FRONTIERS OF THE
ROMAN EMPIRE – THE DANUBE LIMES
Volume I – Nomination file chapters 1-9

World Heritage Nomination
Austria | Germany | Hungary | Slovakia
2.a. Description of Property

2.a.1. General description

The Frontiers of the Roman Empire – The Danube Limes is located within the territories of the States Parties of Germany, Austria, Slovakia and Hungary. It constitutes the northern and eastern boundaries of the Roman provinces of Raetia (eastern half), Noricum and Pannonia, running for 997 km along the river Danube, from Bad Gögging (ID No 1) in Germany to Kölked (ID No 98) in Hungary (DE 205 km, AT 345 km, SK 30 km, HU 417 km). Based on the systematic military occupation of the Danube banks which occurred during the Flavian dynasty (69–96 AD) the linear border defense system emerged and was developed. The first permanent legionary fortresses were established in the second half of the 1st century in Vindobona (Wien; ID No 30), Carnuntum (Bad Deutsch-Altenburg; ID No 31), Brigetio (Komárom; ID No 45) and Aquincum (Budapest; ID No 70a). Due to the favourable geographic situation in Raetia and Noricum only auxiliary troops had to be stationed at that time, but during the Marcomannic war (167–180 AD) both provinces got a legion in Castra Regina (Regensburg; ID No 6) and in Lauriacum (Enns; ID No 14).

As part of that system the Romans erected a continuous chain of military installations – legionary fortresses, forts, fortlets, watchtowers and in later periods so-called burgi, counter fortifications and bridgeheads as well as associated structures – with a distance of usually 10 to 30 kilometres in order to control traffic on the southern bank of the river and social interactions along and across the river. The neighbours from Eining to the Danube band in Hungary were German tribes, and in the Hungarian Lowland the Iranian Sarmatians. The connections between Rome and these barbarians were diplomatic treaties, and according to the power relations at times peaceful or hostile.

The most distinctive feature of a river frontier of course is the river itself. Over the last 2000 years the river beds often changed courses. These changes are of geological or hydrological reason; also the Coriori effect played a decisive role if the river ran in N–S direction which is the case in Hungary. Here some forts have been destroyed from the Danube partly or totally. Beginning with the 19th century, river regulations have caused significant changes.

The topographically preferred sites were often places of settlement in later times. There are only a few Roman military or civilian sites which remained completely free of later building activity. The Frontiers of the Roman Empire – The Danube Limes started at Bad Gögging (DE; ID No 1), a health spa for the legionary soldiers of Regensburg. At Eining it was connected with the Upper German-Raetian Limes in the existing WHS “Frontier of the Roman Empire”. Most of the following stretch of the frontier faced a densely wooded area without much habitation. This probably explains why the number of military posts down to Wallsee (AT; ID No 16) was initially limited.

Due to the alternation of gorges and wide floodplains the location of the military installations varies, but most were built in high positions, which often – but not always – safeguarded them against flooding. However, with the intention to overlook large section of the meandering river many of the forts positions were on the undercut-slopes. This resulted sometimes in long-term severe erosion. Several forts were established at river confluences and other crossings of trade routes, like Künzing and Passau. The two provinces Raetia and Noricum (DE and AT) have a high proportion of fortlets and – in Noricum largely Late Roman – watchtowers. Two legionary fortresses, at Regensburg (ID No 6) and Enns (ID No 14; with short-lived predecessors at Eining-Unterfeld and Albing ID No 15, respectively), owe their origins to the Marcomannic Wars of AD 166–180. Harbours have been attested at sites including Straubing (ID No 7), which may have served as a secondary base of the Pannonian fleet, and Regensburg (ID No 6). From Klosterneuburg (AT; ID No 29) at the boundary between Noricum and Pannonia the Danube runs through the wide Vienna Basin until it reaches the Little Carpathians at Devin near Bratislava (SK). This fertile area was mainly secured by the legionary fortresses of Wien (ID No 30) and Carnuntum (AT; ID No 31) at its western and eastern ends. The latter was located close to the crossing of the ancient Amber Route.
From Bratislava-Rusovce (SK; ID No 32) to Győr Káptalandomb (HU; ID No 38), the military posts were laid out along the Little Danube, the southerly of several parallel channels. The mentioned forts protected the ends of this inaccessible and strongly winding river section. Somewhat further downstream the military stronghold of Komárom-Szőny (HU; ID No 45) marks another important river crossing, which played a specific role in the Marcomannic Wars. Across the river a counter fort is located at Iža (SK; ID No 46), and both military installations are surrounded by many temporary camps.

From Komárom-Szőny (HU; ID No 45) to the next legionary fortress at Budapest/Aquincum (ID No 70a) the Danube cuts through the outskirts of the North Hungarian Mountains. Here, and especially in the Danube bend, the number of military posts was initially limited. Due to external threats it was only in the Late Roman period that this section was secured with large numbers of watchtowers and some fortlets, bridgeheads and outposts.

Beyond Budapest the Danube enters the Great Hungarian Plain. In view of the relatively close spacing of the four legionary fortresses Vindobona (ID No 30), Carnuntum (ID No 31), Brigetio (ID No 45) and Aquincum (ID No 70a) (approximately 60–100 km) it may astonish that the distance to the next legionary base, at Belgrade (already in Moesia, RS), is over 400 km. The reason is that the latter limes section was not too dangerous, perhaps due to inaccessible areas between the Danube and the river Tisza to the east. Until the confluence of the Drava River near Osijek (HR) the Danube has a twisting course. In the case of parallel channels the military posts were invariably built along the most westerly one; occasionally additional posts or bridgeheads were built further east at a later stage.

Throughout the Little and Great Hungarian Plains the riverbank is strewn with some 200 watchtowers. As far as their date has been established most belong to the Late Roman period, but some are definitely earlier. The towers varied in size, construction and position, with only few distinctive groups. Some were clearly linked to the frontier road while others occupied high positions or river bends. In the 2nd and 3rd centuries counter forts were established on the left side of the Danube opposite legionary fortresses as at Komárom/Komárno (Brigetio – Iža, ID Nos 45 and 46) and possibly Carnuntum. In the 4th century opposite the legionary fortress at Budapest a counter fortification was built (Aquincum – Contra Aquincum, ID Nos 70a and 71). Additionally bridgeheads were built in pairs on both sides of the river in Pannonia Valeria, like at Szigetmonostor-Horány (ID No 67a) and Dunakeszi Dunasor (ID No 67b).

Here and in the following chapters we distinguish component parts as the individual site(s) at one location from component which comprises two or more component parts at one location.

2.a.2. System of the Danube river frontier

Part of the very essence of a linear frontier system is that it forms a continuous line. In general, artificially constructed barriers have no major problems to demonstrate this linearity. The fortification system itself with its structural details (walls, palisades, rampart/ditches) provides the necessary link between individual monuments (watchtowers, fortlets, forts). Even forts which are placed behind the active demarcation line stand in a fairly obvious relationship to the outer frontier installations.

River frontiers lack those most obvious connecting elements, except of the Limes Road and very often a chain of watchtowers. Although the rivers form a linear obstacle, which connects the individual monuments, the line itself is not easy to define and to present. Forts along the Danube frontier are 10 to 30 km apart, and inter-visibility often does not exist. Watchtowers, the intermediate elements in the archaeological landscape, are not always easy to detect.

There are long stretches of the Danube frontier where we do not know much about watchtowers along the river, especially those of the earlier Roman Empire, when they were mainly constructed of timber. Late Roman examples are easier to discern because of their massive stone construction. More than 200 watchtowers, mostly stone towers, are recorded along the Danube banks, especially in Hungary, where they form a very tight defence system.

A most distinctive feature of the Danube frontier is the river itself. Over the last 2000 years the river beds often changed courses. Because of such changes and floods, many sites on the lower grounds were destroyed by water action over time. In the 19th century, the Danube underwent a number of regulatory
measures, which often did not help to preserve the monuments. On the other hand, quite a number of them was detected and investigated through those activities. In the last decades an even larger threat came from the water power stations with their dams and reservoirs. Bearing these changes of river course in mind it becomes evident why a lot of military installations seem to be detached from the river nowadays: originally there were located along the southern respectively western bank of the floodplain or earlier riverbeds (in particular at the Little and Great Hungarian Plains). Distinctive features of the Danube frontier are forts, fortlets and bridgeheads on the left side of the river. Only few are known in the earlier Roman frontier system, such as the counter-fort of Iža (SK; ID No 46) and counter fortification in Budapest (HU; ID No 71). They were constructed when Roman political decisions led to planned advances into Barbarian territory. No permanent bridges which crossed the Danube are known yet. In late Roman times more bridgeheads were established in Pannonia to control, and more so to protect, the crossing points and the traffic on the river. Occasionally forts like Göd (ID No 66) were positioned in quite a distance from the river in the Barbaricum, but never finished. These installations were heavily fortified and several of them survived quite well on the left side of the Danube in Hungary.

The legions as backbone of the Roman army were generally placed strategically, to control routes used by the army, river crossings or potential invasion routes. An important aspect of their garrison was the potential of the surrounding area to feed the soldiers and the camp-followers. In between these military hubs auxiliary units were spread along the river. In some areas, such as along the long stretch of the Danube through Lower Pannonia facing the Great Hungarian Plain, the forts were more or less equally spaced, about a day’s march apart that is 22 km. Elsewhere, their locations were related closely to the local terrain. An important part of the defence system was the Pannonian fleet patrolling up and down the Danube. However, communication and distribution of supplies lay also in its responsibility. Over land most of the individual military installations and other ancillary features were linked by the Limes Road, often set back into areas unthreatened by the changing course of the river. Watchtowers and fortlets and sometimes also forts, are connected to that supra-regional road by secondary roads.

2.a.3. Elements of the Danube river frontier

Description and development of the elements of the Frontiers of the Roman Empire – The Danube Limes

The border defenses of the river frontier (ripa) were gradually built up, consisting of legionary fortresses (castra legionis) between which forts (castella auxiliariorum) were constructed for auxiliary troops. The sections between these forts were supervised by watchtowers (burgus) or signal towers. The legionary fortresses and forts were linked by the Limes Road running along the right bank of the Danube. At some legionary fortresses also counter-forts or counter fortifications were built on the other side of the Danube like Iža (ID No 46) for Komárom (ID no 45), or at Budapest (ID Nos 70a and 71) and probably across Carnuntum (ID No 31). Bridgeheads erected in the late Roman period on both sides of the Danube – usually in pairs – served as fortified river ports. They were also part of the border defense and enabled foreign commerce.

