pernau quarter of artisans. – TATÜ, 43/1, 60–67.
- Vunk, A. 1996.** Pärnu 16. sajandi ahjukahlite tüpoloogiast ja valmistamise tehnoloogiast. – Stilus, 6, 37–42.

Vunk, A. 1997. Pärnu ja palverännakud. – 100 aastat Pärnu Muinasuurimise Seltsi. Artiklite kogumik. (Pärnumaa ajalugu, 1.) Pärnu, 74–98.

Vunk, A. 1998. Vanimatest ahjupottidest Eestis. – EAA, 2, 145–153.

Vunk, A. 2000. Mentaliteedi peegeldus Pärnu kahlileidudel. Linnaarheoloogia teoreetilisi aspekte. – EAA, 4/2, 151–174.

ARHEOLOOGILISED VÄLITÖÖD PÄRNUS

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Ajavahemikus 1990–2001 on Pärnus toimunud arheoloogilisi kaevamisi ja järelevalvetöid u. 30 erineval objektil. Enamik kaevamistest on leidnud mainimist iga-aastastes välitööde ülevaadetes, kuid üksnes nelja suurema uurimisobjekti kohta on ilmunud artikkel. Kahjuks tuleb märkida sedagi, et aruanded on valminud vaid nelja suurema kaevamise ja kahe väikesemahulise järelevalvetöö kohta. Selles kontekstis on potentsiaalsetel uurijatel Uus-Pärnu arheoloogilise materjali kasutamine keeruline. 2002. aastal toimusid päästekaevamised mitmel keskaegse Pärnuga seenduval objektil (joon. 1: 1–7). Alljärgnevas kirjeldatakse uurimisi ordulossi alal ja Uus-Pärnu põhja-, lääne- ning lõunaosas. Lisaks neile toimus aastavahetusel 2002/2003 eeluuring ordulossi loodetorni asukoha väljaselgitamiseks (joon. 1: 7) ning arheoloogiline järelevalve trassis, mis kulges üle Pika tänava Nikolai tänava joonel (joon. 1: 8). Seal fikseeriti arvatav Nikolai kiriku põhjamüür.

MÕÖDISTUSTÖÖD ORDULOSSI ALAL

Keskraamatukogu ehitusega seotud trasside järelevalvetöödel Õhtu ja Akadeemia tänaval (joon. 1: 1, 2) leiti ordulossi sisemise eelkindlustuse lääne-, põhja- ja lõunamüüri katked. Säilinud müürid puhastati välja ehituseks vajaliku sügavuseni. Arheoloogilised esemeleid puudusid. Õhtu tänava arheoloogiliselt fikseeritud trassi pikkus oli 15 m, laius 0,6–2 m ning keskmine sügavus alates praegusest maapinnast ulatus 1,5–2,35 meetrini. Uurimisala lääneseinas paljandus ida-kerde-lääne-edela-suunaline suurtest maakividest mördi ja tellisetükkidega seotud ordulossi sisemise eelkindlustuse läänemüür 11,5 m pikkuselt. Laotis puhastati välja kahe, kohati kolme kivikihi ulatuses, kusjuures ehitise taldmiku ei kaevatud. Trassi põhjapoolses osas lõppes müür ristumisega idast läände suunduva 1,75 m paksuse sarnase vuugiga müüri – ordulossi põhjamüüri. Trassi ehitamiseks oldi sunnitud seda müüri lõhkuma 1,5–2 m ulatuses, alles jäeti müüri ristumiskoht eelkindlustuse läänemüüri. Trassi lõunaosas leiti läänemüüri lõikuvat müüri jäänused, mis võis kuuluda eelkindlustuse müüri külge rajatud ehitisele. Müüre ja nende varinguid katsid erineva koostisega rusukihid, kuid ühes proovisurfis ja põhjamüüri lõhkumistööde käigus fikseeriti läänemüürist idas ja põhjamüürist lõunas kaks erinevat puidujäänuste kihti, mida enamasti eraldas üksteisest müüride vastu ladestunud lubimördi kiht.

