



INVESTIGATIONS ON THE TERRITORY OF THE MEDIEVAL NEW-PÄRNU

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INTRODUCTION

From May to November 2011 investigations were carried out in the historical centre of Pärnu (known during the medieval period as Germ. *Neu-Pernau* (New-Pärnu)), studying

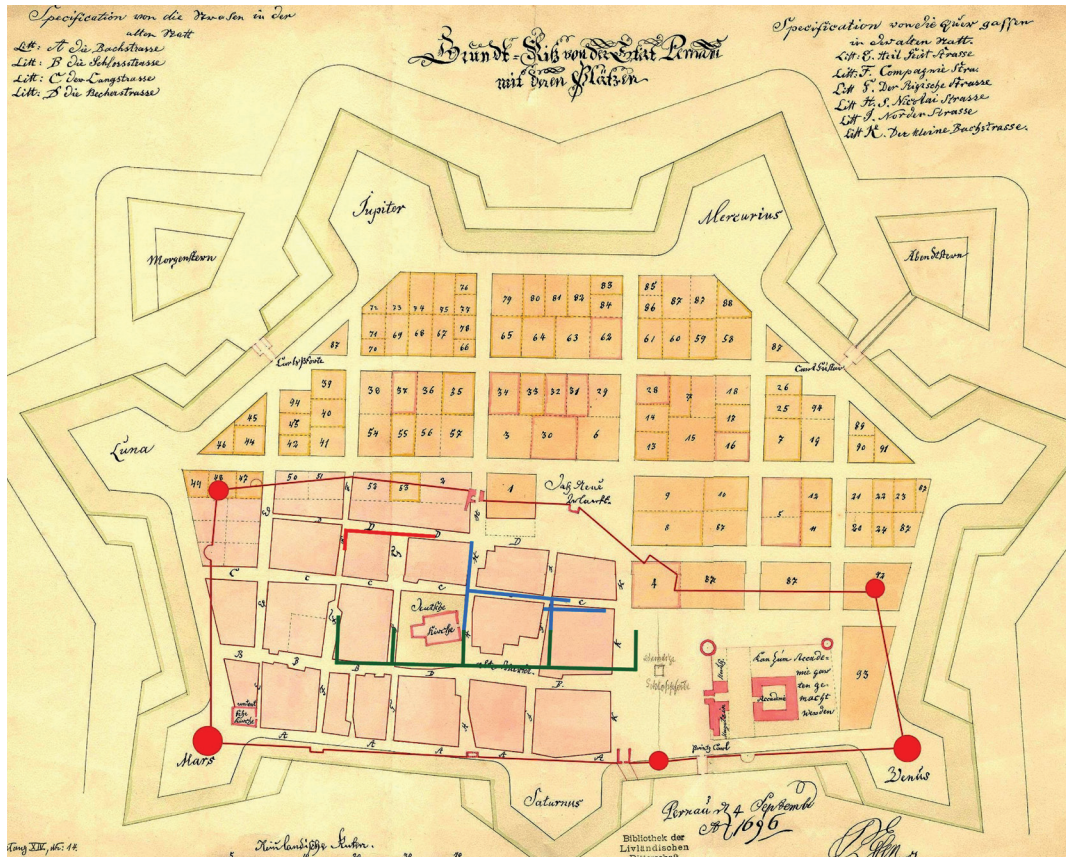


Fig. 1. Town plan of New-Pärnu from the end of 17th century (Krigsarkivet) and approximate locations of the trenches.

Jn 1. Uus-Pärnu linnaplaan 17. saj lõpust (Rootsi Sõjaarhiiv) ning trasside ligilähedased asukohad. <http://www.riksarkivet.se/default.aspx?id=7773#Pernau> (10.07.2012.)

the streets Pikk, Munga, Malmö, Uus and Pühavaimu. The research was conditioned due to the reconstruction and extension of the water and sewage system. In total 630 m³ of pipeline trenches were archaeologically investigated, 640 m³ of soil was studied. The work was contracted by AS Pärnu Vesi and the investigations were carried out by MTÜ AEG archaeologists Rünno Vissak, Peeter Piirits and Eero Heinloo.

EXCAVATIONS AT PIKK STREET

The archaeological investigations on Pikk Street concentrated on the area that according to the oldest survived town plans from the 17th century (Fig. 1) constituted the centre of the medieval town. Regardless of the inaccuracy of the old maps, some confirmed sites such as the Red Tower that is still standing today, the location of the White Tower determined during archaeological investigations (Bernotas *et al.* 2009, 156–160, fig. 1), the sites of the medieval Town Hall and St Nicholas' church allow us to understand the relations between the medieval and the present town plan that several earlier researchers (H. Laakmann, A. Vunk among others) have attempted to map (see Kivimäe *et al.* 1998, 81, ill. II). Prior to the investigations we had reason to believe that the main pipeline on the green area¹ on the north side of Pikk Street runs largely either along the medieval street line or along the buildings at its south side, partly crossing over the former market square.² The auxiliary lines were planned to be installed to the street lines crossing the present Pikk Street (Vee, Munga, Nikolai, Pühavaimu and the former Gildi), that in general coincide with the medieval street plan.

Character and capacity of the investigations

The investigations consisted of both archaeological surveillance and excavations (Fig. 2). The trench for the main pipeline on the green area (length *ca.* 200 m) was intended to be partly above the existing sewage line. However, the trench only occasionally coincided with the old one. Hence an approximately 1–1.5 m (max 2.1 m) wide area with a survived cultural layer remained north of the main line. The thickness of manually excavated layers extended down to 1.8 m, the total thickness of the cultural layer on the main line could be as thick as 3 m.³

The trenches that crossed Pikk Street (with an average length of 30 cm) required less voluminous investigations. Two of the five auxiliary lines (along Vee and the former Gildi Streets) were rainwater lines (width 1.5 m, depth 1.3–1.8 m) and two (on Pühavaimu Street and partly on the line of Nikolai Street) were mostly monitored, because the location of the new lines coincided with the previous rainwater and sewage lines and the cultural layer was already largely destroyed. The most extensive investigations on auxiliary lines were carried out in the trench dug on the line of Munga Street.