Legionary fortresses

The most important Roman military troops were the legions of Roman citizens, each consisting of 5500–6000 soldiers. Their garrison, the legionary fortress (castra legionis) measured about 400 × 500 m and were in the shape of a playingcard, surrounded by a wall and rampart as well as ditch(es), with four gates at the end of its main roads. In the centre at the crossing of the two main roads the headquarters (principia) were situated, flanked by the house of the commander and high ranking officers and other buildings (baths, granaries, hospital, workshops). Surrounding, but especially in the front and back parts
of the legionary fortresses the barracks for the soldiers were built. In the 1st century AD the defences were constructed as earthen ramparts with a timber front and timber towers/gates. Beginning from the 2nd century these were changed into stone fortifications. In the 4th century some reconstructions and modifications were executed. Protruding U-shape side towers and fan-shaped corner towers were built and a new ditch dug in a greater distance (9–15 m) from the wall. The protecting walls were heightened, and in the place of the earthen wall on the inner side of the wall rows of buildings was erected, partly for incoming civilians. Some legionary fortresses like that of Budapest (ID No 70a) and Komárom (ID No 45) were replaced then by bigger fortresses, established by the side of the earlier fortress. These fortresses did not have the regular structure and form of the earlier ones, underlining their composite use by the army and the civil population.

While both in Raetia and Noricum one legion was stationed only from after the middle of the 2nd century onwards, there were four legionary fortresses in Pannonia, three on the northern, German front and one on the eastern, Sarmatian front.

**Auxiliary forts**

Non-citizen auxiliary troops both mounted and on foot supported the legions. They comprised usually 500, sometimes 1000 soldiers. Their forts were similar in layout to those of the legions but much smaller. These forts measure 100–250 by 140–350 m accordingly. As building method and material for the forts earth and timber was used up to the middle and second half of the 2nd century when they were rebuilt in stone, too. Auxiliary forts were established along the Danube in an average distance of 15–20 km, forming the core of the chain of serveyance posts. However, we still do not know the exact positions of some of the auxiliary units which would be of crucial importance to complete that chain at the Danube. As a special form can be seen Iža (ID No 46) as it is positioned on the other site of the Danube as a counter-fort for legionary fortress of Brigetio (ID No 45). The auxiliary forts were used and rebuilt almost without exception in the 4th century. The main characteristics of their modernization were higher walls, with buildings at the inner side of them, protruding towers at the sides and the corners, new ditches in a greater distance from the wall. The latest development of the auxiliary forts took place at the end of the 4th century, as a lack of soldiers resulted in a reduction of the units and the size of their forts down to about 30–40 × 40–50 m.

**Temporary camps**

Temporary camps could be practice camps without any further use, but also marching camps for troops during military campaigns. Usually, they were not used for a long time. At present more than 40 temporary camps around Komárom (ID No 43a-j) and on the other side of the Danube testify outstandingly the Roman military strategy. Most of them were built by the troops concentrated here in preparation for an offensive against the Marcomanni in the seventies of the 2nd century by Marc Aurel (161–180 AD). The camps usually were surrounded only by a ditch and a low earthwall trown up with the spoil from the ditch. They also can be distinguished by their special gates (clavicula). Tents served as accommodation of the troops.

**Fortlets**

Fortlets – small forts – were built both in the 1st century and in the 4th century for parts of military units and special purposes. At Weltenburg (ID No 3) an early Roman fortlet was identified. Some new fortlets were built in the 4th century like in Passau-Boiotro (ID No 9b) or Visegrád-Gizellamajor (ID No 58). The first one has an irregular shape, the other is quadrangular. They are quite small, 30–40 m long side walls and fan shape corner towers. There are buildings, a row of housing and sometimes a bath at the inner side of the defensive wall, leaving a free space in the middle.
**Watchtowers and burgi**

The watchtowers and signal towers were quite small isolated structures (5–10 m long side walls) sometimes surrounded with a ditch. When they were built with wood they hardly left any traces on the surface, but stone structures can be observed in their ruinous state. Along the *Frontiers of the Roman Empire – The Danube Limes* there are only a few built in the 1st and 2nd centuries, but from the 4th century we know many, sometime called *burgus*, in particular from the Hungarian section of the Danube Limes (more than 110) showing a new level of supervision of the Danube.

The conformity in size of the watchtowers from the time of Valentinian deserves attention. This could only have occurred if the military was working from centralized plans. The length of the ditches is often 25–26 m, or double that, about 52 m. Presumably, this corresponds to 100 or 200 feet corresponding with the approximately 27 cm units that were generally used here. The situation is similar in the case of wall thickness, the common 1.05 m or 1.35 m thickness allows us to conclude a value of 4 respectively 5 Roman feet.

In many cases, where the Limes Road runs right along the bank of the Danube, such as for a long stretch in the area of the Danube Bend, it is impossible to distinguish between watchtowers and signal towers. Where the road swings away from the Danube, often a second row of watchtowers appear. In these cases watchtowers erected on the banks of the Danube or at the edges of plateaus can be differentiated from the signal stations, generally on the inner side of the Limes Road. The two kinds of towers, however, do not typologically differ from one another, or only do so to a minimal extent.

**Fortified storage bases**

A special type of fortifications is a group of defended storage bases in the inland of Pannonia. They can measure from 100–400 × 150–500 m. The one on the Danube, Tokod/Tokodaltáró Várterek storage base (ID No 50) is nominated. It was built in the middle of the 4th century looking like an auxiliary fort, but inside it was covered with storage buildings for food and equipment.

**Counter fortifications**

In the 4th century, some new fortlets were built on the other side of the Danube like Contra Aquincum in Budapest (ID No 71). Their common characteristic is a quadrangular form with fan shape towers at the corners. They served as positions to secure the crossing of the river Danube.

**Bridgeheads**

Also in late Roman times bridgeheads were built on both sides of the Danube. Usually with a central tower-like building, two side towers and walls projecting into the river the provided secure landing places for boats, and in peacetime trade centres with the barbarians.

**Hillforts**

A late phenomenon is the retreat of some installations onto hills close to the Danube. The erection of hillforts clearly demonstrates the increasing number of dangerous barbarian attacks. These fortifications do not follow the old regular shape of the forts but are adapted to the form of the plateau of the hill. Such fortifications were found e.g. in Esztergom (ID No 53a) and in Pilismarót (ID No 56).

**Limes Road**

In order to connect the military installations along the Danube a continuous road was built. It usually ran as close as possible to the river on its right bank of the river. As one of the main connector in the Roman Empire, running from the North Sea to the Black Sea it was one of the most thoroughly constructed Roman military roads anywhere. Long stretches have been identified or presumed on the basis of the analysis of...
aerial photographs and data gained during the course of field work. It was constructed by the soldiers according to designs by the military’s surveyors (gromaticus), consisting of long straight sections. Milestones provided information on the distance from the legionary fortresses. The Limes Road was often paved with stone slabs in the fortresses, forts and civil settlements but covered with gravel in the countryside. Usually, ditches on the side were responsible for drainage.

Road stations

Not only towers but also road stations were built along the Limes Road. The Roman itineraria (lists of roads with place names) name them mansio - resthouse. Road stations were identified e.g. at Gönyű Nagy-Sáros-dűlő (ID No 40) and Bátaaszék Kaniszsa-dűlő (ID No 94). They have a big courtyard to give place to wagons. Rooms for the guests were built along the inner side of the perimeter wall.

Civil settlements

The military units did not move and stay alone. They were followed by civilians who became interconnected with the soldiers. These people – camp-followers – lived in civil settlements (canabae, vicus) next to the fortresses and forts. Here merchants, craftsmen and other people offered things and services to the soldiers, veterans and the soldiers’ families settled, sometimes including indigenous people. These settlements contained houses and workshops, baths and shrines, sometimes beautiful villas. Often they were larger than the fortresses or forts. Usually, their layout was oriented along the roads leading to and from the military installations. At the turn of the 3rd century AD the canabae of some legionary fortresses got the rank of a Roman civil town as municipium and colonia.

Next to the civil settlements of most legionary fortresses additional settlements developed outside the direct military jurisdiction, usually some 2.5 km beyond the lines of the fortifications, like at Budapest (ID Nos 69a and 70a-c) and Carnuntum (ID No 31). They had all the installation of a Roman town and regularly received the rank of municipium and colonia earlier than the settlements next to the fortresses.

Governor’s palace

Not far from the legionary fortress of Budapest (ID No 70a) in the area of the civil settlement the governor’s palace was built on the shore of the Danube. This superb palace with many mosaics and other decoration had an extension of 120 × 120 m. It possessed its own harbor. At Carnuntum (ID No 31) the governor’s palace is assumed close to the fortress on its western side, again close to the river.

Amphitheaters

Originally established in funeral contexts gladiatorial games became important to entertain the masses in the Imperial period, civil or military. Amphitheaters with an oval arena and seating stalls for a large number of spectators were regular features in the civil settlements next to legionary fortresses. There were two amphitheatres in Budapest (ID Nos 69a and 70c) and Carnuntum (ID No 31), both in the canabae and in the civil town. The reason is that the two civil settlements had different structures and legal organizations. An amphitheatre built entirely in timber next to the auxiliary fort of Künzing (ID No 8) is an exception at this type of military installation, perhaps used only once for a special occasion.

Brick kilns / pottery kilns (military workshops)

The soldiers had the task of building their own constructions. A lot of tiles were needed for the baths and from the 2nd century onwards, as gradually all buildings of the fortresses and forts were made of stone, a high demand for roof tiles arose. Some units had workshop for brickmaking, and their tiles which were burnt in special, quadrangular kilns as at Dömös (ID No 57) and Dunaszekcső (ID No 97), were distributed over large areas. Other soldiers were engaged in pottery production. Therefore, pottery kilns, as in Enns (ID No 14d) and Dunaújváros (ID No 78a), were an important aspect of the infrastructure of the frontier.
Sanctuaries

Sanctuaries to worship the gods were established and altars dedicated to them were erected in all possible places. Higher ranking officers with their regular high income were the most important dedicants. The main gods and goddesses, Iuppiter, Iuno, Minerva and first of all the deified emperors were honored in the centre (forum) of the settlements, others like Mithras, Isis or Iuppiter Dolichenus only in their outskirts. The Mithras shrine in the legionary fortress of Aquincum (ID No 69a) is an exception, because it was built in the privat house of an officier. Sanctuaries could be built also outside of the settlements like that of Eining-Weinberg (ID No 2).

Early Christian installations

Special forms of sanctuaries are early Christian installations. After the end of the persecutions of the Christians at the beginning of the 4th century AD, Christianity became the state religion of the Roman Empire with the Edict of Thessalonica in 380 AD. From this time onwards more and more Christian sanctuaries were established. The early Christian Basilica of Enns – St. Laurenz (ID No 14c) is situated in the centre of the Roman civil settlement and was a bishop’s church. Therefore, it is an evidence for early Christianity at the Danube Limes in the 4th and 5th centuries AD. In Intercisa (ID No 78) a late Roman apsidal building seems to be another Christian church.