Akadeemia t. 3 kõnnitee alla rajatud 2,5 m laiust trassi lõikas lääne-edela-ida-kerde-suunaline ordulinnuse sisemise eelkindlustuse ca 1,5 m paksune lõunamüür. Müür oli laotud suurtest maakividest ning seotud mördi ja tellisetükkidega. Müürist puhastati välja kolm ülemist kivikihti, kuid taldmiku ni ei jõutud. Trassi kagupoolses küljes (müürist lõuna pool) puhastati osaliselt välja uusaegne tellis-

test keldrivõlv. Müüri katsid ja ümbritsesid erinevad rusukihid. Vajalike trasside läbiviimiseks lõhuti müüri umbes 2,5 m laiune auk. Müüritaldmik jäi lõhkumistöödest puutumata.

EELUURINGUD KONTSERDIMAJA EHITUSKRUNDIL (AIDA T. 4)

Kontserdimaja ehitusplatsile kaevati ca 42 m pikkune põhja-lõuna-suunaline tranšee (joon. 1: 3), mille laius oli 1,5–3,5 m ja suurim sügavus 2,25 m. Rootsi-aegsetelt linnaplaanidelt võis välja lugeda, et uurimisaslasse jäi 17. saj. lõpuni looduses jälgitav luiteline saar. Samaaegsetelt plaanidelt selgub ka, et saare lõunaosani võis ulatuda üks bastion. 19. ja 20. sajandil asus sellel alal raudteejaam koos prop-side laadimise platsiga. Selles piirkonnas on viimasel kümnendil tehtud ka väikesemahulisi geoloogilisi ja GPR (Ground Penetrating Radar) uuringud. Arheoloogiliste töödega linna fortifikatsiooniga seotud kultuurikihti ega jälgi keskajest ja varasemast asustuskihist ei leitud. Uurimisas ei fikseerunud ka saare kuju. Proovikaevandi põhjapoolses osas leiti tänapäevaste täitekihtide all halli orgaanikat ja tellisetükikesi sisaldava liiva kiht (joon. 2: 7), mis ulatus vähemalt veepiirini või isegi alla selle. Mujal kaevandis oli ülemiste täitekihtide all inimtegevusest puutumata kollane liiv (joon. 2: 6) (kihi algus trassi põhjaosas oli absoluutkõrgusel 1,3 m ning see tõusis lõunaosas kuni 2,5 m kõrgusele ü.m.p.). Seega fikseeriti trassis oletatava saare põhjakallas, kuna lõunakallas jäi kaevamisalast välja. Tulemus on võrreldav 1658. aasta linnaplaaniga, kus pole välja toodud mitte saar vaid poolsaar, milles on kaks kraavide abil jõega ühendatud tiiki.

Arheoloogilised uuringud Aida ja Põhja tänaval. Seoses Põhja t. 3 hoonesse vee- ja kanalisatsioonitrassi paigaldamisega toimusid päästekaevamised 70 m pikkusel trassil (joon. 1: 4), mis pidi ristuma linnamüüri. Linnamüürist lõunas oli varaseim elutegevuskiht ladestunud kollasele liivale. Orgaanikarohkes kultuurikihis, mis sisaldas laaste ja sõnnikut, eristati üksteise kohal 20–30 cm vahedega vähemalt kolme liivakat vahekihti. Leiti nahatükke, vitsiknõude katkeid ning 14. saj. importkeraamikat. Absoluutkõrguselt u. 2 m oli 60 cm paksune laastukiht, mis sisaldas loomasõnnikut ja õlgi, liiva leidus vaid õhukeste läätседena. Lisaks 14.–15. saj. importkeraamikale leiti nahkesemete katkeid, üksikutest metallesemetest võib märkida küünlahoidjat. Absoluutkõrgusel ca 2,75 m paljandus kaevandi idaosas tänavaga risti asetatud, põlenud ülapinnaga palkidest sillutis. Palkide peale laotatud kollase liiva padjale oli asetatud munakivisillutis, mis kivide vahelt saadud leidude põhjal rajati 17. sajandil. Sillutisepealne rususegune, kuni 1 m paksune täitekiht sisaldas 17.–18. sajandi, ülaosas ka 19. sajandi leide. Kihi tekke võib siduda arvatavalt Põhjasõjaga. Sillutise põhjaser-va ja linnamüüri vahele jäänud 4,6 m laiusel alal satuti peentest palkidest, lubimördiga kaetud konstruksioonile, mida võiks tõlgendada põranda või käimispinnana. Ehkki palkidel asunud lubjakiht on kindlasti linnamüürist hilisem, ei saa täielikult välistada võimalust linnamüüri-eelsest hoonest.