Additionally to installing sewage and rainwater pipes water connections were reconstructed. This work was mainly done by drilling in a closed method or new pipes were installed into the lines of the old pipes. Therefore only archaeological surveillance was required.

¹ The pipeline that was originally intended to be built to the south side of Pikk Street was removed to the green area upon advice from archaeologists. This was done in order to diminish harming the construction substance that had survived in the ground and to avoid excavations in the St Nicholas' cemetery.

² The market square depicted on the Early Modern plans is located at the site of the green area in front of the present building at Pikk 4.

³ Thickness of mixed soil and strata that were mechanically removed was 50–120 cm.

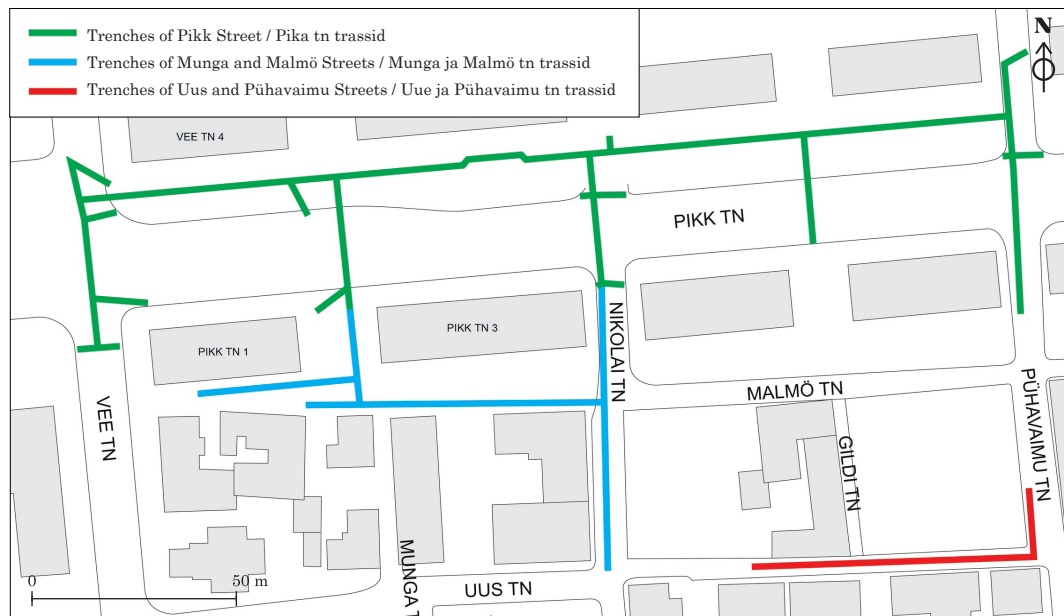


Fig. 2. Locations of archaeological excavations in Pärnu in 2011.

Jn 2. 2011. a Pärnu kesklinnas toimunud arheoloogiliste uuringute asukohad.

Drawing / Joonis: Andres Tepper

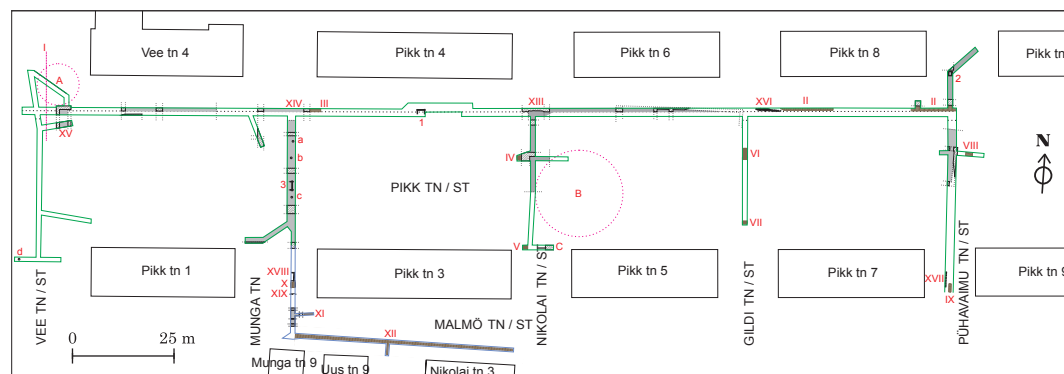


Fig. 3. Schematic situation plan of the trenches at the streets of Pikk, Munga and Malmö.

Jn 3. Pika, Munga ja Malmö tänavate kaevandite skemaatiline asendiplaan.

Drawing / Joonis: Andres Tepper

Street plan

Information obtained from working on the pipelines on Pikk Street (Fig. 3) allows us to make adjustments about the medieval town plan. For example, the existence of a moat inside the town was confirmed and its east ditchbank was located (see below). In several cases timber pavements from round logs that were used both as common streets and as pathways inside town blocks or building lots were documented. In addition to those, the medieval timber and stone buildings refer to the former street plan as well.



Fig. 4. Remains of the medieval timber paving on Pikk Street.

Jn 4. Keskaegse puitsillutise säilmed Pikal tänaval.
Photo / Foto: Eero Heinloo

On the crossing of the streets Pikk and Vee a steep north–south oriented trench emerged that reached the layer of natural sand. Excavations established only the east edge of the trench (Fig. 3: I), as the bottom and the west edge were not located. This was due to the fact that at the depth of installing the pipeline (ca. 3 m) the filling layers of the moat⁴ could be still documented, while the edge towards the Order Castle probably remained westward of the area investigated in 2011. The wide trench must have belonged to the moat dug on the east side of the party-wall that separated the Teutonic Order's lands from the town. The moat was possibly dug simultaneously with the construction of the party-wall. The moat was filled in the 17th century and the town plans from the end of the 17th century do not depict it anymore.