Harbours

All forts along the Danube must have had a harbor as well, but most of them are not known, except for Straubing (ID No 7) and in front of the governor’s palace in Aquincum (ID No 70a). At other places their existence can be suspected as landing places for the ships of the fleet and for the supply were along the Danube were necessary. In the 4th century regular connection across the water is attested by the bridgeheads, which are fortified landing places.

Cemeteries

To separate the living from the dead areas for cemeteries were dedicated from the beginning of a military site with a certain distance to them, leaving space for the settlements in between. Over the time hundreds, at legionary fortresses thousands of deceised soldiers and civilians were interred at the cemeteries, in the first centuries mostly cremated, later as inhumations. Often the graves were marked by stones, which in late Roman times often were collected and reused in the foundations of installations strengthening the fortresses and forts.

Health spas

For the recuperation of sick and injured legionary soldiers the Romans built health spas in case there were healthy mineral waters in the vicinity. At Bad Gögging (ID No 1) sulphuric water served as the basis for healing measures.
### 2.a.4. The individual component parts

A short description of all the nominated component parts is given in the following table.

<table>
<thead>
<tr>
<th>ID No</th>
<th>Component part</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Bad Gögging – Heilbad</td>
<td>The component part is situated in the historic centre of Bad Gögging on a flood save gentle hill near the river Abens next to the crop out of sulfuric springs. Substantial remains of the spa baths of legio III Italica were discovered here in the course of several excavation campaigns carried out between 1959 and 2007. The extensive building covered an area of at least 50 m by 36 m. It was formed by at least four building units, which housed numerous rooms with hypocaust heating, a steam room, several cold water pools and a 11m by 8 m large central water basin with four to five hip-baths attached to its north-eastern wall. At all, a minimum of three construction phases could be identified. The architecture of the spa baths differs significantly from the standardized military baths of auxiliary forts. Hip-baths, similar to the ones preserved at Bad Gögging, e. g., are only known from spa baths in other provinces of the Roman Empire. In the early Christian period the central basis of the Roman baths was converted into a place of worship. The basin was filled in, when a first pre-Romanesque church was constructed. Like at Eining-Weinberg (ID No 2), numerous iron crosses provide evidence for Early Christian worship. Later the Romanesque church of St. Andreas was erected on top of the central basin of the Roman spa baths. Subsequent to the archaeological excavations the church was converted into a museum, in which the central water basin of the Roman spa with its hip-baths forms the main exhibit. Further substantial remains of the Roman spa baths, partly with rising masonry, survive below the streets and buildings around St. Andreas church.</td>
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<tr>
<td>2</td>
<td>Eining-Weinberg – Wachturm und Heiligtum</td>
<td>2 km north-east of the auxiliary fort of Eining/Abusina, three Roman buildings are situated on a hilltop called “Weinberg” (vineyard). P. Reinecke carried out excavations from 1916 to 1918 and discovered the remains of a watchtower and two other stone buildings. According to the finds, presumably in a first phase, a wooden tower with a 6 × 6 m wide stone base was erected. Fragments of a building inscription provide evidence for the construction of the two other buildings in AD 226 or 229. According to the ground plan and two beheaded limestone statues that were found during the excavations, one of the buildings was a sanctuary of Mars and Victoria. It had a 9.0 × 9.20 m large precinct that was enclosed by a temenos wall and housed the podium of a 3.5 × 4.3 m large shrine. Opposite the sanctuary a 14 × 19 m a large building was located. It was subdivided into a corridor with three rooms on each side. Next to the threshold of the entrance remains of wall-plaster and a plastered floor were found. The building may have provided accommodation for visitors of the sanctuary or for the crew of the watchtower. The end of the shrine and the watchtower seems to coincide roughly with the fall of the Raetian Limes in AD 254. A large number of iron crosses found during the excavations show that the area was used by a Christian community in the Early Medieval period. The position on the “Weinberg” hilltop was of great importance, as it offered commanding views along and across the river Danube. It provided a visual interconnection between the auxiliary fort Eining/Abusina and the installations of the Raetian limes. 2 km north of Eining-Weinberg the limes arrived at the river Danube. Here the artificially built land frontier (WHS since 2005; Ref: 430ter) with wall, watchtowers and fortlets ended and the river frontier of the Danube limes began. Today the remains of the Roman buildings on the Weinberg hilltop are covered but still visible on the surface as the trenches of the 1916-1918 excavations were not properly backfilled. Below the surface the walls survive to a height up to 0.4 m.</td>
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<tr>
<td>3</td>
<td>Weltenburg-Am Galget – Kleinkastell</td>
<td>Before the river Danube enters the “Weltenburger Enge”, a 5.5 km long narrow gorge of limestone cliffs four-hundred-feet high, it passes the Early Imperial fortlet Weltenburg-Am Galget, which is situated on a terrace on top of a steep slope that descends to the right bank of the Danube. In 1979 the fortlet was discovered in the course of systematic aerial investigations. In 1989 the eastern part of it was excavated due to construction plans. In 2017 using magnetometry geophysical prospections were carried out in the area of the fortlet and its vicinity.</td>
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<tr>
<td>ID No</td>
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<td>4</td>
<td>Regensburg</td>
<td>In the course of the Marcomannic Wars in the seventies of the 2nd century AD <em>legio III Italica</em> was moved to its new base at Regensburg (component parts 6a-i). In this context a small military garrison was based at Großprüfening to guard the confluence of the rivers Naab and Danube, as the Naab valley functions as a natural communication line between the Danube valley and the area north of it. In this context a small stone fort was constructed on the lower terrace close to the bank of the river Danube. It had four gates, corner towers and a ditch that was more than 5 m wide and 1.9 m deep. With a size of 79 × 62 m it provided an interior space of 0.47 ha. Parts of the fortifications and of the headquarters building/principia are known from excavations. In addition to that, the results of geophysical prospections indicate the presence of barrack blocks and store buildings. The fort was surrounded by an extensive civil settlement/vicus. The military road that ran along the south bank of the river Danube provided a main axis for the development of this civil settlement/vicus. Therefore, with a length of c. 1000 m the settled area had a width of only 250-300 m. In addition to that two Roman cemeteries are known. Whereas the civil settlement/vicus presumably was destroyed and abandoned in the mid 3rd century AD the fort seems to have been occupied until the 80s of the 3rd century AD. Results of excavations and geophysical prospections indicate that after the abandonment of the fort its area was partly leveled to erect a tower/burgus in the former northwest corner. This tower/burgus was probably constructed in the 4th century AD and protected by a ditch. A wall collapsed into the ditch was found at excavations. It provides evidence that the walls of the tower/burgus had a height of at least 9 m. According to pottery and small finds the Roman occupation of Regensburg-Großprüfening continued until the end of the 4th century AD. Today only one excavated building of the civil settlement is presented to the public covered by a protective building. The fort as well as the other buildings of the civil settlement/vicus and the cemeteries is preserved below the surface and not visible. Nevertheless the topographical situation next to the river bank and opposite to the confluence of the river Naab can be experienced very clearly, as the area today is open land mainly used for agriculture.</td>
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<tr>
<td>5a</td>
<td>Regensburg</td>
<td>At the end of the reign of the Emperor Vespasian (69-79 AD), or shortly thereafter, an auxiliary fort was established on the Koenigsberg in the Kumpfmühl district on a slope overlooking the Danube valley. The fort housed <em>cohors III Britannorum quingenaria equitata</em> and later <em>cohors II Aqitanorum quingenaria equitata</em>, both of them being part-mounted infantry regiments with a nominal strength of 500. Archaeologically, the progression from earth and timber to stone construction was determined. The size of the slightly oblique-angled rectangle fort was 154 × 143 m, i.e. 1.9 ha. Two V-shaped ditches were dug as part of the fortifications. The fort was used to monitor the traffic routes into the Barbaricum and to the south to the provincial capital of Augsburg/Augusta Vindelicum. In the historical context of the Marcomannic Wars the fort and military <em>vicus</em> at Kumpfmühl were destroyed and subsequently abandoned in the third quarter of second half of the 2nd century. This incident is illustrated by a treasure-hoard for which gold, silver, and bronze coins provide a latest date of AD 166/7. The fort interior is now used as allotment gardens and park. The nominated component part 5a refers to the central area of the fort with headquarters and barracks as well as to a set of baths north of the fort. The archaeological structures are preserved below the surface. They are not visible.</td>
</tr>
<tr>
<td>5b</td>
<td>Regensburg</td>
<td>To the south and to the east of the auxiliary fort (component part 5a), a typical civil settlement/military <em>vicus</em> developed on an area of approximately 20 ha, with shops, workshops and living quarters of merchants and craftsmen as well as with a set of baths.</td>
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<tr>
<td>6a</td>
<td>Regensburg – Legionslager I</td>
<td>In the course of the Marcomannic Wars Emperor Marcus Aurelius (AD 161-180) raised three new legions. One of them, legio III Italica, was moved to the Danube in the 160s. Initially partly based at Eining-Unterfeld (part of WHS FRE; Ref: 430ter), it finally built its legionary fortress at Regensburg to become the largest military base in Raetia. The Danube bend was chosen as the site. The remains of a previous settlement on the Danube had to be levelled. The construction work on the 24.5 ha large legionary fortress certainly lasted several years. The limestone and sandstone of the curtain wall (component parts 6b-6h) were broken at Kapfelberg in the north and up the Danube and shipped directly to the construction site – a great advantage of the topography of the legionary fortress. At the east gate substantial parts of a monumental building inscription, formerly 8-10 m long, were found that dates the construction of the fortress to 179 AD. Comprising four gates with towers, four corner towers and 18 intermediate towers, the approximately 6 m high curtain wall and a ditch, 7 m wide and 3 m deep, the fortifications of the legionary fortress had an impressive appearance. Due to intensive Medieval and later building activities, we know only parts of the internal buildings of the fortress from excavations. It housed barracks for about 6,000 soldiers that were built of timber in the 3rd century. The part of the barracks with the centurions quarters were more comfortable and erected in stone as were the luxurious houses of the tribune’s, the higher officers. Of the principia, the headquarters building, and of the praetorium, the residence of the legionary legate, only few walls are known. In the 3rd century, a fabrica or armamentarium was built along the eastern wall. In addition, some wells are known that provide insight into the water supply. Sources dating to c. 200 AD give evidence that &quot;Legio&quot; and &quot;Reginum&quot; were used as place names for the legionary fortress and its canabae legionis, the nearby civilian settlement. Dating evidence from destruction layers indicates that the destruction of Mid Roman Regensburg did not coincide with the final destructions along the Raetian Limes, where occupation ended around 254 AD. At Regensburg at various places burnt destruction layers can be dated to the years around 280 AD. Hereinafter occupation was considerably reduced and the civilian population withdrew into the fortifications of the legionary fortress. Until the mid 5th century, Castra Regina, as Regensburg is called in the Notitia Dignitatum, was still occupied, as the excavations in Niedermünster church (component part 6i) showed. The fortifications of the legionary fortress were used well into the Medieval period, parts of them surviving visible until today in the cityscape. Component part 6a refers to the still upstanding parts of the main gate/porta praetoria, the eastern gate tower of which is preserved up to a height of at least 11 m, and the right doorway of which still stands up to a height of about 6 m.</td>
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<tr>
<td>6b</td>
<td>Regensburg – Legionslager II</td>
<td>For description see Component part 6a. Component part 6b refers to a section of the curtain wall of the legionary fortress with a height of at least 5 meters. Visible is a cross-section in the house façade as well as open-lying masonry in the building.</td>
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<tr>
<td>6c</td>
<td>Regensburg – Legionslager III</td>
<td>For description see Component part 6a. Component part 6c refers to a section of the curtain wall of the legionary fortress with a height of at least 5 meters. The massive upstanding masonry marks the position of the round north-east corner of the legionary fortress clearly visible until today.</td>
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<tr>
<td>6d</td>
<td>Regensburg – Legionslager IV</td>
<td>For description see Component part 6a. Component part 6d refers to a section of the curtain wall of the legionary fortress with a height of at least 3 meters that marks the course of the curtain wall in this area in a striking way.</td>
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<tr>
<td>6e</td>
<td>Regensburg – Legionslager V</td>
<td>For description see Component part 6a. Component part 6e refers to a section of the curtain wall of the legionary fortress with a height up to 4 meters that marks the course of the curtain wall in this area in a striking way.</td>
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<tr>
<td>6f</td>
<td>Regensburg – Legionslager VI</td>
<td>For description see Component part 6a. Component part 6f refers to a very well-preserved section of the curtain wall of the legionary fortress with a height up to 6 meters (including a later phase of reuse), which is located in a multi-storey car park and is elaborately didactically developed.</td>
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<tr>
<td>6g</td>
<td>Regensburg – Legionslager VII</td>
<td>For description see Component part 6a.</td>
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Component part 6g refers to a section of the curtain wall of the legiberal fortress that is preserved within a building up to a height of about 4 meters (including a later phase of reuse). Like the other nominated parts of the curtain wall, it is easily visible from outside the building plot.

