

## ARCHAEOLOGICAL MONITORING AT MUNGA AND SEPA STREETS IN THE OLD TOWN OF VILJANDI

#### ANDRES TVAURI and KÄRT METSOJA

Tartu Ülikool, Ajaloo ja arheoloogia instituut, Arheoloogia osakond (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51014 Tartu, Estonia; andres.tvauri@ut.ee

#### INTRODUCTION

Munga and Sepa streets lie within the territory of medieval Viljandi. Monitoring was carried out in connection with the renovation of water and sewerage pipelines (Fig. 1). Earthworks were monitored in the area of approximately 375 m²; the depth of the trench for pipelines was up to 2.2 m. In addition, two archaeological trenches were made (Tvauri & Metsoja 2013). The size of trench 1 at the western part of Munga

street was 7.5 m<sup>2</sup> and the size of trench 2 at Sepa street was 10 m<sup>2</sup>. The occupation layers on both Munga and Sepa streets were approximately 1.5 m thick.

At the eastern part of Munga street. in a section between Sepa and Lossi streets, archaeological investigations have been carried out before the installation of water pipeline in 1989 (Valk 1990). In the courtyard of Munga 4, on the northern side of the street, building of a storage shed necessitated a small-scale monitoring work in 2011, during which no medieval layers were unearthed (Tvauri 2011). At Sepa street, archaeological monitoring has been carried out in the southern end of the street where a trench was dug in 2000 to install a power cable (Haak 2005, fig. 3). There was no knowledge about the thickness and character of the occupation layer of the western part of Munga street and most part of Sepa street before the current monitoring.

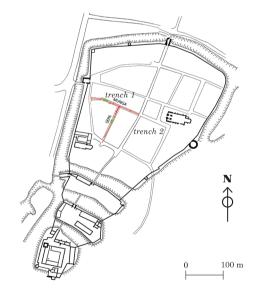


Fig. 1. Trench for pipelines, documented during the monitoring works at Sepa and Munga streets, and archaeological trenches 1 and 2.

Jn 1. Viljandis Munga ja Sepa tänaval arheoloogilise järelevalve käigus dokumenteeritud kaevis ja uurimiskaevandid 1–2.

Drawing / Joonis: Andres Tvauri

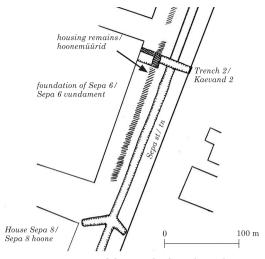


Fig. 2. Location of the trench of pipelines, housing remains and trench 2 at Sepa street.

Jn 2. Torustiku kaevise, avastatud hoonemüüride ja kaevand 2 asukoht Sepa tänaval.

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Fig. 3. Trench 2 at Sepa street. View from the west. Jn 3. Vaade kaevandile 2 Sepa tänaval lääne poolt. Photo / Foto: Andres Tvauri

#### MEDIEVAL STREET PAVEMENTS

Throughout the entire Munga street, one could see layers of red Devonian sand on top of which in most places cobblestone pavement had preserved that had originally covered the entire street within the width of the current street. The pavement appeared 0.5-1 m below the current street level. The layer consisting of cobblestone pavement and its sandy bedding was in some places only 10 cm thick (eastern end of Munga street) while in other parts – in the western end of Munga street and the middle part of Sepa street - it reached 50 cm and had three different layers of sand isolated by layers of soil. Thus, probably in places where potholes occured, pavement stones had been removed, depressions refilled and the pavement restored.

In 1989, during the investigations at the eastern part of Munga street, a stone cannonball fallen onto the cobblestone pavement and having penetrated it was found in the Devonian sand layer. The ball was most likely deposited in the year 1560 when Moscovian troops besieged Viljandi (Valk 1990, 11–12). Therefore, it can be assumed that this pavement, similar of which can be seen in many places inside the medieval town wall of Viljandi, dates from the Middle Ages (see Haak 2003).