Timber pavements marking the medieval street front of Pikk Street (Fig. 3: II) could be noted only on the eastern part of the main pipeline. Unfortunately the remains of the pavement were visible only in the north side of the trench (Fig. 4), since earlier installations of pipelines had destroyed most of the cultural layer and the former constructions. It was also possible to establish the existence of stone buildings on the north side of the pavement that marked the north line of the street front. The excavations could not establish the south edge of the pavement (i.e. the width of the pavement), yet in the easternmost end of the main pipeline the pavement was visible both in the north and the south profile of the pit. There the street was measured to be at least 3 m wide. The timber paving was placed slightly diagonally in comparison with the pipeline, i.e. in the east direction the pavement kept towards roadway. The fact that the former street front may not be parallel with the present Pikk Street is also seen on the old town maps (see Fig. 1). The timber pavements are dated to the 15th–16th century.

In addition to the timber pavement of medieval Pikk Street the excavations also established timber paving both in the trenches of the main pipeline and the auxiliary lines at streets crossing over Pikk Street. In the main pipeline a north–south oriented pavement was noted (dated by findings to the 14th century) that coincides with the line of the present Munga Street. References to timber paving were also discovered in the pits dug on the line of the streets Nikolai, former Gildi⁵ and Pühavaimu (Fig. 3: III–IX). Apart from timber pavements that coincided with the street front other pavements that may have been used as pathways within town sections and building lots were noted.

In addition to wooden pavements also timber and stone houses lining the town quarters help us to understand the medieval street plan. The established locations of stone buildings in main trench suggest the west and east border (Fig. 3: XIII–XIV) of the late medieval/early modern market square that generally coincides with the situation described on the 17th century town plans. If or how much the market square has changed its borders over time still remains to be clarified. However, it is certain that the market square was not an empty place, but the discovered timber constructions suggest that

⁴ A brass token (see Fig. 7: 2) was discovered at the bottom of the excavation pit – a late 16th or early 17th century Nürnberg jeton by master Hans Krauwinkel. Identified by Ivar Leimus (AM).

154 ⁵ Gildi Street depicted on Early Modern town plans is presently obscure.

there were temporary light wooden buildings. Based on written records Inna Põltsam-Jürjo suggest that these may have been used for selling fish, meat, bread etc. (2009, 55).

Another discovery apart from the stone buildings around the market square was a stone construction (Fig. 3: XV) at the west end of the main pipeline (at the crossing of the streets Pikk and Vee) that designates a stone building straight at the east ditch-bank of the moat that stood there prior to filling the moat for good. The function of the building remains unclear, but it looks like it stood at some distance from other buildings and thus the supposed street line may have existed east of the building.

The excavations established the total of at least nine different stone buildings (see Fig. 3). However, some later stone buildings have been constructed on top of the earlier stone walls and therefore the number of earlier stone buildings might be bigger.

In addition to the walls of stone buildings remains of wooden buildings were also determined. These were located in the present green area in front of the houses at Vee 4 and Pikk 4, at the south end of the auxiliary pipeline going to Munga Street, at the crossroads of the Pikk and Nikolai Streets and at the rainwater pipeline along Vee Street. A base from field stones (Fig. 3: XVI) discovered at the east part of the main pipeline and soil rich in decayed wood right on top of it also refers to timber buildings. Based on the stratigraphy it can be dated to the end of the 13th or the first half of the 14th century.

Other objects

In addition to timber and stone buildings also three cesspits with timber supports deserve special attention. At least two of the cesspits were used as refuse dumps, the third may also have had the function as a sediment box.

Cesspit No. 1 (Fig. 3: 1) had survived for at least seven layers of logs (diameter of 19–21 cm) and it was placed at the area of market square. Excavations touched the northern part of the pit. The southern part had mainly been destroyed in the course of earlier pipeline installations. The measurements of the pit from the inside were 133 × 135 cm. The timber supports were isolated on the outside with birch bark and blue clay. The pit contained a number of leather strips and other residue from cutting the leather, but also a few intact objects (footwear), side boards of small wooden stave dishes (e.g. a couple of side boards with four wicker grooves) and fragments of pottery. Leather processing residue in the cesspit may refer to a shoemakers shop on the market place.⁶ The find material and stratigraphy dates the pit to the end of the 15th century/16th century.

Cesspit No. 2 (Fig. 3: 2) with the measurements from the inside 150 × 160 cm was filled with 17th century finds. It was built into a stone building that stood on the line of Pühavaimu Street. The bottom of cesspit was made of lime stones tightly placed next to each other. In this case it is also possible that the construction was used for sediment residue, but since no drainage pipes were discovered, it is not possible to either confirm or refute the version.

Cesspit No. 3 (Fig. 3: 3) was discovered in the mid part of the roadway on Pikk Street. It was possible to examine only a quarter of its volume due to the limited space of the excavation pit (Fig. 5). The cesspit lay under the floor of the basement of a stone construction built to the west side of the market square no later than in the 17th century. It contained only wooden finds, including four more or less intact small wooden stave dishes and details of wooden furniture. The finds inside cesspit No. 3 are associated with the 15th century.

⁶ Remains of a alleged shoemakers shop on the market place have been discovered in Tartu (Metsallik & Tiirmaa 1982).



Fig. 5. Cesspit No. 3, discovered in the auxiliary trench at Munga Street.

Jn 5. Munga tänava joonete rajatud kõrvaltrassist avastatud jäätmekast nr 3.

Photo / Foto: Eero Heinloo



Fig. 6. Drainage casks under the 17th century timber floor.

Jn 6. 17. saj puupõranda alla asetatud kuivendusvaadid.