Component part 6h refers to the remains excavated and preserved below Niedermünster church. They comprise parts of legiberal barracks and the structural remains of their reuse and transformation during the Late Roman period. They can be visited in an elaborately didactically developed undercroft.

Component part 6i refers to the remains excavated and preserved below Niedermünster. For description see Component part 6a.

Several Roman forts of the late 1st to mid 3rd century AD are situated east of the Medieval city center of Straubing. The oldest well-known fort of them is the so-called Westkastell IV, which was built in the early Flavian period and was destroyed during the time of the Marcomannic Wars. Now it is built over by modern constructions. About a third of its total area was excavated in the 1980s. In contrast to that, the nearby “Ostkastell II” is situated in an area that is largely undeveloped and used for agriculture until today. Here, a total of three earth-and-timber building phases (Ostkastell I-III a) and one stone building phase (Ostkastell III b) could be identified.

The first wooden building phase (Ostkastell I) probably existed since the late 1st century AD. The total extent of this fort is not known. Only a part of the southern ditch, the south gate and small parts of internal buildings could be located by excavations in 1976-78.

Similarly limited is our understanding of the second earth-and-timber building phase (Ostkastell II) that was erected in the Domitianic period to which a sector of the northern ditch a few other structural remains can be attributed.

In the late Hadrianic or early Antonine period, the third earth-and-timber construction phase (III a) followed. With about 3.2 ha, this fort housed cohors I Flavia Canathenorum milliaria sagittariorum, a part-mounted infantry unit of double strength, which had been raised in Syria. In the 3rd quarter century (before the Marcomannic Wars) the fort was rebuilt in stone (phase III b). We know that the porta decumana in the north and the porta praetoria in the south were both gates with two pathways. The North Gate was excavated in 1976-78. During the first decades of the 20th century, a large number of trial trenches were cut through the defences and carried out in the praetentura. In addition to that the East and the West Gate are known as well as corner towers. Despite the considerable size of the fort, its stone defences had no intermediate towers. Of the four trenches, which relate with the stone construction phase, only two were used simultaneously. After the Marcomannic Wars the two inner trenches were filled up and moved forward. The line of the southern defences shows up as an elevation on the surface until today. Mainly on the basis of the results of geophysical prospections carried out in 2013 it is possible to reconstruct almost the complete internal plan of the fort. The magnetogram shows clearly recognizable Roman structures in the central sector and the praetentura south of it. For the north-western part of the fort it indicates the existence of two Medieval ditches cutting through the Roman structures. In addition to that the road network and drainage channels show up in the magnetogram and infantry as well as cavalry barracks can be identified on the basis of the absence or presence of centrally placed, elongated pit in the front rooms. According to that the cavalry barracks were placed in the southern half and the infantry barracks in the northern half of the fort. In the central sector, the headquarters building (principia) and its large entrance hall are visible. Even details like screed floors and the cellar-like aerarium below the regimental chapel are discernible. Building complexes flank the principia. The two to the east could be a fabrica or horreum and the commander’s residence (praetorium) with rows of rooms arranged around a courtyard. The one to the west probably was a military hospital (valetudinarium). The Ostkastel III was probably destroyed by a fire and abandoned in the middle of the 3rd century AD.

Up to the arrival and subsequent deployment of legio III Italica in the context of the Marcomannic Wars, Straubing/Sorviodurum, with altogether about 1500 soldiers garrisoned in the west and east forts, housed the largest military garrison on the Raetian Danube Limes. The nominated area is currently used for vegetable growing. With the exception of the conserved foundation walls of one building, the Roman remains are not visible on the ground.
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<td>7b</td>
<td>Straubing – Kastell St. Peter</td>
<td>In the context of the reorganization of Roman frontier defence Straubing became a Roman military base again around AD 300. The Roman Army did not return to the open space of the lower terrasse, where the Mid-Roman forts had been situated, but moved to St. Peter’s church hill not far west of the Mid-Roman forts. This promontory was strategically well chosen and provided good views over the surrounding area. Few Early Imperial finds possibly indicate an Early Roman military presence at the site during the Claudio-Neronian period although no related structural remains are known so far. Late Roman walls and finds prove the existence of a Late Roman fortification. In the course of excavations on the northern cemetery wall in 1980 and below the Romanesque basilica in 1968 and 1974 Late Roman finds and settlement layers were revealed. From 1997 to 2000 the line of the northern curtain wall of the Late Roman fort was identified in the form of a foundation trench and postholes of a wooden wall walk. The entire Late Roman fort comprised an area of 0.3 hectares at the most. Its main gate is assumed to have been in the west or south-west, and a postern-gate is reconstructed in the north. The coin series of St. Peter’s church hill ends in the early 5th century AD. Brick stamps possibly indicate that a vexillation of legio III Italica was garrisoned at Staubing, to which no reference is given in the Notitia Dignitatum. Partly it was also supposed that German-Bohemian foederati were present. The preservation of further remains of the Late Roman military site below the church and the cemetery is certain.</td>
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<td>8</td>
<td>Künzing – Amphitheatere und Vicus</td>
<td>Research on Roman Künzing/Quintana started in the 19th century, when baron von Mülzer mapped the position of the Roman fort. In 1958–66 large parts of the fort were excavated by the Romano-Germanic Commission (RGK) of the German Archæological Institute (DAI), anticipating its destruction by building projects. The fort housed a part-mounted cohort of 500 men. Today large parts of Roman Künzing/Quintana are built over, although since 1980 the district archæology of Deggendorf was able to record the developed areas. Therefore, it was very fortunate that a wooden amphitheatre was discovered in the south-east of the civil settlement, which was covered after a quarter of it had been excavated in 2003–2004. Its oval arena is 34.6 × 29.6 m. It measures 46 × 40 m, extended by the circulating platform, whose wooden structure has post holes. For the amphitheatre, which accommodated about 500 spectators, an edifice was erected in the Late Antonine period (respectively in the last quarter of the 2nd century AD) and used only for few decades. Amphitheatres of Roman military forts are a rare phenomenon. It is assumed, however, that they were more frequent, but in the province of Raetia, only one more is known next to the fort of Dambach (part of WHS FRE; Ref: 430ter). To mark the location of the well-preserved amphitheatre, a wooden framework was erected to visualize the construction and dimensions. In the rest of the nominated area, remains of the civilian settlement are to be assumed. The Roman structures are not visible on the ground. Today the area is used as meadows and for agriculture.</td>
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<td>9a</td>
<td>Passau Altstadt – Kastell</td>
<td>The excavations in the interior of the church of Niedernburg monastery revealed evidence for a Roman occupation from the 1st century AD onwards as well as well-preserved structural remains of a Mid Roman civil settlement and a Late Roman fort. In an area 24.30 m long and 14.20 m wide, parts of three 3rd century strip buildings of the Mid Roman civil settlement were discovered, which were destroyed by a fire in AD 280/285. In addition to that, the excavations revealed well preserved structural remains of a granary that was part of the Late Roman fort. The walls of this granary are preserved up to a height of 1.3 m and have 1.5 m thick foundations. In addition to that the excavations produced unique evidence for the material culture used by the inhabitants of a Roman military garrison in the western segment of the Danube Limes during the second half of the 5th century AD; inter alia the latest proof for Roman trade relations between Raetia and North Africa. The preservation of further substance of the Mid Roman civil settlement and the Late Roman fort in the area of the nominated component part is certain.</td>
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<td>9b</td>
<td>Passau Boiotro – Kastell</td>
<td>After the destruction of the fort and the civilian settlement Boiodurum in the middle of the 3rd century AD it took until around AD 300 that the Roman military administration decided to replace Boiodurum by the Late Roman fort Boiotro that was erected about 1 km upstream on the Norican bank of the river Inn. Despite the unusual trapezoid form of its ground plan, Boiotro – beyond doubt – represenst the westernmost example of the characteristic Late Roman quadruburgium type forts. Its fortifications consist of four fanshaped corner-towers, a single gate facing the river Inn and an 8 meter wide ditch. The curtain wall had a thickness of 2.4 m on the riverside and of 3.6 m</td>
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on the landward side. In order to provide a firm ground, the foundations were layed on a grid of oak piles. The internal buildings of the fort probably were timber constructions that rested on a row of large square stone pillars, which line up about 5 meters from the curtain wall. According to the coin series Roman military occupation ended around AD 375. Structural remains and pottery finds indicate a reoccupation of the abandoned fort that lasted well into the second half of the 5th century AD. Conventionally this reoccupation of the Late Roman fort is interpreted as archaeological evidence for the community that established a small monastery at a place called Boitro according to the Vita Sancti Severini. Until today massive upstanding parts of the fortification survive incorporated into a Medieval house that is open to the public as a site museum.