Maakividest lubimördiga laotud 1,35–1,5 m paksune linnamüür oli vundeeritud absoluutkõrgusel 1,9 m. Kahe kivirea kõrgune taldmik astus müüri siseküljel 40 cm võrra ette. Sellest kõrgemal oli müüri sisemuses kasutatud väiksemaid kive kui pindadel ning müüri ülaosas rohkesti esinevas vuugitaites oli tellisetükke ning katusekivide katkeid. Alt lugedes 3. kivirea kõrgusel tähdeldati tasan-duskihti, kokku eristati 8 kivirida. Vahetult linnamüürist põhja pool ja osaliselt ka müürikivide all fikseeriti puidukiht.

Linnamüürist põhjapool jõuti loodusliku kollase liivani vaid Aida tänav all, praegusest teepinnast 175–185 cm sügavusel. Kogu kaevandi ulatuses esinenud must, sõnniku- jm orgaanikarohke kul-tuurikiht sisaldas uusaegseid leide. Tundub tõenäoline, et Aida tänav alune kultuurikiht seostub kit-sarööpmelise raudtee ehitusega 19. saj. viimasel veerandil, sellest linnamüüri pool ehk ka 17.–18. saj. eksisteerinud bastionidesüsteemiga.

Aida t. leiud jagunevad ajaliselt kahte rühma: a) üksikud varased keraamikakatkendid 14. saj. ning b) ülejäänud esemed 16. saj. teisest poolest kuni 19. saj. alguseni – ühtegi üheselt 19. saj. teise poole/20. saj. tüüpilist leidu silma ei organud.

PÄÄSTEAEGAMISED VEE TÄNAVAL

Seoses Pärnu teatri juurdeehituse ja rekonstrueerimistöödega tekkis vajadus paigaldada veetrass Vee tänavale (joon. 1: 5). Kaevetööde eesmärk oli välja selgitada veetrassile arheoloogilisi kihte ja kinnismuistiseid kõige vähem kahjustav kulgemine. Tööd toimusid Vee tänaval Pika ja Uue t. vahelises lõigus 49 m pikas ja 2,8 m laias trassis Vee t. esimese sõidurea alal (joon. 3). Trassi sügavus ulatus alates praegusest maapinnast 1,9 kuni 3,4 meetrini. Kaevamistega puhastati välja kahe Teise maailmasõja käigus hävinenud hoone vundamendid (joon. 3: 2, 5). Kuni trassi sügavuseni kaevati läbi põhjapoolse hoone põhjaküljele jäävad Malmö tänavaga seotud ladestused. Loodusliku liivani uuriti kahe hoone vahele jäävaid pinnasekihte. Ristpalkidest jäätmekast avastati põhjapoolse maja ühe keldri alt ning keskaegse linnamüüri lõik lõunapoolse hoone alt.

Endise Malmö tänavaga seonduvad kihid. Trassi põhjaosas kaevati läbi endise Malmö tänavaga seotud pinnasekihid kuni trassile vajaliku sügavuseni (joon. 3: 6). Tänapäevase maapinna all lasus 55–85 cm paksune tumepruun laastudega muld, millest kõrgustel u. 3,7–3,9 m puhastati välja kuus horisontaalset 4–14 cm vahemaa asetsevat põhja-lõuna-suunalist 0,5–1,9 m pikkust ja 6 cm läbimõõduga puitvaia. Nende all lasus 10–25 cm paks kiht halli tellisetükkidega savi, mille sees paiknesid raud- ja paekivid. Savi all kuni trassile vajaliku sügavuseni lasus tumepruun sõnnikune laastude ja tellisetükkidega tätekiht. Põhjapoolsest hoonest 1,5 m kaugusel põhja suunas asetses üksik vertikaalne u. 0,8 meetri pikkune ja 0,3 meetrise läbimõõduga puitpost.