Photo / Foto: Eero Heinloo

Additionally to the cesspits also four wooden casks (Fig. 3: a–d) were found. The casks (Fig. 6) were placed under floor beams of stone building to gather moisture from under the floor.

Cultural layer and finds

The natural soil in the area is a layer of light sand, the upper part of which is a greyish strip of humus from plants. Investigations on the main pipeline on Pikk Street demonstrate that the natural ground on the area between the Vee and Nikolai streets has been relatively level, with the absolute height between 1.85–2.05 m a.s.l. The natural ground in the east part of the pit in the vicinity of Pühavaimu Street was only slightly higher (absolute height 2.00–2.20 m a.s.l.). The sand dunes that are considered to be typical to the natural relief of Pärnu could only be noted in the area between Nikolai Street and the former Gildi Street, where the natural sand layer raises to the absolute height of 2.75 m.

The oldest depositions related to human activities from the third quarter of the 13th century are the sandy layers containing only few organics, which were mostly distinguished in the vicinity of the market square. These demarcate the centre of the early settlement in New-Pärnu. On top of the 13th century deposits dominate mainly organic rich cultural layers of the 14th–15th centuries that largely consist of woodchips. There are also sandy layers poor in organics and containing

fine debris dating from the 16th century. Every now and then the ground there was ‘re-planned’, which can be seen from large light sand layers or surfaces of brushwood. In addition thicker fill layers containing a lot of woodchips could be differentiated. Therefore deposits containing mainly imported ceramics dating from earlier periods may occur on top of the 14th/15th century layers. It is possible that the fill layer is composed from the content of cesspits mixed with chips and other wood, because in addition to ceramics a lot of fragments from leather and timber objects were found e.g. footing and upper parts of leather footwear, side boards of small wooden stave dishes.



Fig. 7. Significant single finds from archaeological excavations in Pärnu. 1 – knife handle, 2 – brass counter, 3 – mould, 4 – fragment of Venetian glass beaker, 5–6 – knives from the 14th–15th centuries.

Jn 7. Pärnu arheoloogiliste uuringute tähelepanuväärsemad üksikleid. 1 – noapea, 2 – arvestuspenn, 3 – valuvorm, 4 – Veneetsia klaaspeekri kild, 5–6 – 14.–15. saj noad.

(PäMu 25187 A 2662: 1484, 3084, 182; PäMu 25341 A 2663: 6, 4–5.)

Photo / Foto: Eero Heinloo, Rünno Vissak

To some extent it was possible to excavate the layers dated to the 17th/18th centuries, mainly at the crossing of the streets Pikk and Vee. These were largely fill layers of the moat and later levelling layers. As a rule modern times layers at the Pikk Street area have been mixed or removed in the course of land planning in the middle of 20th century.

Find material consists of over 3000 items⁷ and includes mainly fragments of imported ceramics and leather. Local pottery and wooden objects are represented to a lesser extent: mainly side boards of small wooden stave dishes, but also barrel lids, turned wooden bowls, furniture details etc. The number of metal objects is fairly small, considering the large number of finds. These are mainly construction nails, but also a few ice nails, a horse shoe, a brooch, scissors, a fish-hook. Also a few bone items like combs, a stilus, a needle case were found. Other noteworthy objects were spindles, a needle, amber beads, fragments of glass beakers, gaming pieces and bowling bones, and a moulding box (see Fig. 7: 3). The most significant single find from Pikk Street is a knife-handle decorated with a human figure (Fig. 7: 1). The figure depicts a man holding a book with a cross. The cross is depicted in a way that refers to the cross of St Andreas. The knife-handle is dated to the end of the 13th century or to the 14th century (Holtmann 1993, 301).

Imported ceramics include a surprisingly large amount of 13th century pottery: 3 fragments of Paffrath-type globular pots, nearly fifty sherds of Siegburg proto- and early stoneware (Fig. 8), dozens of fragments of near stoneware from Southern Lower Saxony and Northern German or Southern Scandinavian highly decorated redware.⁸

⁷ PäMu 25187 A 2662.

⁸ The authors are obliged to Arvi Haak (TLM) for his consultations.

A



B



0 5 cm

Fig. 8. Fragments of Siegburg proto- (A) and early stoneware (B) refer to the earliest settlement history in Uus-Pärnu. Jn 8. Uus-Pärnu vanimale asustusele viitavad Siegburgi proto- (A) ja varakivikeraamika (B) katkendid. (PäMu 25187 A 2662.)

Photo / Foto: Eero Heinloo

The early pottery found at Pikk Street exceeds by far the amount found prior to the 2011.⁹ The big difference between finds from the Pikk Street area and finds from earlier excavations¹⁰ suggests that the centre of the early urban settlement in New Pärnu was located in the vicinity of the medieval market square. At the same time the find material from Pikk Street allows us to connect the development of the New-Pärnu settlement with the third quarter of the 13th century. Investigations at Pikk Street do not refer to a possible prehistoric settlement.

Cemeteries

Archaeological excavations opened up two burial sites. At the crossing of the streets Pikk and Vee there was an 18th century Russian garrison cemetery and at the crossing of the streets Pikk and Nikolai burials from the St Nicholas churchyard were unearthed (see also Malve, this volume).

The cemetery at the crossing of streets Pikk and Vee (Fig. 3: A) dates from the period after the Great Nordic War (1700–1721) and the burials belong to the soldiers and their families of the Russian garrison (Plaat 2011, 19). The Russian Orthodox wooden church Alexander Nevsky was also located close to the cemetery, yet the exact site has not yet been determined. The investigation results suggest that the cemetery extended as far as the east side of Vee Street¹¹, as the renovated sewage pipeline could be considered the south border of the cemetery, since no burials were discovered from south of the pipeline.¹² Although at the depth of 80 cm some burials already appeared, the majority of burials came to light at the depth of 120–130 cm (Fig. 9). The burials have partly been disturbed by several pipelines and cables, the upper parts of at least two



Fig. 9. 18th century Russian garrison cemetery discovered at the crossing of the streets Pikk and Vee.