The watchtower (burgus) of Passau-Haibach is situated on the southern bank of the Danube, 3 km downstream the Late Roman fort Boiotro (ID No 9b). It has a square floor plan of 12.2 by 12.2 meters. Its erection probably dates to the reign of the Emperor Valentinian (AD 364-375). Little ceramic indicates a use until the middle of the 5th century AD. In the 12th and 13th centuries a brick kiln was built into the ruins of the watchtower. The well preserved walls of the burgus were preserved after excavation. Today they are sheltered by a protective structure and can be visited by groups, although the Roman watchtower is situated in the area of a sewage treatment plant, to which access is restricted.

Known since 1840, the fortlet with round towers at the corners (quadriburgium) can be identified with the ancient name Stanaco of the Itinerarium Antonini. It is situated between the confluence of the Inn and the Danube at Passau/Boiodurum (Bavaria) and the Danube River Bend at Schlögen. The structure situated on the river terrace directly on the right bank of the river Danube served to control the basins of Ranna and the Limes Road on the opposite bank. Findings of the 2nd century AD suggest a preceding building phase of the fortlet.

The only partly investigated complex with an approximately square floor plan (inner side length 12.5 m) is parallel to the Danube and the Limes Road and has four round corner towers. The SW front visible today with its 1.6 m high-preserved walls dates from Late Roman times. In the western tower, which was subdivided by a wall with a connecting door, was a bathing area that was heated by an externally built praefurnium.

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Geophysical prospections in 2012 as well as excavations in 2017 have provided evidence of the substantial preservation of the defensive walls of the fortlet. Parts of those walls are preserved and further components underground are preserved in situ.

The vicus is located at the western end of the Danube River Bend at Schlögen, on a plateau protruding northwards towards the Danube, directly west of the mouth of the Freyental stream into the Danube.

The settlement lies about seven meters higher than the fort and was connected to it by a road running across the stream. The vicus from the middle of the 2nd century to the 5th century AD already existed before the fort was built.

During the excavations from 1838 to 1840, the first planned excavations in Upper Austria, a total of seven buildings, including a bath complex, were discovered. Two building periods are proven; the older stone building phase dates back to the middle of the 2nd century AD, the younger one included wooden and wattle-and-daub buildings, which were destroyed by a fire in the course of Late Antiquity.

After the geophysical prospections of 2013, new archaeological research took place in the bath building in 2014 and 2015, showing the good preservation of its walls up to a height of 0.5 m, as well as details of the building history.

Buildings of the vicus are preserved under the earth’s surface in their substance. The on site conservation of the bath complex is planned.

The fort is located on the west side of the Schlögen Danube River Bend, on a narrow, flat riparian strip just east of the mouth of the Freyental stream into the Danube and west of the former Mühlbach stream.

The antique name of the fort with 0.65 hectares and a slightly distorted rectangular floor plan (110 × 69 m) is not secured. Ioviacum or Ad Mauros are taken into consideration. For the 3rd century garrison a cohors V Breuconorum as well as the legio II Italica, which are named on brick stamps, can be presumed. For Ioviacum, a base camp of the Danube fleet and a Liburnarian unit of the legio II Italica is mentioned in Late Antiquity.

Two building periods with the same building area can be verified: From the fort of the first period only the outer fort wall is known. It was founded not later than AD 170 and was destroyed by a damaging fire just after AD 300. In the late 4th century the fort was rebuilt and
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<td>12</td>
<td>Hirschleitengraben – Wachturm</td>
<td>The watchtower is located on the northern slope of the Kürnberg, on a steep rocky promontory to the Danube, east of the Hirschleitengraben. It was used to control the narrow breakthrough valley of the Danube between the wide basin landscapes in the West and East. At the entrance of the valley a river crossing from Ottensheim was located. Also, line of sight to the east towards Linz existed. The two-phase building has an approximately square layout and is enclosed by a horseshoe-shaped trench on the west, east and south side. The originally 6 × 6 m watchtower had a wall thickness of 0.80 to 0.90 m with a foundation thickness of about 1.10 m. It was built at the end of the 2nd or early 3rd century. In the 2nd half of the 4th century, the watchtower was extended to the east and south (9.90 × 9.95 × 9.80 × 9.50 m) and the ground level was raised by 0.30 m. For this younger extension phase, a brick with the stamp of the Dux Ursicinus gives an indication of the erection during the reign of Emperor Valentinianus I (AD 364–375). The structure is visibly preserved and restored at the site. Component part 12 comprises the watchtower with the surrounding trench within a 10 m wide ground strip.</td>
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<td>13a</td>
<td>Linz – Siedlung Martinsfeld</td>
<td>The Martinsfeld forms the western part of the Linzer Schlossberg, which rises on the southern bank of the Danube. Here, a Late-Celtic craftsmen’s settlement was established, which developed continuously up to the Roman settlement. The earliest records of the Roman residential and craftsmen district date to the first half of the 1st century AD. From the Martinsfeld the Roman settlement evolved on the southern slopes of the Römerrberg to the western part of the Old Town. The largest extent of the ancient settlement is documented for the middle Imperial period, which can be traced south to the Roman cemetery in the area of the Sisters of the Cross. Roman military presence in Lentina is indicated by inscriptions and finds. The presence of the <em>ala I Pannoniorum Tampiana victrix</em> is certain. In Late Antiquity, parts of the <em>legio II Italica</em> and <em>equites sagittarii</em> (mounted archers) are documented. While the middle Imperial fort of <em>Lentia</em> was documented for the first time 2015 south of the Old Town of Linz, the military presence relocated to the heights of the Schlossberg in Late Antiquity. In addition to gravestones and burials of military personnel on the slopes south of the Martinsfeld, a Late Roman ditch emphasizes the military importance of the component. Component part 13a includes early Roman strip houses and economic evidence as well as later stone buildings. Outside of the church runs a massive stone wall, which delimits the area to the west and south. In the church of St. Martin a conserved oven from the 1st century AD is visible as well as Roman spolia in the interior and exterior walls. Roman stone buildings are preserved in their substance under and outside the church underground.</td>
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<tr>
<td>13b</td>
<td>Linz – Befestigung Schlossberg</td>
<td>For description see Component part 13a. Component part 13b includes the area of the massive Late Roman ditch immediately west of the castle of Linz, which is proven by excavation. The north-south running part of the ditch runs parallel to the castle front and turns then to the west in the direction of the St. Martins’ church. The ditch, which was refilled following the archaeological survey of the year 2000, secured the civilian and military occupied settlement area around the church of St. Martin. The ditch is preserved as a refilled mold below ground level.</td>
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<td>14a</td>
<td>Enns – Gräberstraße</td>
<td>The area surrounding Enns is one of the central settlements on the Danube that has been inhabited since the Neolithic period. Roman Enns is located on the flank of the hill with the Medieval settlement in the district of Lorch, whose name derives from ancient Lauriacum. The earliest Roman settlements were found near the river Enns at the foot of the Georgenberg in the Mauthausenerstraße. At the end of the Marcomannic wars, the <em>legio II Italica</em> was moved to the Danube, where it built its fortress in <em>Lauriacum</em>. The beginning of the construction of the fortress started around AD 185, and the completion is assumed for the period between AD 200 and 205 on the basis of a building inscription.</td>
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<td>At the same time, the planning of a civilian settlement west of the fortress was begun; parallel to this, the area north of the fortress was developed for settlement purposes (<em>canabae legiones</em>). The rapidly flourishing settlement was probably given the rank of a <em>municipium</em> under Emperor Caracalla (AD 211-217), indicated by fragments of a municipal law which refer with a high degree of probability, but not absolute certainty to Lauriacum. In the 3rd century, the civilian settlement fell victim to a fire disaster, but was rebuilt soon afterwards. At the end of the 3rd century parts of the legion were subdivided as a result of the Diocletian army and administrative reform, the originally unitary province of Noricum divided into a part south of the Alps (<em>Noricum Mediterraneum</em>) and between Alps and Danube (<em>Noricum Ripense</em>). Even if parts of the Legio II Italica were detached during the army reconstruction completed under Emperor Constantine (AD 306-337), Lauriacum still had military importance. As in most of the Danube forts, the now empty space was used for a civilian settlement within the protective walls of the legionary fortress after the withdrawal of the troops. From this late period, simple buildings have been found which superimpose the military infrastructure. The central character of Lauriacum is particularly evident in the early Christian Bishop's church within the legionary fortress. The long Roman presence in Lauriacum/Enns corresponds to the long use of the cemeteries, which range from the 1st to the 5th century AD and include both cremations and inhumations. The unique position of Lauriacum/Enns for the history of early Christianity on the Austrian Limes section is verified by written sources, small finds and the two archaeologically proven early Christian churches (see component part 14c). In the life story of Saint Severin, completed by Monk Eugippius in AD 511, the place is portrayed as a Late Roman, city-like settlement. The Romans lived within the protective walls of the former legionary fortress. Bishop Constantius of Lauriacum is the only known Late Roman/early Christian bishop on the Austrian Danube. In addition to his ecclesiastical duties, he also directed the settlement's defense that was ensured by a militia group formed by the inhabitants. Component part 14a comprises an area adjoining the well known burial zone of Kristein, in which geophysical prospections showed a road branching from the Limes Road towards the legionary fortress. On the other side of the road, graves and burial structures are clearly visible in the survey images. Road and graves are preserved under the earth's surface in their substance. The so far intact area of the cemetery is a zone with a particularly high research potential for Roman burial customs of Lauriacum.</td>
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14b | Enns – Canabae Südwest | The *canabae* of Lauriacum, the so-called civil town, is an extensive settlement that is delimited to the east by the glacis of the legionary fortress, to the south by the slope of the Eichberg, to the north by the Kristeinbach and to the west by the cemeteries of Kristein. The central area of the *canabae* extends to the area between the Basilica of St. Laurenz and Doktor Renner Strasse, which corresponds to the ancient Limes Road. In this area, the *forum venale*, administrative buildings, quarters of residential buildings and workshops as well as bath complexes are known. There are several construction and destruction horizons. The starting point is a settlement along the road of the 1st century, which developed further on with the establishment of the legionary fortress. The *canabae* were opened up by several roads, from which the modern day Mitterweg to Volkersdorf is still used. The most extensive construction measures took place simultaneously with the erection of the legionary fortress. Settlement activity is archeologically verified until the time of St. Severin, the early Christian church under the present church of St. Laurenz being of the utmost importance (see component 14c). Component part 14b covers the area of the *canabae*, in which the *forum venale*, administrative and residential buildings as well as baths are proven. There are also several streets, including the road leading to the western gate of the fortress, which runs along the south side of the *forum venale* and dating back to the 1st century. Roads and buildings are verified by excavations and geophysical prospections and are preserved in their substance underground. |

14c | Enns – St. Laurenz | Settlement activity is archeologically verified up to the period of Saint Severin, the early Christian church under the today's Lorcher Basilica St. Laurenz is of great importance. The Basilica, today the parish church and cemetery of Enns, rises in the center of Roman civil settlement. Ten construction phases from the Roman Imperial Period to the High Middle Ages were discovered. The assumption of a cult continuum from Late Antiquity to the present is based, above all, on the assumption of constant knowledge of the bones of Lorch's martyrs and the development of the name of Lauriacum to Lorch. |
Component part 14c covers the area of today’s Basilica of St. Laurenz in the center of the Roman canabae. The wide scale building, which is situated underneath the church, is a building with a peristyle courtyard, which is interpreted as the residence of the legion commander. In the basement and in the choir of the St. Laurenz basilica, the early Christian Church is preserved and publicly accessible as well as imperial buildings of the civilian settlement.