Cobblestone pavement was also visible in the southern and middle part of Sepa street (Fig. 2). In trench 2 there were up to five layers of Devonian sand bedding of earlier pavements under the layer of preserved pavement stones. Thus, the cobbles of Sepa street have been removed, the surface refilled and flattened and the pavement restored at least four times. Trench 2 revealed that at least during the use of the last pavement layer there had been a drain running along the central axis of the street (Fig. 3).

The red sand bedding layers below the pavement were empty of finds. In the filling layers between sand beddings a few sherds of stoneware and, from the fill layer underneath the sand bedding of the youngest pavement layer as a most remarkable artefact, a fragment of glass beaker decorated with polycrome paintings (Fig. 4) were found. In Estonia, the largest number of fragments of such beakers, manufactured probably in Venice in the 13th – 14th centuries, has been found in Tartu. A few fragments have also been found in the medieval town of Haapsalu, the suburban area of medieval Tallinn and in the castles of Viljandi and Otepää and the hill fort of Vooremäe at Pikasilla (Kull 2010). The fragment found at Sepa street was the first from the territory of the medieval town of Viliandi.



Fig. 4. Fragment of a medieval decorated glass beaker from trench 2 at Sepa street.

Jn 4. Keskaegse maalingutega klaaspeekri kild Sepa tänava keskosast kaevandist 2.

(VM 11458 A 561: 281.) Photo / Foto: Andres Vindi

The layers immediately on top of the pavement layer contained abundant finds dating from the second half of the 16th century or the beginning of the 17th century. Fragments of earthenware pots of Pskov origin, characteristic to the second half of the 16th century, sherds of Russian glazed greyware and an iron heelpiece were found. In addition, fragments of glazed redware, glazed stove tiles and window glass were obtained. Thus, the pavement in question got buried either during the events of the Livonian War, after Moscovian troops conquered Viljandi in 1560 or some time in the beginning of the 17th century during the Polish-Swedish Wars.

#### REMAINS OF MEDIEVAL BUILDINGS

At Munga street, below the pavement and bedding layers in the up to 60 cm thick dark brown organic-rich medieval occupation layer, several logs and stakes rammed into the ground were found. However, the logs were not bound with any joint and did not form any construction.

The only stone construction unearthed at Munga street was a granite stone base of a stove and a row of stones (possibly a base for a wooden wall) connected to it, found in trench 1 (Fig. 5). Below the stove-base and contruction attached to it, the aforementioned medieval occupation layer continued. The composition of the layer deposited on the natural ground and the stove-base and remains of logs within this layer demonstrate that at least before the middle of the 14th century there was no street or road on that area, but a courtyard and some building instead.

In the middle part and on the western side of the Sepa street the front walls of stone buildings were unearthed, observable approximately in the length of 25 m (Figs 1 and 2). The profile of trench 2 reveals that the stone building on the western side of Sepa street was erected only after the first (i.e. lowest) street pavement was



Fig. 5. Trench 1 at the western part of Munga street. View from the east.

Jn 5. Vaade kaevandile 1 Munga tänava lääneosas ida poolt.

Photo / Foto: Andres Trauri

built. Out of five pavement layers, four were younger than the house, and were laid right against the wall.

As revealed during monitoring works, the northern end of Sepa street, reaching 18 m from the southern edge of Munga street, had been covered with housing in the Medieval Period. No pavement layers were discovered here. Instead, remains of a 50 cm thick brick wall made of 9–10 cm thick bricks running along the southern border of Munga street were unearthed. Remains of a hypocaust with heat storage and a clay floor were also found. Whether the latter two were related to the aforementioned brick wall remained unclear.

# PRE-PAVEMENT MEDIEVAL OCCUPATION LAYER

Throughout the entire Munga street, there was a medieval occupation layer that had deposited before the paved street was constructed. The layer was up to 60 cm thick and consisted mainly of dark brown soil, dampish and rich in organics,

containing small fragments of bricks, charcoal and animal bones. Pieces of different wooden dishes, and fragments of leather shoes, along with wood shavings, hazelnut shells, and even hay had preserved in the layer. Artefacts can be dated from the middle of the 13th to the middle of the 14th century.