Jn 9. Pika ja Vee tänava ristis avastatud 18. saj Vene garnisoni kalmistu.

Photo / Foto: Eero Heinloo



Fig. 10. Burial No. 11 disturbed by an earlier pipeline.

Jn 10. Varasema veetrassi poolt lõhutud matus nr 11.

Photo / Foto: Eero Heinloo

⁹ A vast majority of items found prior to the 2011 excavations were discovered from one site – Malmö Street 15 – situated not far from the medieval market square (Russow 2006, 272, app. 2: 25).

¹⁰ Earlier excavations focussed on the south part of the New-Pärnu (Russow 2006, 22, fig. 7).

¹¹ The locals remembered that in 1950s next to Vee Street 4 some human remains were found.

¹² The probable west border of the cemetery was determined by Silja Möllits in 2010 (Möllits 2011, 8).



Fig. 11. Burials at the St Nicholas' churchyard.
 Jn 11. Püha Nikolai kiriku kirikaia matused.
 Photo / Foto: Eero Heinloo

skeletons have been destroyed during the installation of water pipes (Fig. 10), on one occasion the electricity cable runs through a burial. The total of 26 coffins and 40 intact burials¹³ were described at a ca. 10 m long section.

The burials were placed tightly together, sometimes on top of one another. In a few cases the upper burial had damaged the one underneath. This may mean that although some burials had taken place at different times, the majority of burials are simultaneous and that more than one wooden coffin has been placed in the grave. The coffins were made of co-

niferous wood boards. Some smaller coffins, consisting of two parts, were hewn hollow from a single trunk and contained remains of small children. In most cases the skeletons lay with their heads towards west, with one exception (burial No. 9), where the body was placed in the opposite direction. No decorations or other items were found with the burials, exceptionally some coffins contained remains of leather footwear.

Burials were also discovered at the crossing of the streets Pikk and Nikolai (Fig. 3: B), providing us with valuable data regarding the location and size of the churchyard of the medieval St Nicholas' church. According to the investigation results the churchyard extended until the north side of the roadway at Pikk Street, where remains of five skeletons were unearthed (Fig. 11).¹⁴ In addition some burials in the north and east wall of the excavation pit were determined.

It is possible that the west border of the St Nicholas' churchyard was the east profile of the old sewage pipeline that ran along Nikolai Street, where the burials of at least two people were established. No burials were found in the west profile.

The small number of finds makes it difficult to date the burials, yet the few fragments of pottery suggest that the oldest burials may belong to the 16th century and the youngest ones probably to the mid-18th century.

Apart from the burials it was also possible to document the walls of the St Nicholas' church itself in the south-eastern corner of the Pikk and Nikolai streets (Fig. 3: C). The church was demolished in the 1950s to make room for new housing development.

EXCAVATIONS AT MUNGA STREET

The studied area at Munga Street between the streets Pikk and Malmö was located in the western verge of the medieval Munga Street, at the site of medieval and later period buildings and yards. The length of the investigated section was 22 m and depth (from current street level) max 2.7 m.

In the northern end of the trench a 1.5 m wide foundation of a southern wall of a stone building resting on a raft of logs placed upon vertical posts was found. The building was dated to the beginning of the Modern Times and was investigated during the excavations on Pikk Street. Another stone wall on a log raft dating from the

¹³ Identified by Martin Malve (TÜ), see Malve, this volume.

¹⁴ Earlier pipelines had partly destroyed the burials. In addition to *in situ* burials the fill layer at the crossing of the streets Pikk and Nikolai revealed remains of human skeletons, which indicates that burials there had been disturbed.



Fig. 12. Construction with corner post at Munga Street.

Jn 12. Nurgapostiga konstruktsioon Munga tänaval.

Photo / Foto: Rünno Vissak

post-medieval period was located in the southern part of the trench at Munga Street. This was a partially preserved 0.6 m wide foundation from boulders and lime stones joined with lime mortar and resting on two parallel rafts made of hewn logs. The south wall of this building may have been located *ca.* 4 m further to the south, however, several earlier digs had destroyed the cultural layers and constructions.

In the northern part of the trench the study of dense layers containing organics revealed single beams and boards, often with traces of fire, vertical posts of different diameter and remains of braided fences. Some of the discovered logs could have been fragments of various temporary constructions, several horizontal timber details probably belonged to earlier constructions and had been taken to the fill layer by chance in the process of levelling the ground.

In the northern part of the excavated area a hewn rectangular post (14 × 25 cm) was unearthed (Fig. 3: XVIII). The south and west sides of the post displayed grooves, where the ends of the horizontal beams were fastened (Fig. 12). The south ends of the 1.8 m long beams forming the eastern wall of the construction reached a beam at the north side of the log pavement and one of the construction beams was fastened on top of it into a special notch. Hence the building with the corner post construction had existed simultaneously with the pavement south of it, but it could have been erected also somewhat later. Two beams on top of each other had survived from the east wall of the construction. The third had moved from its original location and was placed in the east part of the wall. The fourth fragment of a beam with a similar pivot was located on top of the pavement logs. Only the lowest plank had survived from the north wall of the construction. The east wall of the construction consisted of at least four logs. The lowest log was placed beneath the ground level, the next was fastened to the log on the north side of the already existing pavement



Fig. 13. Upper and lower log pavement at Munga Street.
Jn 13. Ülemine ja alumine palksillutus Munga tänaval.
Photo / Foto: Rünno Vissak



Fig. 14. Pavement of planks and boards at Malmö Street.
Jn 14. Plankudest ja laudadest sillutus Malmö tänaval.
Photo / Foto: Rünno Vissak

and the two upper logs reached *ca.* 30 cm above the surface of the pavement. The remains may have belonged to the construction of a shed.