Ristpalkidest jäätmekast. Põhjapoolse hoone ühe keldri alt puhastati välja ristpalkidest jäätmekasti nurk (joon. 3: 4). Põhiplaani olid selle mõõdud vähemalt 1,5 x 1,25 m. Säilinud oli seitse palgikihti, mille läbimõõt oli 20–25 cm. Kasti täitis ülaosas 0,5 m paksune puidu, orgaanika ja ehituskeraamika tükkidega pruun muld. Viimase alla oli ladestunud ühe meetri paksune püdel sõnnik.

Kahe maja vaheline ala. Põhjapoolse hoone lõunavälismüüriäärde kaevati 1,2–1,75 meetri pikkune ja kogu trassi laiune (2,75 m) šurf. Fikseeriti kahest majast varasemaid pinnasekihte. Absoluutkõrgusel 1,9 m puhastati välja inimtegevusest puutumata hallikaskollane liiv. Rusukihtide ja betoonist kanalisatsioonitoru all lasuvatest mullast, laastusõnnikust ja tumehallist liivast puhastati välja neljal erineval kõrgusel rohkesti horisontaalasendis laudade, vaiade ja puitnumate jäänuseid.

Keskaegne linnamüür. Lõunapoolse hoone all avastati keskaegse linnamüüri jäänus (joon. 3: 3). Suurtest raud-, pae- ja telliskividest lubimõrdiga seotud 1 m pikkune müürijupp oli orienteeritud loodest kagusse. Mõlemal küljel astmega linnamüüri laius oli madalamas osas 2,3 meetrit, kõrgemas osas 1,7 meetrit. Väline (lõunapoolne) aste asus kõrgusel 3,05 m ja sisemine (põhjapoolne) 2,6 m kõrgusel ü.m.p. Müüri taldmiku puhastamist raskendas pinnasevete sissetungimine kaevandisse, kuid arvatavasti asus müüri algus absoluutkõrgusel 1,8 m, seega enne kaevetöid oli müüri kõrgusest säilinud 1,9–2 meetrit. Mõlemale poole linnamüüri kaevati proovišurfid. Linnamüürist 0,6–0,9 meetri kauguselt põhja poolt leiti 5 cm vahega kahe suurema puitposti alaosa. Postid olid murdunud absoluutkõrgusel 2 m. Linnamüürist u. 2 m lõunapool asetsesid absoluutkõrgusel 2–2,6 m kuue puitvaia jäänused. Need olid 30–50 cm pikad ning keskmiselt 8–12 cm diameetriga. Vaiade rida oli sarnaselt linnamüüriiga orienteeritud loode-kagu-suunalisena.

Varaseimad leiud pärinevad 16. saj. I poolest (Siegburgi ja Kölni kivistkeraamika) ja hilisemad 20. saj. I poolest (tööstuslik keraamika, sh. 1 Itaalia fajansskauss). Suurem osa esemetest kuulub ajavahemikku u. 16. saj. viimane veerand / 18. saj. I pool. Seetõttu sarnaneb Vee t. materjal üldjoontes Aida t. kogumiga (glasuurkeraamika ja fajanss). Siiski on ka erinevusi: märgatavalt kõrgem on Madalmaade glasuurkeraamika (graapenid, pannid, kausid) ja luksuslikumate lauanõude osakaal. Glasuurkeraamikast on lisaks ühele *weserkeraamika* taldrükukatkele (joon. 4 all) leikkompleksis ka mitmeid teisi tavapärasest kõrgema kvaliteediga Põhja-Hollandi maalingutega taldrükute-kausside tükke (joon. 4 ülal) ning Madalmaade fajansist varast orientaalmotiividega taldrükute fragmente 17. saj. I poolest. Keraamilistest leidudest väärib märkimist veel 17. saj. keskpaigast pärinevate Madalmaade savipiipude rikkalikult ornameenteeritud varretükid, mis ei kuulu igapäevaste leidude hulka. Olulisematest klaasileidudest on kollektsioonis paar 17. saj. esimesele poolele tüüpilist pudeli ja peekri tükke ning gooti tähtedega maalitud aknaklaasi fragmente 16. sajandist.