Earthworks revealed pottery production waste in the western end of Munga street that had deposited immediately on top of natural soil surface. Sherds of earthenware, broken and melted during firing, stem from the mid-13th century pottery workshop on the western side of Pikk street, some 50 m south of the current find spot. The pottery workshop has been excavated archaeologically, both remains of kilns and pits containing production waste have been investigated (Tvauri 2000).

At Sepa street, the soil deposit below pavement layers was in average only around 20 cm thick (in trench 2 the thickness was up to 50 cm) and contained considerably less finds than the one at Munga street. Most numerous among the finds were sherds of earthenware manufactured in the nearby Pikk street pottery workshop. As the soil was dry at Sepa street, no artefacts of organic material were obtained from there. Excavations revealed that south of trench 2, in front of Sepa 6 building there was no occupation layer deposited before the street was paved. An approximately 20 cm thick layer of dark soil found there laying on top of natural sandy loam consisted most likely of natural black earth and a few occasional potsherds.

Natural soil throughout the investigated area was grayish or yellow sandy loam. In some places, there was a layer of (natural?) dark soil, approximately 10 cm thick with no finds on top of natural sandy loam. The natural ground surface descends towards southeast: at the western end of Munga street the ground surface is at 83.60 m from the Kronstadt zero-level, at the eastern end of Munga street at 82.40 m, and at the southern part of Sepa street only at 82.15 m.

#### CONCLUSIONS

Archaeological monitoring works at Munga and Sepa streets provided new information about the street network and buildings of medieval Viljandi.

We learned that Munga street in its current location had existed already in the 14th-16th centuries. The street had been paved with cobblestones and pavements had been renovated repeatedly. Throughout the entire street, the youngest of the pavements, in use in 1560, had been preserved. An organic-rich occupation layer dating from the second half of the 13th century or from the 14th century was revealed under the pavement layers of Munga street, containing the base of a stove and remains of other constructions.

A medieval cobblestone pavement, similar to the one documented on Munga street was found at the southern and central part of Sepa street. The northern end of contemporary Sepa street, however, was covered with construction during the Medieval Period; here a brick wall, a hypocaust with a heat storage and a clay floor were discovered. In additon, remains of stone buildings were found from the western side of Sepa street. A medieval occupation layer below pavement layers was only 10–20 cm thick and poor in finds. It appears that there were no houses at Sepa street before the construction of the paved street probably some time in the 14th – 15th centuries.

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### ARHEOLOOGILINE JÄRELEVALVE VILJANDI VANALINNAS MUNGA JA SEPA TÄNAVAL

Andres Tvauri ja Kärt Metsoja

Arheoloogiline järelevalve Viljandi keskaegse linna alal, Munga ja Sepa tänaval toimus seoses vee- ja kanalisatsioonitorustike renoveerimisega (jn 1). Järelevalvet tehti u 375 m² suurusel alal. Lisaks rajati kaks kaevandit: Munga tänava lääneosas paiknenud kaevandi 1 pindala oli 7,5 m² ja Sepa tänaval paiknenud kaevandi 2 pindala oli 10 m². Kultuurkihi paksus oli enamasti umbes 1,5 m.

Vaadeldavas piirkonnas on varem suuremahulisi arheoloogilisi uuringuid tehtud Munga tänava idaosas. Enne 2013. a järelevalvet puudusid andmed kultuurkihi paksuse ja koostise kohta Munga tänava lääneosast ja enamiku Sepa tänava alalt.