Approximately 20 cm north of the construction two vertical posts from different periods and at different heights that were located above each other were fixed in the west wall of the trench. These posts may refer to the fact that a fence had been built there repeatedly, which in turn suggests that this may have been a border between plots. This is also supported by the fact that the layers, among them several later sandy levelling layers, on the northern and southern side of the posts were different.

Two timber in-plot pavements from different periods, located on top of each other were unearthed south to the above mentioned constructions (Fig. 3: X). The logs of the upper pavement with an average diameter 8–14 cm were placed in the north–south direction and the width of the pavement was 2.3 m (Fig. 13). After removing part of the later pavement an earlier pavement came to light. It consisted of east–west oriented logs. The location and size of this earlier pavement largely coincided with the later one.

The south ends of the logs of the upper timber pavement lay in bluish grey clay. The layer of the clay extended to a 0.8 m wide area and extended to east–west oriented wooden wall made of horizontal logs (Fig. 3: XIX). The south wall of that large timber building, lower part of which had been deepened into the ground, was found 8.1 m to south. Both walls had a layer of clay isolation on the outer side and had birch bark as isolation between clay and the timber. The inner sides of the walls bore traces of fire. The floor of the room was made of a 5–6 cm thick layer of caked clay. The stratigraphy of the layers suggests

that this construction dated from a slightly later period than the pavement.

A number of randomly laying logs with traces of burning, was discovered at the south part of the excavation at the absolute height of 2.50 m a.s.l. Those referred to a serious fire. Also a number of broken and intact bricks measuring $8 \times 15.5 \times 31.5$ cm were discovered from the same layer.

The older layers of the described excavation were brown or grey and were largely compound of woodchips, fine branches, birch bark, decayed plants, and in some layers also manure. The find material of the studied layers dated mainly from the 14th and 15th centuries. In some occasions upper fill layers contained several fragments of stoneware and side boards of small wooden stave-built dishes that were of an earlier origin than fragments of similar pottery and wooden dishes from the lower layers.



Fig. 15. *Malmö Street log pavement.*

Jn 15. *Malmö tänava palksillutis.*

Photo / Foto: Rünno Vissak

EXCAVATIONS AT MALMÖ STREET

Excavations were carried out also at the pipeline east of Munga up to Nikolai Street, running along Malmö Street. In the northern wall of the excavation the walls of destroyed stone constructions were partly unearthed. These were the outer southern walls of demolished earlier constructions. No north–south directed walls reached the excavation area. Most of the walls remained north of the northern wall of the trench and could be observed only partly.

At the crossing of the streets Munga and Malmö and along Malmö Street a pavement of wider east–west oriented planks and boards was unearthed (Fig. 14). Under and between the planks supporting and fixing logs had been placed. Cable installation had destroyed this construction in the northern part of the excavation.

Below the upper pathway along Malmö Street a log pavement (Fig. 3: XII) came to light within the entire width (0.6 m) of the trench (Fig. 15). Traces of burning could be observed on the upper side of the logs. The layers on top of the paving consisted of several decayed plant remains, branches, wood chips and manure. In the excavation of the auxiliary southward pipeline a support log was fixed, on which the southern ends of the paving logs documented in the main pipeline were resting. The length of the ends of the logs in the auxiliary pipeline was up to 56 cm. The pavement from north–south oriented logs continued also south of the support log and was visible up to 2.98 m. Supposedly the width of the medieval Malmö Street was at least 4 m, possibly up to ca. 6 m.

At places an earlier pavement beneath the upper timber pavement was documented, under which again a brownish thick layer rich in woodchips and manure was found. It contained stripes of leather and some darkened animal bones and only random small pieces of bricks.

Straight to the east of the crossing of the Munga and Malmö Streets a fragment of a small 14th century Venetian glass beaker was found. It was discovered in the brownish layer rich in woodchips and manure beneath the timber paving. The fragment displayed an enamel-coated plant leaf ornament typical of such beakers (Fig. 7: 4). Among finds there is remarkable number of well preserved wooden objects, including fragments of wooden dishes like stave built plates, bowls and beakers, but also two knives from the 14th or 15th century which were used at the table as individual dining tools (Fig. 7: 5, 6).

Comparing the layers investigated on Malmö Street with the excavated layers of the western side of Munga Street, it turns out that the layers immediately on top of and beneath the pavement were very rich in woodchips and other pieces of wood. They also had a higher content of manure, which indicates that such tightly compressed layers were used for levelling the ground and possibly also to isolate the ground from moisture coming from below.

CONCLUSIONS

Archaeological investigations at Pikk, Munga and Malmö Street gave new information about the early development of New-Pärnu, about medieval buildings, the location of the streets and the character of the layers. Among finds there is surprisingly large amount of 13th century pottery and remarkable number of well preserved wooden objects, including fragments of wooden dishes like stave built plates, bowls and beakers. Most of the above mentioned finds have been thrown to cesspits and occurred in the fill layers after the pits were emptied and the contents was mixed with woodchips that resulted not only anaerobic but also watertight layers. The assemblages of the studied layers were also rich in findings of different leather artefacts and production waste that will need further study.

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KESKAEGSE UUS-PÄRNU ALAL TOIMUNUD UURIMISTÖÖD*Eero Heinloo ja Rünno Vissak*

2011. a maist novembrini toimusid Pärnus Pika, Munga, Malmö, Uue ja Pühavaimu tänavate alal ühisveevärgi ja kanalisatsiooni rekonstrueerimise ja laiendamise seotud arheoloogilised uuringud. Kokku toimusid tööd 630 meetril, läbi uuriti 640 m³ pinnast. Tööde tellijaks oli AS Pärnu Vesi ning uuringuid teostasid MTÜ AEG arheoloogid Rünno Vissak, Peeter Piirits ja Eero Heinloo.