Vee ja Põhja tänavalt saadud nahaleiud (joon. 5). Nahkesemete seas domineerisid jalatsileiud (vt. tabel). Rohkesti oli taldasid ning tallarante. Kõik pealsed olid katkendlikud ning seetõttu väheinformatiivsed. Teiste nahkesemetest olid äratuntavad vaid üks kukkur ja oletatavasti riitusesemele kuulunud kantide katked. Ühte nahkeset võiks pidada padrunitaskuks.

Vee t. materjalis eristusid selgesti kaks väga laia ninaosaga nn. lehmamokk (tuntud ka tudori) tüüpi jalatsikatket. Lisaks neile leidudele on Vee tänava materjali seas veel üks fragmentaarselt säilinud lapse lehmamokk-tüüpi kinga ninaosa. Järgmise grupina eristuvad viis nn. hõlmkinga katket. Tegemist on ühe ninaosaga ning nelja pealse tagaosaga. Viimaste pikendused, mis ulatuvad jalaseljale ning kinnitatakse seal kas paela või pandla abil ongi andnud tüübile nime. Identifitseeritavad olid veel kolm nõörkinga katket ning pealse fragment, mille ninaosa oli ilustatud risti üle jalaselja jooksva u. 1 cm pikkuste sisselõigete reaga. Põhja tänava kaevandist saadi madala ning teravanihalse, väga kitsa tallaga kinga katkeid. Leitud pealne oli kaunistatud sisselõigatud tammelehemotiividega. Põhja tänava materjali hulgas oli üks väga rikkalikult, kolmes vöötmes jalatsi ninaosa poole suunatud lehekujutistega kaunistatud kinga katke. Tallaleidude seas domineerivad laia esiosaga sirgekülgsed lehmamokk tüüpi kingade tallad ning tallad, mida iseloomustab ümar nina- ja kannaosa, suhteliselt ovaalne päkaosa ning kitsenemine jalavõlvi kohalt. Kõik Vee tänavalt leitud tallad on mitmekordsed ning ühel neist on *in situ* säilinud erinevaid tallakihte ühendavad puutikud. Dateeritavad nahaleiud pärinesid Vee tänaval peamiselt endise Malmö tänava seonduvatest kihtidest ning kahe maja vaheliselt alalt, hoonetest varasematest kihtidest. Kõige täpsemalt on dateeritavad lehmamokad (joon. 5: 1), mis tulid Euroopa jalatsimoodi 16. sajandi alguses, kõrgajaga 1510–1550. Algselt oli tegemist kingadega, mis kiiresti muutusid linna ülemkihil poolt eelistatud jalatsiteks. Hõlmkingade dateeringud pole enam nii selged. Need ilmuvad esimest korda juba 14. sajandil ning püsivad kasutusel 18. sajandilgi. Taldadel ning pealsetel ja rantidel olevate õmblus- ning naelutusjälgede põhjal võib öelda, et Vee tänavalt välja tulnud jalatsileiud kajastavad konstruktsioonilisi ja tehnilisi võtteid, mis jõudsid kingsepakunsti 16. sajandil. Kuna tegemist oli mitmekihiliste taldadega, ei saa neid dateerida varasemaks aastast 1500. Kahele hõlmkinga katkele (joon. 5: 3) on teada 1675–1725 dateeritud vaste Hollandist Nieuwe't (Niedorp) ning Eesti Ajaloomuuseumi etnograafiafondis 18. sajandisse dateeritud kinga näol. Pikk levikuaeg oli ka nõörkingadel (joon. 5: 2), mis oli üheks Kirde-Euroopa eelistatumaks jalatsiks perioodil 14. sajandist kuni 1550. aastani. Pärnu leide võib pidada pealse ja talla ühendamisel tekkinud õmblusjälgede põhjal, aga samuti koosleidumise tõttu lehmamokk tüüpi jalatsitega nõörkinga hilisemasse levikufaasi kuuluvateks. Pärnu nahkmaterjali kuulumist 16. sajandi teise poolele tõendavad ka samast ajast pärinevat tallaleidu.