Component part 14d comprises the north-western part of the canabae, with roads and loose lining, consisting of residential buildings, workshops and kilns. The streets and structures detected by excavations and geophysical prospections are preserved in their substance underground.

Component part 14e covers the north-eastern part of the canabae with road sand loose lining. To the south, a battery of at least twelve lime kilns must be mentioned as a significant economic finding. The lime kilns are conserved and preserved in their substance underground. The streets and structures detected by geophysical prospections are preserved in their substance underground as well.

Lauriacum’s legionary fortress is located north-west of the Medieval town, between Bleicherbach, Teichweg, Lorchersstrasse and Römergraben, on an area of about 19.5 hectares. The legionary fortress was the garrison of the Legio II Italica, which had previously been garrisoned in Albing, and the capital of the province of Noricum and was probably completed by Septimius Severus (around 200 AD).

The legionary fortress was oriented north-east-north-west to secure both the Danube and the Enns, has an oblique-angled floor plan (539 × 398 m) and powerful reinforcement (wall thickness 2.10 m). At the rounded corners, internal towers were erected, between which 24 intermediate towers were erected along the sides. Rectangular towers flanked the gates. The external reinforcement included a double V-shaped trench, into which the Bleicher stream was led in. The via principalis was accompanied by a portico on the east side and crosses via praetoria and via decumana through a four-gate building. The principia lay in the center of the fortress; the West to East oriented barracks showed the usual plan and had hypocausts. Tribune houses, a bath and a valetudinarium lay to the east of the via principalis. The complex of the Late Roman fabrica for metal work could be verified in the retentura. Four large areas were unspoilt: they lie behind the walls of the praetentura, south of the bath, on the via decumana as well as between that and the fabrica.

In the fortress area, three large building periods are tangible: The first great destruction took place in AD 270/71 during the invasion of the Juthungen, the re- building under the emperors Aurelianus and Probus. Under Valentinianus I, the fortress was repaired for the last time. Brick stamps of the dux Ursicinus verify repair work on the fortifications. During the late period a church interior without an apsis was built into the valetudinarium, which is interpreted as an episcopal church. The following church, Maria Anger, remained until the late 18th century. There are signs of destruction, as well as evidence of Late Roman and Early Medieval settlements dating from the 5th century. In the uninhabited areas, however, simple wooden structures with heating were erected in the streets. The orientation of those differs from that of the existing fortress structures.

Component part 14f in the east of the fortress includes the tribune houses, the fortress bath and a valetudinarium (hospital) with the early Christian church of Maria Anger built into it and can be addressed as a bishop’s church of the ancient Lauriacum because of the baptistery detected by geophysical prospections. To the south are the barracks. Two other buildings can be considered as fabricae for metal processing and could be related to the Lauriacensis scutaria, a weapon factory specialized in the production of shields, which is mentioned in the Notitia Dignitatum.