Kogu Munga tänava alal oli jälgitav punase liiva kihistus, mille peal oli enamasti säilinud munakivisillutis, mis on katnud Munga tänavat selle praeguses laiuses. Kihistus oli 10–50 cm paksune, koosnedes ühest kuni kolmest mullaga eraldatud liivakihist. Varasemate uuringute põhjal on teada, et see, linnamüüriga piiratud Viljandi alal paljudes kohtades jälgitav sillutis pärineb keskajast. Sillutis oli alles ka Sepa tänava lõuna- ja keskosas. Sepa tänava kaevandis on sillutise all jälgitavad neli varasema sillutise liivapadjandit. Vähemalt kõige viimases sillutises on piki Sepa tänava keskosa kulgenud sadeveerenn (jn 3).

Sillutise alused liivakihid olid leiutühjad. Vaid sillutiseliiva vahelistest täitekihtidest leiti mõned kivikeraamiliste kannude killud. Tähelepanuväärseimaks leiuks on värvilise maalinguga klaaspeekri kild (jn 4), mis oletatavasti pärineb Veneetsias valmistatud nõust ning on esimene seda tüüpi leid Viljandi linnast. Sillutise pealne kiht sisaldas rohkesti leide 16. saj teisest poolest. Seega on sillutis mattunud kas Vene-Liivi sõja ajal pärast Viljandi vallutamist moskoviitide poolt 1560. aastal või 17. saj alguses Rootsi-Poola sõdade käigus.

Munga tänaval paljastus tänavasillutise aluses keskaegses kihis palke ja maasse rammitud vaiu. Leitud palgid polnud omavahel tapiga seotud ega moodustanud konstruktsioone. Ainus kivikonstruktsioon oli Munga 4 hoone ees kaevandis avastatud maakividest ahjualus ja sellega seostatav kivirida (jn 5), mis võis olla osa puithoone vundamendist. Looduslikule aluspinnasele ladestunud kihi koostis ja selles leiduv ahjualus ja palgijäänused näitavad, et enne 14. saj keskpaika ei olnud sellel kohal tänav või tee, vaid hooviala ja hooned.

Sepa tänava keskosas avastati tänava lääneküljel kivihoonete esiseinte müürid, mis olid jälgitavad u 25 m pikkuselt (jn 2). Kaevandi 2 profiili põhjal otsustades on Sepa tänava läänekülje keskaegne kivihoone või hooned rajatud pärast Sepa tänava sillutamist esimese munakivisillutisega.

Selgus, et keskajal on olnud hoonestatud ka Sepa tänava põhjaots alal, mis ulatub Munga tänava lõunakülje joonest 18 m lõuna poole. Siin ei avastatud tänavasillutise kihte, küll aga tellismüüri jäänus Munga tänava lõunaserva joonel, kerishüpokaustahju jäänus ning savipõrand.

Keskaegsete sillutiste alused kihistused olid Munga tänaval kuni 60 cm paksused ja koosnesid peamiselt pruunist orgaanikarohkest mullast, mis mh sisaldas väikeste laudkausikeste tükke, treitud puittaldrikute katkeid, nahkjalatsite katkeid, laaste, heina jm. Sellest kihist saadud leiumaterjali võib dateerida ajavahemikku 13. saj keskpaigast kuni 14. saj keskpaigani.

Mainimist väärivad Munga tänava lääneosas looduslikult maapinnalt leitud lihtkedrakeraamiliste savinõude valmistusjäägid: põletusel punsunud savinõukillud. Need pärinevad oma leiukohast viiekümne meetri kaugusel Pika tänava lääneküljel 13. saj keskpaigas tegutsenud keraamikatöökojast.

Sepa tänaval oli sillutisekihtide all lasuv orgaanikarohke mullakiht keskmiselt vaid paarikümne sentimeetri paksune (kaevandi 2 alal kuni 50 cm paksune) ja sisaldas märgatavalt vähem leide kui Munga tänaval. Arvukaimaks leiuks olid lihtkedrakeraamiliste pottide killud. Kaevandist 2 lõuna pool polnud enne tänava sillutamist kultuurkihti üldse ladestunud.

Looduslik aluspinnas on kõikjal uuritud alal hallikat või kollakat tooni saviliiv. Kohati oli sellel säilinud kümmekonna sentimeetri paksune looduslik mullakiht, mis leide ei sisaldanud.