ARHEOLOOGILISED UURINGUD NIKOLAI T. 10 KRUNDIL

Seoses kavandatava uue hoonega 1944. a. hävinu asemele toimusid avariiumingud u. 175 m² suurusel krundil. Asukoha tõttu kunagise Riia maantee ja värava juures (joon. 1: 6), keskaegse Uus-Pärnu peateljel oli maapinnast oodata rikkalikke elutegevuse jälgi ja esinduslikku arhitektuuri.

Vara-uusaegsed hooned D ja C (joon. 6). Juba mõne senitmeetri sügavusel paljandusid Teises maailmasõjas hävinud 19. saj. puuhoone vundamendid (hoone D). Hoone on paiknenud tänava ääres, hoovisissepääsuga krundi põhjaservas. Mitme ahju vundamendid hoone keskosas jagasid selle kaheks osaks. Hoone D on olnud keldrita, kuid selle vundmentide lammutamise järel ilmus krundi keskel nähtavale varasem kelder (hoone C). Keldri idaosa oli lõhutud soojustrassiga, mistõttu ei leitud ka keldri sissepääsu ega ühtki muud ava. Kelder oli täis aetud mitte varem kui 19. saj. alguses, seda näitab täitepinnasest mh. leitud keiser Pauli 2-kopikaline aastast 1800. Kelder oli ehitatud mitte varem kui 17. saj. II poolel, millele osutab rikkalik keraamika hoone B2 täitest keldri all. Tõenäoliselt on hoone C rajatud linna rekonstrueerimisega 17. saj. viimasel veerandil või millalgi peale Põhja-sõda.

Keskaegse kivimaja algne kelder – hoone B1 I etapp (joon. 7–11). Alles hoone C keldrimüüride lammutamise järel selgus, et suurem osa kaevandist koosnes keskaegse kivimaja (hoone B) keldrikompleksi täitepinnasest. Sellest majast väljaspool on paiknenud vaid krundi kirdenurk, kus kunagise hoovi maapinnatasandid olid seostatavad ka maja enese stratigraafiaga. Nii oli võimalik ainult õueala varasematest maapinnatasanditest pärit potikildude abil välja selgitada hoone B1 ehitusetappide absoluutne kronoloogia. Kivimaja keldri esimene etapp on ehtiatud u. 80 cm tolleaegsest maapinnast sügavamale. Maakividest seinte ladumiseks oli kasutatud lubimörti. Akna- ja ukseavad ja nurgad olid vormistatud puhta vuugiga tellistest. Algne kelder koosnes vähemalt kahest ruumist (joon. 8; 9). Edelaosa hõlmas suur keldriruum, mis ulatus lääne ja lõuna suunas kaevandi piiridest välja tänava ja naabermaja alla. Keskaegne tänav pole olnud päris samal joonel praegusega ning maja fassaad asus ilmselt praeguse tänava all. Väike kitsas ruum mitmete säilinud arhitektuursete detailidega, ilmselt kunagine eeskoda, paiknes suurest keldrist põhja pool. Põhjaseinal osaliselt säilinud segmentkaar on selle jaganud omakorda kaheks osaks. Eeskoja läänepoolses osas on paiknenud tänavale viinud trepp, mille jäljed leiti hilisema trepi alt. Lihtsa ühe astmega välisportaali põhjapoolsest piidast on säilinud paar tellist. Eeskoja idaosa põhjaseinas on olnud kaks ja idaseinas üks segmentkaarne riulinišš (joon. 9–11). Need on olnud puuriituliiga kaheks osaks jaotatud ja ka muidu ühesugused. Vaid põhjaseina läänepoolne nišš oli tervena säilinud (joon. 11). Täpselt kahe põhjaseina niši vahel on olnud aknaava, millest on alles vaid kaldus aknalaud. Eeskoda ja suur kelder on olnud ühenduses 3,6 m laiuse ava kaudu, mis paikneb eeskoja põhjaseina niššide ja aknaava suhtes sümmeetriliselt. Arhitekt on kavandanud vaate suurest keldrist eeskotta. Kas ava on olnud kaarega (või kahe kaarega ?) sillatud, ei olnud võimalik kindlaks teha. Keldri põrandatest polnud midagi säilinud. Arvatavasti olid need kunagi kaetud keraamiliste plaatidega, mis korjati üles enne keldri mahajätmist ja täitmist. Täiterusust leiti mitmesuguste glasuuritud ja glasuurimata põrandaplaatide tükke, kuid need ei pruugi olla pärit sellest hoonest. Seinad ei olnud säilinud piisava kõrguseni, et teha järeldusi laekonstruktsiooni kohta. Igatahes pole jälgi võlvidest. Eeskoja taga leitud kivist käimlakast on tõenäoliselt planeeritud juba koos majaga, kuigi see on stratigraafiliselt hilisem lisandus.