Pikal tänaval keskendusid uuringud alale, mis vanimate linnaplaanide (jn 1) alusel moodustas Uus-Pärnu keskaegse linnasüdame. Enne kaevamisi võis oletada, et Pika tn põhjaküljel olevale haljasalale rajatud põhitrass kulgeb kas piki keskaegset tänavajoont või selle lõunaküljel olevat hoonestusfronti, ületades mh omaaegse turuplatsi. Kõrvalliinid olid omakorda planeeritud tänapäevaste Pika tänavaga ristuvate tänavate (Vee, Munga, Nikolai, Pühavaimu ja kunagise Gildi tänav) joontele, mis langevad kokku keskaegse tänavaskeemiga.

Pika tn uuringud sisaldasid nii arheoloogilist järelevalvet kui ka kaevamisi (jn 2). Käsitsi uuritud ladestuste paksus ulatus maksimaalselt kuni 1,8 m, kultuurikihi kogupaksus võis põhitrassis ulatuda kuni 3 m. Risti üle Pika tn sõidutee kulgenud kaevandid olid uuringute mahult mõnevõrra tagasihoidlikumad.

Uuringutega selgitati välja mitmeid linnaehituslikke elemente (jn 3). Nii ilmnes Pika ja Vee tn ristil sügav ja järsuseinaline põhja-lõuna-sihiline kraav. Tõenäoliselt tähistab massiivne kraav ordulinnust linnast eraldanud vahemüüri idaküljele kaevatud vallikraavi. Vallikraav kaotas oma funktsiooni 17. saj, mille järel on kraav lõplikult kinni aetud.

Pika tn keskaegset tänavafronti tähistavaid 15.–16. saj puitsillutisi võis täheldada vaid põhitrassi idapoolses osas (jn 4). Lisaks Pikale tänavale õnnestus nii põhitrassis kui ka kõrvalliinides fikseerida samuti ristuvate tänavate puitsillutisi. Tänavafrontidega kokkulangevate puitsillutistele lisaks tuvasitati ka väiksemaid kvartali või krundisiseseid käiguteid.

Sillutistele lisaks annavad keskaegsest tänavaskeemist aimdust kvartalite servades olevad puit- ja kivihooned. Kokku eristati kaevamistel vähemalt üheksa erineva kivihoone konstruktsioonid ning mitmeid puithooneid. Põhitrassis fikseeritud kivihoonestuse põhjal võib oletada nt hiliskeskaegse/varauusaegse turuplatsi lääne- ja idaserva asukohta, mis üldjoontes langeb kokku 17. saj linnaplaanidega. Turuplats polnud avatud ala, seal leidis lihtsamaid puitkonstruktsioone, mis võivad kuuluda ajutisele kerghoonestusele.

Hoonete ning sillutiste kõrval vääriwad eraldi mainimist kolm puitraketega kasti, millest vähemalt kaks on jäätmekastid, kolmanda puhul pole välistatud ka settekasti funktsioon.

Jäätmekast nr 1 (siseküljelt 133 × 135 cm) paiknes turuplatsil. Rakked olid välisküljelt isoleeritud kasetohu ja sinise saviga. Kastist saadi arvukalt naharibasid ja muid naha lõikamisel tekkinud jääke, aga ka mõningad tervikesemed (jalatsid). Lisaks esines nii väikeste laudnõude küljelaudu kui ka üksikuid keraamikakilde. Kast on dateeritav 15. saj lõpu – 16. saj. 17. saj leidudega jäätmekast nr 2 (siseservast 150 × 160 cm) oli rajatud Pühavaimu tänav joonel olevasse kivihoonesse. Konstruktsioonile olid iseloomulikud tihedalt üksteise kõrvale asetatud paekivid, mis moodustasid kasti põhja. Pika tänav sõidutee keskosast avastatud jäätmekast nr 3 (jn 5) pärineb 15. sajandist. Kast sisaldas eranditult puidust leiuainest sh neli terviklikumat väikest laudnõud ja puitmööbli detaile.

Kastide kõrval fikseeriti ka kolm puuvaati. Turuplatsi lääneservas olnud kivihoone 17. saj põranda-palkide alla asetatud vaatide (jn 6) ülesandeks oli põranda tasapinna aluse niiskuse kogumine.

Piirkonna looduslikuks pinnaseks on hele liivakiht, mille ülaosas on taimestikuga seotuv hallikas huumuseviirg. Pika tänav haljasalale rajatud põhitrassist nähtub, et Vee ja Nikolai tänavate vahelisel alal on looduslik maapind olnud suhteliselt tasane, jäädes kõrgusele 1,85–2,05 m ü.m.p. Kõigest mõnevõrra kõrgemal asetses looduslik maapind kaeve ideaos, vahetult enne Pühavaimu tänavat kõrgusel 2,00–2,20 m ü.m.p. Pärnu looduslikule reljeefile iseloomulikuks peetud luitelisust võis märgata vaid Nikolai ja kunagise Gildi tn vahelises lõigus, kus looduslik liivakiht tõuseb kuni 2,75 m ü.m.p.

Vanimate inimtegevusega seonduvate ladestusena (13. saj III veerand) esinevad vähese orgaanika-sisaldusega liivased kihid, mida ennekõike eristati keskaegse turuplatsi läheduses. See markeerib ühtlasi Uus-Pärnu varase asustuse tuumikala. Varastel ladestustel domineerivad peaaesjalikult 14.–15. saj orgaanikarikkad kihid, samuti 16. saj orgaanikavaesed liivasemad kihid. Iseloomulikuks olid ka mitmed maapinna planeerimised, mis on jälgitavad ulatuslike heledate liivakihtide või hagudetasapindadena. Lisaks eristusid paksemad rohkelt puitlaaste sisaldavad täitekihid, mille tõttu võib 14./15. saj kihtidel esineda ladestusi, mis sisaldavad ajalisel olulisel varasemat keraamikat.