The numerous buildings are verified by excavations and geophysical prospections and preserved in their substance underground.
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<tr>
<td>14g</td>
<td>Enns – Legionslager</td>
<td>Component part 14g covers the northern corner of the legionary fortress. There are long-stretched, NE-SW-aligned crew barracks. The end of the legionary fortress is a 2.10 m strong wall with inward towers. The trench surrounding the fortress is clearly visible at the site. The northern corner of the legionary fortress is visible as the only and most important Roman monument of Enns. The defensive trench surrounding the fortress is also clearly visible. Of the interior, the internal reconstruction obtained underground is completed.</td>
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<td>15</td>
<td>Albing – Legionslager</td>
<td>The legionary fortress lies at the east side of the village of Albing, on the edge of the former outskirts of the Danube on a slight terrain elevation. The area of the legionary fortress reaches north towards the Danube, to the south just beyond the Landesstraße. The western part is partly covered by the modern village of Albing. So far the excavations have resulted in a fortress with a rectangular floor plan and rounded corners. Of the four gates, three were archaeologically examined. Because of its NE-SW orientation, the system was oriented with its longitudinal side against the direction of the Danube and with the northern corner to the current. Archaeological investigations were carried out on several sites at the fortification walls with gates and intermediate towers, which enclosed an area of 568 × 415 m. They are massive cast mortar walls of a maximum width of 1.9 m, the foundations of which reach a depth of 1.7 m. The foundations made of pebbles had a thickness of 1.80 to 3.15 m. An upstream moat would probably have been superfluous due to the location of the building site on the edge of the Danube. In the west corner was a trapezoidal tower. Both <strong>porta praetoria</strong> and <strong>porta decumana</strong> had two towers; the <strong>porta praetoria</strong> had three passages. Although the <strong>principia</strong> have been proved in the center, no remains of internal structures were found on any of the excavated areas, so that the fortress, except for its fortification and the pole structures, may never have been completed and regularly garrisoned.</td>
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<tr>
<td>16a</td>
<td>Wallsee – Kastell</td>
<td>The fort is located under the Medieval center of Wallsee within the district of Alter Postgasse and Alter Schulstraße. Due to the topographical location and the regular layout of the historical area, a Roman fort under the Medieval market was presumed since the second half of the 19th century. Smaller archaeological investigations, stone monuments and random discoveries as well as the systematic control of construction sites since the 1960s confirmed the assumption. The identification of the fort with <strong>Adiuvense</strong> remained controversial for a long time, but recently, the equation with <strong>Locus Felix</strong> is suggested. The fort was built in the last decades of the 1st century as a timber-earth construction. During the 2nd century it was re-built in stone and used until the 5th century. In the 2nd century, the fort was presumably the garrison of <strong>cohors I Aelia Brittonum</strong>. The <strong>legio II Italica</strong>, the <strong>legio X Gemina pia fidelis</strong>, and the <strong>cohors V Breucorum</strong> are handed over to other troop units. Late Antiquity changes took place under the <strong>dux Ursicinus</strong>. The walls of the fort run inside the present road system and cover an area of approximately 3.4 hectares (195 × 175 m). The deepest findings, documented in the archaeological investigations, are about 1.10-1.20 m below modern day street level. The foundations of the 2.0-2.10 m thick bearing walls made of calcareous stones with limestone mortar reach 2.20 m deep. Component part 16a includes the market square of Wallsee, at the center of which is today’s municipal office. The square follows in its orientation the course of the ancient <strong>via decumana</strong>. The municipal office rises above the <strong>principia</strong> and shrine of the banner, of which in 1967 and 1997/98 components were uncovered, but were not archaeologically examined, although left in situ. At the southern exit of the market square, the <strong>porta decumana</strong> is located.</td>
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| 16b   | Wallsee – Kleinkastell| Component part 16b, the late Roman fortlet, was found as early as 1987/88, but only the archaeological investigations (2011-2013) necessary for the construction of a social housing project led to its partial excavation and preservation as an accessible site in the basement of the new building. The exceptionally good preservation of the ancient building substance is based on its use as the foundation of the school, built here in the 16th/17th century. The remains of the predecessor building, such as multi-phased wooden buildings of barracks and well-preserved parts of the middle imperial fort, also belong to the nominated component part. The eastern wall of the fort and a tower with a rectangular floor plan reaching into the **vallum** are visible proof thereof. At the SE corner a horseshoe tower with a front ditch and wall is oriented to the East. The defensive wall of the late Roman fortlet (29.8 × 26.7 m) consists of solid cast mortar masonry and encloses a **portico**. For the erection around the turn of the 4th to the 5th century, numerous spoils of older monuments were used. The inner surface of the fortlet was only...
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<td>17</td>
<td>Ybbs – Kleinkastell</td>
<td>The Roman fortification is located on the right bank of the river Danube at the beginning of the Persenbeuger loop and in the historical heart of the city of Ybbs. A building inscription in Ybbs, which had been transferred to Vienna in 1508 and is lost today, describes a <em>burgus</em> erected around 370 AD by <em>milites auxilares Lauriacensis</em>, which until now had not been located. In 1991, during a renovation project in the area between the parish church and the town wall, two parallel masonry blocks were unveiled for the first time, but without proper archaeological investigation. In 2014, the outer wall was re-examined and it was found that the form and the dimension were that of a Roman building. The reconstructed course of the wall is like that of the front and east corner of a Roman fortification, probably of a fortlet. Although the precise extent and dating of today’s research are still unclear, considerable components under the building of the parish church and the adjoining square can be safely assumed. This component part is the first archaeological proof of Roman military presence in Ybbs and is exceptionally well preserved. The identification with the <em>Ad pontem Ises</em> of the <em>Tabula Peutingeriana</em> and the <em>burgus</em> mentioned in the building inscription is justified.</td>
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<tr>
<td>18a</td>
<td>Pöchlarn – Kastell Hufeisenturm West</td>
<td>The fort is located under the Medieval town centre of Pöchlarn between the right bank of the Danube, the castle, Weigelsbergerstrasse and Thöringplatz. It is only on account of recent excavation results from 1990 that it is ensured that only about the south-eastern-third of the former fort is preserved, while the other two have been destroyed by the Danube. The ancient name <em>Arelape</em> is passed down in the <em>Tabula Peutingeriana</em>, the <em>Itinerarium Antonini</em> and the <em>Notitia dignitatum</em>. The <em>Cohors I Flavia Brittonum miliaria</em> was garrisoned here, for the Late Antiquity a unit of <em>equites Dalmatae</em> as well as a naval base. Recent archaeological investigations in the area of church square and Thöringplatz have provided important insights into the history of the fort, such as the proof of a first Roman marching camp, which was followed by a first timber-earth-fort in the 2nd century AD, from which two east-west oriented crew barracks were uncovered. Around the turn of the 2nd century, the new construction of the barracks and the western stone fort wall with a square tower was built inside the fort. In the course of the 2nd century a new construction of the barracks with changed orientation and construction took place. A part of this was further developed during the 3rd century with the same orientation as the older stone buildings, while wooden buildings in swell beam construction remained in use. Last extensions date to the Late Antiquity. The southern front, which can be seen for a length of 160 m, runs just south of the parish church (component part 18b). The 1.2 m-strong stone fort wall was strengthened by a wall-walk built in the fort interior and is also visible in the area of the retirement home (component part 18c). Two enclosing trenches are in front of the fort wall. A horseshoe tower (A09a) was built above the planned trench in Late Antiquity. Immediately connected with the military garrisoned here is the bath of the fort, which was found in the castle park, and a small <em>Mithraeum</em> (component part 18d). Component part 18a includes a horseshoe tower erected in Late Antiquity in the south-western area of the fort. The horseshoe tower is conserved and accessible and can be viewed in the underground car park of the municipal center.</td>
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<tr>
<td>18b</td>
<td>Pöchlarn – Kastell Zentralbereich</td>
<td>For description see Component part 18a. Component part 18b in the area of the parish church and church square is located on the southern edge of the fort and has been archaeologically largely undeveloped. The parish church itself is the richest Roman church building of the Norican Danube Limes. The present church (built in 1389-1429) contains a variety of architectural parts and inscriptions of tombstones from the Roman tombs of Pöchlarn. Close to the church, remains of the western tower gate of the <em>porta decumana</em> and archaeological strata are preserved, so that the developmental history of the ancient <em>Arelape</em> is conserved for the first-mentioned Early-Medieval settlement of AD 832 for the first time.</td>
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<tr>
<td>18c</td>
<td>Pöchlarn – Kastell Hufeisenturm Ost</td>
<td>For description see Component part 18a. Component part 18c includes the eastern horseshoe tower on the southern wall of the fort. Two construction phases are clearly visible: a rectangular, Roman tower pointed at the fort interior as well as a Late Roman horseshoe tower, which is placed on the outside of the fort wall. The latter is conserved and visible and accessible in the basement of the retirement home.</td>
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<td>18d</td>
<td>Pöchlarn – Vicus und Kastellbad</td>
<td>For description see Component part 18a. Component part 18d lies in the castle park and forms one of the most important zones of substantial preservation of the ancient buildings of Pöchlarn. In 1886 and 1913, preliminary investigations were carried out in the Roman baths that had a hypocaust room being laid out with screed. In 1990/91, test excavations were carried out on the foundations of a 13.6 × 20 m two-phase <em>Mithraeum</em> with mortar floor. Outside, two wells and a water gutter could be detected. The <em>Mithraeum</em> is the only one preserved on the northern Danube limes and is directly connected with the military units garrisoned here. Fort bath and Mithraeum are preserved underground in their substance.</td>
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<td>19</td>
<td>Blashausgraben – Wachturm</td>
<td>The watchtower lies directly on the right bank of the Danube in the valley of the Wachau between Schönbühel on the Danube and Aggsbach. Along the right bank of the Danube several watchtowers were built in the valley of the Wachau. They underline the military importance of monitoring the stream and river crossings in the contact area between the Roman Empire and the <em>Germania Magna</em> in northern Lower Austria. The watchtowers are in close connection with the Limes Road running to the hinterland over the valleys opening into it, in this case the Blashausgraben. The ancient cast concrete masonry is partly preserved up to 1.20 m high underground.</td>
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<tr>
<td>20</td>
<td>St. Johann im Mauernthale – Wachturm</td>
<td>The watchtower is located directly on the right bank of the Danube at the entrance to the Mauertal valley in the village of St. Johann in Mauernthale and is integrated in in the church of St. John the Baptist. Along the right bank of the Danube several watchtowers were built in the valley of the Wachau. They underline the military importance of monitoring the stream and river crossings in the contact area between the Roman Empire and the <em>Germania Magna</em> in northern Lower Austria. The watchtowers are in close connection with the Limes Road running to the hinterland over the valleys opening into it, in this case the Mauertal. In the foundation of the church tower on the southern side of the chapel of St. Johann in the Mauernthale, and of the nave, up to 7 m high sections of a watchtower are integrated based on an investigation of building history in 2015. Archaeological and geophysical investigations in 2016 have shown that the watchtower is still largely preserved in its floor plan.</td>
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<td>21</td>
<td>Bacharnsdorf – Wachturm</td>
<td>The watchtower lies directly on the right bank of the Danube in the valley of the Wachau, following the Bacharnsdorf house No. 7. Along the right bank of the Danube several watchtowers were built in the valley of the Wachau. They underline the military importance of monitoring the stream and river crossings in the contact area between the Roman Empire and the <em>Germania Magna</em> in northern Lower Austria. The watchtowers are in close connection with the Limes Road running to the hinterland over the valleys opening into it, in this case the Kupferta. It blocked the access to the Kupfertal opening up from the Dunkelsteinerwald to the Danube. The watchtower was first recognized in its significance in 1965, followed by an archaeological investigation in 1970 and a comprehensive restoration in 1985. The watchtower of Bacharnsdorf, to which house no. 7 is built to, has a square floor plan (12.2 × 12.4 m, foundation stone thickness 1.6–1.7 m) and is visible up to the height of three floors (height max. 9 m). It is the best preserved Late Roman watchtower on the Austrian Danube limes. The former room heights are indicated by the put-log holes visible in the interior; the middle floor is characterized by crenels, the upper floor by round arched windows. The masonry of the south and west sides, which rises to a height of 9 meters, is conserved.</td>
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<tr>
<td>22</td>
<td>St. Lorenz – Wachturm</td>
<td>The watchtower lies directly on the right bank of the Danube in the valley of the Wachau between Schönbühl on the Danube and Rossatz and is integrated into the chapel of St. Lorenz. It is located just upstream of the great Donauschlinge of Rossatz. Along the right bank of the Danube several watchtowers were built in the valley of the Wachau. They underline the military importance of monitoring the stream and river crossings in the contact area between the Roman Empire and the <em>Germania Magna</em> in northern Lower Austria. The watchtowers are in close connection with the Limes Road running to the hinterland over the valleys opening into it. On the other hand, the watchtower of St. Lorenz served as a monitoring point of the Rossatz current loop due to its topographical position. In the foundations of buildings on the northern side of the parish church of St. Lorenz and of the church, a section of the watchtower is integrated based on the investigation of the historical construction in 1994. The north wall of the church nave corresponds to the older southern wall of house no. 4 and thus to the Roman fortifications.</td>
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<td>23</td>
<td>Windstallgraben – Wachtturm</td>
<td>The watchtower lies directly on the right bank of the Danube in the valley of the Wachau between Rossatz and Mautern on the Danube. It is located just downstream of the large Donauschlinge of Rossatz. Along the right bank of the Danube several watchtowers were built in the valley of the Wachau. They underline the military importance of monitoring the stream and river crossings in the contact area between the Roman Empire and the Germania Magna in northern Lower Austria. The watchtowers are in close connection with the Limes Road running to the hinterland over the valleys opening into i, in this case the Windstal. The watchtower at the Windstallgraben served for the monitoring of the Rossatzer current loop due to its topographical position. After a Roman watchtower had been postulated in the area around Windstalgraben already around 1900, it was also recognized on site for the first time in 1952. The building, restored in 1994, is preserved up to a height of 1.20 m and has a square floor plan (9.0 x 9.0 m). The findings confirm the dating to the 4th/5th century AD; a few Germanic finds indicate a garrison with Germanic origin. A smaller predecessor construction of the 2nd/3rd century was erected in the south wing of the watchtower. The watchtower is not only an integral part of the chain of watchtowers in the Wachau between Melk and Mautern on the Danube, but also comparatively well preserved and accessible as a preserved ruin.</td>
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<td>24a</td>
<td>Mautern – Kastell Westbereich</td>
<td>The Roman fort Mautern/Favianis is located in the Medieval old town of Mautern, between the castle in the north, Alter Friedhofstraße in the south, St. Pöltener Straße in the east and Stadtmauer in the west. Medieval Mautern developed over the fort Favianis of the Notitia Dignitatum and the Vita Sancti Severini. According to recent research, seven construction periods of the 1st to 5th centuries AD are examined, which were associated with extensions and partial positional shifts. The first two periods (AD 70/80-120/140) are marked by the pointed trenches of two timber-earth forts. The Northern front was built over in the first period of the stone building phase (period 3) and retained until period 5. In period 2 an expansion took place to the south and west, but remained unchanged in the oldest stone fort. For the stone fort, a total of five construction periods are assumed, the fronts of periods 3 and 4 being identical. The oldest stone fort (period 3, AD 130/140-170/180) had a square floor plan (175 x 175 m). Its western and southern fronts correspond to the Medieval town wall, while the unchanged northern front between the younger field tower at the parsonage and the tower at the Nikolaihof disappeared. The garrison of the cohors I Aelia Brittonum around AD 140/150 is considered as the reason for the erection. After a fire, the destroyed barracks were restored in period 4, possibly during the reign of Commodus (end of fire after AD 251). In a continued retention of the floor plan during period 5 (AD 260/270-360/370) at the NW, NE and SW corners, field towers were erected and the interior was redesigned, which is connected to the garrison of the legio I Noricorum. Period 6 (AD 370/380-450) brought a comprehensive change when the northern front was advanced to the Danube. As a result, the interior has been enlarged by about one third, although not installed. In the first half of the 5th century, three powerful horseshoe towers, including a gate tower of the eastern front arose. A horseshoe Tower of the northern front became the essence of the present day’s castle during the Middle Ages. The one on the western front is integrated into the Medieval town walls and forms an access to the castle and the museum. The interior of the fort was increasingly used for civilian purposes during the later period. For period 7 (AD 450–480/500) only settlement activity is detectable. The component part 24a in the west of the fort comprises of the ancient fortifications standing upright, which were integrated into the city fortification during the Middle Ages. A horseshoe tower in the north and a fan-shaped tower in the south are the main features of the western front of the fort. They are some of the most monumental buildings from the ancient world at the Danube Limes. The adjacent green areas and traffic areas within the fort contain intact archaeological levels from ancient times to the present. They display an outstanding example of Roman art of fort construction in the Middle Danube as well as its Medieval perception and transformation, a visible testimony of the Roman past of Mautern.</td>
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<td>24b</td>
<td>Mautern – Kastell Ostbereich</td>
<td>For description see Component part 24a. The component part 24b in the east of the fort comprises of the North and East Front of the fort construction periods 1-5, as well as a gate tower of Late Antiquity of the Eastern Front (period 6). These antique components were integrated from the 9th century AD onwards into...</td>
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<td>Traismauer – Kastell südwestlicher Fächerturm</td>
<td>The building of the Nikolaihof. The adjacent green spaces on the north within the fort contain intact archaeological levels from ancient times to the present. They display an outstanding example of Roman art of fort construction in the Middle Danube as well as its Medieval perception and transformation, as a visible testimony to the Roman past of Mautern.</td>
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<tr>
<td>25a</td>
<td>Traismauer – Kleinkastell</td>
<td>The fort, built by the Medieval old town, lies within the district of Gartenring, Bahnhofstraße and Wiener Strasse, on the right bank of the river Traisen, about 2 km south of its estuary into the Danube. The present view of the place reflects the former ground-plans of the fort. Originally equated with the road station <em>Trigisamum</em>, the identification with the <em>Augustiana</em> mentioned in the <em>Notitia dignitatum</em> is undisputed today. The first fort from the early imperial period, presumably a two-phase or three-phase timber-earth fort, so far has been known only in individual sites. Its location corresponds more or less to the later stone fort; however, the walls are located somewhat within the area of stone walls at the North Front and East Front. According to an inscription from the Wiener Tor (“Vienna Gate”), the stone fort was built by the equestrian military unit <em>ala I Augusta Thracum</em> in the first half of the 2nd century and moved further outwards the timber-earth forts. From the findings proved so far, there is a roughly rectangular ground plan with an inner area of 3.75 hectares. In the 4th century construction of a horseshoe tower and a fan-shaped tower. The parts of this most recent stone building phase (Wienertor “Vienna Gate”, Reckturm “Reck Tower”, Haus Venusbergstrasse 10) which stand upright up to this day, were used again during the Middle Ages and continue to characterize the landscape of Traismauer. The <em>ala I Thracum (victrix?)</em> from the second third of the 2nd century is verified as the first fort garrison. The <em>equites Dalmatae</em> (Dalmatian horsemen) had occupied the fort in Late Antiquity. Component part 25a, the south-western fan tower, can be recognized already on the ground plan of the existing building. Archaeological investigations of 1983 showed that the ancient masonry is preserved up to a height of 4 m. It has a wall thickness of 1.5-1.8 m and a structural height of 1.9 m. The tower is built over two V-shaped ditches of the older stone fort. In its interior, a continued use during Late Antiquity has been successfully proven. The uppermost antique layer shows the traces of destruction by fire. After a long period of dilapidation, the first reconstruction measures took place during the Middle Ages. Today, the remains of the tower are preserved in a basement.</td>
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<tr>
<td>25b</td>
<td>Traismauer – Zentralbereich</td>
<td>For description see Component part 25a. Component part 25b, the castle built in the northwest corner, was developed from the remains of the late Roman fort in the 4th century. The area is preserved intact in its original substance, both in the foundation of the castle as well as under the surrounding green spaces, except for small archaeological investigations in the courtyard. Above its gate there is an honorific inscription of the <em>ala I Augusta Thracum</em> in honor of the Emperor Antoninus Pius, founded in AD 140/144, which is known since the early 16th century. As a visible testimony of the Roman past in Traismauer, the modern castle constitutes an excellent example of Roman architecture of fortification at the Middle Danube as well as its perception and transformation, which began in the early Middle Ages.</td>
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<tr>
<td>25c</td>
<td>Traismauer – Hufeisenturm</td>
<td>For description see Component part 25a. Component part 25c, the central area with the parish church St. Rupert rises above the important remains of the <em>principia</em> of the stone fortification with a space consecrated to the flags of the legion and the forum surrounded on three sides by a portico (pillared hall). The preserved ruins are accessible in an archaeological crypt of the parish church. In the 5th century, the <em>principia</em> were destroyed in a fire originating at the nearby settlement with simple wooden huts. The remains of the timber-earth fort and a barrack building of the stone fortification can be found under the eastern part of the church square and the northern part of the parsonage. Undisturbed and well-preserved parts of the inner building as well as the eastern and southern fort-front are found underground, in the adjoining gardens.</td>
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<tr>
<td>25d</td>
<td>Traismauer – Hufeisenturm</td>
<td>For description see Component part 25a. Component part 25d, the so called Reck Tower or Hungerturm belonging to the northern front of the fort consists of antique masonry, up to the second floor, which contains numerous spolia. The Medieval town wall adjoining the west and east was built above the foundation of the ancient fort walls.</td>
</tr>
<tr>
<td>ID No</td>
<td>Component part</td>
<td>Description</td>
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<tr>
<td>25e</td>
<td>Traismauer – Kastell Römertor</td>
<td>For description see Component part 25a. Component part 25e, the so-called Römertor (“Roman Gate”), is identical with the <em>porta principalis dextra</em> of the second stone building phase, from which the ancient building substance is preserved up to the second floor. The complex consists of two lateral semi-circular towers with a gate-system. The monumental gate-building was built by moving it slightly eastward over an earlier gate-system with corner towers. Adaptation work of the early 16th and the 19th centuries has resulted in the appearance visible today. As a visible testimony to the Roman past of Traismauer, the gate-system forms an outstanding example of Roman fortification architecture at the Middle Danube and its perception and transformation during the Middle Ages.</td>
</tr>
<tr>
<td>26</td>
<td>Zwentendorf – Kastell, Vicus, Gräberfelder</td>
<td>The fort is located on the edge of the former marshy area near the River Danube. The fort was built north of the Limes Road near the main stream. The decisive factor for the site selection was the control of the easy river crossing from a main settlement area of the Marcomanians in the marshy area. The southern part of the fort, <em>vicus</em> and connecting road to the Limesstrasse were already flood-proof. The strategically advantageous location can be clearly identified by means of historical maps, because the control buildings near the River Danube are only visible to the trained eye on site. The identification of the fort, which has been disputed for a long time could be verified recently with the help of a label made of lead with an <em>Asturis</em> mentioned in the <em>Notitia Dignitatum</em>. While the northern half of the fort had eroded due to Danube floods, extensive archaeological studies were done on the southern area. The first timber-earth fort had a trapezoidal ground plan, the trenches of which ran obliquely towards the north-west, probably following the course of a Danube creek. The expansion in stone took place for the first time in early 2nd century. The fort was reinforced in Late Antiquity, with fan towers at the corners and horseshoe towers on the south and west front. The <em>porta decumana</em> was remodeled into a small protruding gate-building with a small passage. At the same time, the <em>principia</em> expanded. The fort was used as a civilian settlement in Late Antiquity and as burial place during the 10th/11th century. Subsequently, the south-eastern fan tower was converted to a fort to be utilized until the 14th century. It is disputed to some extent that the presence of the troops was deduced only with tile stamps but the presence of <em>legio II Italica</em>, the <em>legio I Noricorum</em> and units of the OFARN group have been established. The extent and construction of civilian settlements are known from aerial photographs and geophysical prospecutions. A multi-story stone building stands out in the southeast of the fort. A road about 6.5 meters wide leads southwards from the <em>porta decumana</em>. Another road accompanies the south flank of the fort at a right angle. On each side of the road leading south, there were cemeteries lining them. The dating of the settlements and burial grounds has been verified by rescue excavations in the western border area. The fort, <em>vicus</em> and cemeteries are preserved to a great extent below ground; the south-east corner of the fort, which towered above during the Middle Ages, is visible.</td>
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<tr>
<td>27a</td>
<td>Tulln – Kastell Hufeisenturm</td>
<td>The ruins of the fort <em>Comagena</em> (Comagenis) mentioned in the <em>Tabula Peutingeriana</em>, the <em>Itinerarium Antonini</em> and also an important place of the <em>Vita Sancti Severini</em> lie under the Medieval old town of Tulln. Despite its initial identification in the 19th century, the localization of the fort was only possible due to archaeological research after 1980. On the basis of a fort construction inscription found in year 2000 in the <em>porta principalis dextra</em> (AD 104), a reconstruction work had taken place in a stone fort, on one of the oldest timber-earth forties from the late first century, around the 1st to 2nd century by the <em>ala I Commagenerorum</em>. The eastern, southern and western fronts of the fort are still apparently partially preserved, while the northern front has been eroded by the River Danube. A two-phase system of V-shaped trenches was located in front of the fort walls. Two catastrophic fires are known from the 3rd century. A more extensive restructuring work of the fort was done around the middle of the 4th century. The fan towers at the south-west and the south-east corner originate from this period. After another fire disaster, the last construction measures were carried out under the Roman military chief <em>dux Ursicinus</em>. It appears that the fort was reduced in size during Late Antiquity, as its north-west corner had been sealed off by a V-shaped moat; the small fort itself is so far incomprehensible from an archaeological point of view. The bulk of the fort’s area served as a civilian settlement area.</td>
</tr>
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</table>
### Component part 27b
#### Tulln – Kastell
#### Zentralbereich