Hoonet B1 iseloomustab müüriiao kõrge kvaliteet ja põhjalik arhitektuurne planeering võrreldes hilisemate etappidega. Õuealal leitud varasem elutegevuskiht, mis on osaliselt lõhutud algse keldri rajamisega, dateeriti kahe Alam-Saksi päritolu kivikeraamika katke järgi 14. sajandi esimesse poolele. Hoone B1 ei saa olla sellest varasem. Algse keldri ja käimlakasti rajamise järel õuele laotatud täite-

kiht sisaldas 14. sajandi keraamika katkeid. Algne kelder ei pruugi sama vana olla.

Keskaegse keldri ümber- ja juurdeehitused – hoone B1 II etapp. Mitmed hilisemad konstruktsioonid osutavad ilmekalt keskaegse hoone pikale kasutusajale. Olulisemateks lisandusteks on:

a) maja taha püstitatud sekundaarne kelder, kus tähelepanuäärseks detailiks on tellistest müüritrepp, mille kaudu on pääsenud peakorrusele. Õueala elutegevuskihist saadud leiud dateerivad ainult seda sekundaarset ehitusosa. Siegburgi kivikeraamika killud dateerivad juurdeehitise 15. –16. saj. esimesse poolde;

b) oletatav köögikompleks suure keldriruumi loodenurgas. L-tähe kujuline seinamoodustis on tõenäoliselt kandnud mantelkorstent. Vähemalt keldrikorrusel on paiknenud kaks sekundaarset ahju;

c) suures osas on kinni müüritud lai ava suure keldri ja eeskoja vahel. Tänavapoolsesse otsa on jäetud kitsas ukseava. Algselt tänavale viinud trepp on lammutatud ning selle asemele laotud töötlemata paelahmakatest uus.

Keldrikompleksi täitest saadud leidude järgi ei saanud keskaegse hoone lõpp mitte enne 17. sajandi esimest poolt. Arvatavasti oli see seotud Rootsi ja Poola vahel pikaks veninud sõjategevuse laastava mõjuga. Kui hilisemate hoonete jäänused lammutati kaevamistöödega, siis hoone B1 müürid säilitati ning need ootavad konserveerimist.

Keldri ülaosa taaskasutus – hoone B2. Keskaegne maja jäi siiski osaliselt kasutusse. Lammutati köögikompleksi seinad ning eeskoja ja suure keldri vaheline sein (joon. 8). Nii jäid alles vaid välisseinad. Keldrikompleks täideti osaliselt ja kasutusse jäi vaid selle ülaosa. Ilmselt muutus ka tänavajoon, sest selle äärde püstitati uus fassaad. Sellised tööd on saanud toimuda peale ulatuslikumat hävingut, mil täielikult lammutati ülemised korrused. Mõne aja möödudes on keldrid lõplikult täidetud, maapealsed müürid lammutatud ja mälestus majast kadunud sajanditeks. Järgnes hoone C ehitus 17. sajandi viimasel veerandil või 18. sajandil. Nende töödega on arvatavasti seotud ka hoone B2 lõpp.