Ennekõike Pika ja Vee tänava ristis õnnestus kaevata ka kivihoonete ümber paiknenud 17./18. saj kih- te (peamiselt vallikraavi täitekihid ja hilisemad tasanduskihid), kuid reeglina on uusaegsed kihid Pika tn piirkonnas sõjajärgsete maapinnaplaneerimistega maha või ümber planeeritud ja segatud.

Leiuaineses (kokku üle 3000 ühiku), moodustavad enamuse importkeraamika ja naha katked. Vähem esineb kohalikku keraamikat ja puitesemeid: väikeste laudnõude küljelauad, kuid ka tünnikaasi, treitud puunõusid, mööblidetaile jne. Samas on suhteliselt kasinalt metalli: peamiselt ehitusnaelad, kuid ka üksikud jäänaelad, hobuseraud, sõlg, käärid, õngekonks. Vähe on ka luuesemeid: luukammid, stilus, nõelakoda. Lisaks väärivad mainimist värtnakedrad, nõel, merevaikhelmed, klaaspeekrite killud, mängunupud ja keeg- likondid, valuvorm (jn 7: 3). Põnevaimaks üksikleiuks on luust nikerdatud inimfiguuriga noapea (jn 7: 1).

Importkeraamika hulgas on tähelepanuväärne 13. saj keskpaiga ja lõpuga seostatava keraamika suur esindatus: 3 paffrathi tüüpi kerapoti kildu, ligi poolsada Siegburgi proto- ja varakivikeraamika katket (jn 8), kümned Lõuna-Alam Saksa varakivikeraamika ning Põhja-Saksa või Lõuna-Skandinaavia pärit- olu ornamenteeritud glasuurkeraamika katkendid. See ületab kordades hulga, mis oli Uus-Pärnust leitud enne 2011. a kaevamisi. Erinevus viitab ennekõike Uus-Pärnu varase asustuse tuumikala paik- nemisele keskaegse turuplatsi vahetus läheduses. Ühtlasi võimaldab Pika tn arheoloogiline leiumaterjal Uus-Pärnu asustuse tekkimist siduda julgemalt 13. saj III veerandiga, samas kui võimalikule muinas- asustusele uuringud ei viita.

Uuringutega satuti ka kahele matusealale – Pika ja Vee tänava ristis 18. saj Vene garnisoni kalmistule (jn 9) ning Pika ja Nikolai tänava ristis Nikolai kiriku kirikaia matustele. Esimesel kalmistul ilmnisid kõrgemal asetsevad matused juba u 80 cm sügavusel, samas kui enamik matuseid tulid nähtavale alates 120–130 cm sügavuselt. Osaliselt on matused saanud kannatada erinevate toru- ja kaablihorustike raja- mise käigus (jn 10). Kokku eristati u 10 m pikkusel lõigul 26 kirstu ning tuvastati 40 tervikmatust.

Matused paiknesid tihedalt teineteise kõrval, aga ka kohakuti. Üksikutel juhtudel oli pealmine matus lõhkunud alumise. Kirstud on tehtud laudadest, samas esineb ka väiksemaid ühest tüvest õõnsaks tahatud kaheosalisi kirste, kuhu on asetatud väikelapse säilmeid. Ehteid või muud esemelist materjali matuste juurest ei leitud, erandiks vaid osades kirstudes esinenud nahkjältsid.

Pika ja Nikolai tänava ristist leitud matused (jn 11) annavad vihjeid keskaegse Nikolai kiriku kirikaia paiknemist ja suurusest. Uuringute alusel ulatus kirikaed vähemalt Pika tn sõidutee põhjaservani, kus puhastati välja viie erineva skeleti osalised säilmed. Võimalik, et kirikaia läänepiir kulges piki Nikolai tänavat, kus vana kanalisatsioonitrassi idaseinas tulid nähtavale vähemalt kahe inimese matused. Üksikute keraamikakildude põhjal võiks vanimaid matuseid seostada 16. saj, hilisemad matused kuulu- vad kirikuaeda toimunud matmist viimasesse faasi ehk oletatavalt 18. saj keskpaika.

Munga tänaval, Pika ja Malmö tänavate vahelises lõigus paljandusid kahe kivihoone müürid ja ühe osaliselt maasse süvendatud puithoone alumised seinapalgid. Samuti fikseeriti Munga tn trassikaaves ühel kinnistul kaks teineteisel paiknevat puitsillutist (jn 13) ning vahetult sillutisega piirneva nurk- postkonstruktsiooni fragment, mis võis olla osa kergemast varjualusest (jn 12). Malmö tänaval leiti lau- dadest ja plankudest tänavakate (jn 14), millest sügavamal paiknes tänava varasem palksillutis (jn 15). Kohati tulid palksillutise eemaldamise järel nähtavale ka varasemad sillutisepalgid. Munga ja Malmö tänavate leiuaines pärineb valdavalt 14.–16. saj. Sealsed kihid sisaldasid samuti palju raielaaste, peenemaid oksid, kohati ka kõdupuitu ja sõnnikut. Tihedates anaeroobsetes kihtides olid hästi säili- nud mitmesuguste puit- ja nahkesemete fragmendid. Ladestuste koostis ning leiuainese iseloom viita- vad sellele, et tegemist on täitekihtidega, kus jäätmekastide sisu on segatud laastude ja vahel okstega. Taoliste kihtide üheks võimalikuks ülesandeks võis olla maapinnas leiduva niiskuse isoleerimine. Laastude ja sõnnikuisaldusega ladestuste rikkaliku leiuainese hulgast väärivad eraldi märkimist Veneetsia 14. saj klaaspeekri kild (jn 7: 4) ja kaks 14.–15. saj laanuga (jn 7: 5, 6).