Hoone A – puu- või vahvärkhoone postid (joon. 9). Uuritud ala varasemateks ehitusjäänusteks osutusid kaks paari ca 20 cm läbimõõduga poste kirdenurgas. Arvatavasti on need kandnud puu- või vahvärk-hoonet, mille sein on olnud paralleelne kivihoone B seinaga. Kahe postipaari vahemaa oli 268 cm. Leiud varasemast elutegevuskihist dateerivad hoone 14. sajandi esimesse poolde. Siiski jäi selguseks, kas kiht seostub hoone A kasutamise või lammutamisega.

Leiud. Koguti 272 esemekatket, mis pärinevad enamasti hoonete B1, B2 ja C 16.–18. saj. täite- ja lammutuskihtidest. Lisaks avastati üksikuid keskaegseid leide. Nii näiteks leiti kahest 14. saj. ehitusega seotud kihtidest paar Lõuna-Alam-Saksi varakivikeraamilise kannu fragmenti (hoone A) ning ühe Siegburgi kivikeraamika kannu ja peekri tükke (hoone B1 I etapp). Hoone B1 sepatööjätmeid sisaldanud elutegevuskihist saadi veel neli kannukatkendit Lääne-Eestis haruldasest Langerwehe valgest glasuurkeraamikast. Sama hoone hilisemat elutegevust peegeldavad maja laiendamisele järgnenud ladestustest ning käimlast kogutud 15.–16. saj. esimese poole leiud. Lisaks tüüpilisele glasuurkeraamikale (graapenid, kauss) ning Siegburgi ja Kölni kivikeraamikale (joon. 12) kätkes käimla leiu-kompleks veel ühte poolikut Waldenburgi kivikeraamilist salvitopsi, pronksnaastu ja klaaspeekri ser-vakatket.

Uusaegsetest kihtidest osutus kõige rikkalikumaks pärast hoone B1 hävinemist ruumidesse kogunenud täitepinna/tasanduskiht, mis sisaldas peale tavapärase 16. saj. teise poole kuni 17. saj. alguse kohaliku ja Madalmaade glasuurkeraamika ja maalingutega glasuurkeraamika ka arvukalt erinevaid ehituskeraamika detaile – keraamilisi põrandaplaate ning ahjukahleid. Samuti saadi samast täitematerjalist Johann III örtug (1589–1590), rauast kahurikuul ning Poola kaalusüsteemis kaaluvihtide komplekt (joon. 13). Mitmekesine oli ka järgmise hoone (B2) lammutamisega seotud keldrite täitepinna leiumaterjal: peale mõne erandi kuulub enamus leidudest 17. saj. esimesse poolde, sisaldades kivikeraamikat (Duingen, Raeren, Frechen, Westerwald), 16. saj. II poole vene glasuurkeraamikat ning maalingute ja tekstiga böömi peekrit. Sama kihi väheste 17. saj. teise poole leidude hulgas väärib nimetamist üks Eestis haruldane savipiibu katke – Madalmaades valmistatud rohelise glasuuri ja tempelornamendiga kaetud piibukaha.

Kaevandi kõige nooremad leiud koguti peale hoone C hävingut ladestunud täitekihist, mis on hiliste mündileidude (Vene denga (1759 AD) ja 2-kopikaline (1800 AD) põhjal dateeritud 19. saj. algusesse. Enamuse sama ladestuse leidudest võib tõenäoliselt seostada kinnistu varasema hoonestusega, kus domineeris 16. saj. teise poole ja 17. sajandi Pärnule iseloomulik keraamika, alustades vene ja böömi hallide pottidega, ning lõpetades Madalmaade punase glasuurkeraamika ja rohkete fajansifragmentidega.