As it can be proved through the presence of *ala I Commagenorum*, the fort was the base of the Danube fleet and the garrison of an equestrian military unit (*equites promoti Comagenis*) in Late Antiquity up to the 3rd century. In the 5th century, a garrison of Germanic confederates is archaeologically documented. After a long phase without inhabitation, new settlement at the site in ruins during the 9th century and its development into a Medieval city center. Component part 27a is a late Roman horseshoe tower of the western front, which is preserved to the rooftop, whose excellent preservation is due to the Medieval re-use as a stacking area for salt in the Danube region of Tulln.

It forms an excellent example for Roman fortification architecture on the Middle Danube, as well as its perception, reconstruction and continued use during the Middle Ages, as a visible testimony of the Roman past in Tulln.

Component part 27b, the central area of the fort, owes its undiminished preservation the use as a park of the former hospital. Overbuilt by two Medieval monasteries, which were demolished in the early 19th century, the ancient archaeological layers are found here at a considerable depth of 3 to 4 m, now protected by a concrete slab-structure bridging and modern buildings.

The *porta principalis dextra* is preserved under a protective structure constructed in 2001. The gate-system of the stone fort, uncovered in 1980, consists of two rectangular gate towers with a partition wall. After a fire, the southern gateway was bricked up in Late Antiquity. The original building inscription of the original gate from the year AD 104 was found in secondary use in its area during the preservation work in.

### Component part 28a
#### Zeiselmauer – KleinKastell

The walls of the fort of Zeiselmauer identify the current layout of Zeiselmauer with several ancient buildings, which are located in upright position, partly up to the height of the roof. The fort lies after the river training approximately 1 km south of the banks of the river Danube and shows the eastern fort of the Province of *Noricum (Noricum Ripense of Late Antiquity)* at the Austrian Danube Limes. The *Cannabiaca* mentioned in the *Notitia Dignitatum* as an ancient name, is widely accepted.

A timber-earth fort built in the last decades of the 1st century AD was gradually renewed in stone by the middle of the 2nd century. From the beginning of the 4th century, the fan towers which are partly visible to this day were built. Towers with a horseshoe-shaped layout between the corners of the fort and the gates verified the 1.4 m thick fort wall. Two V-shaped ditches built in a forward position and separated by a wall, could be seen on the north side. Several remains of military barracks could also be identified in the fort area, near the *principia* with its sanctuary of the flags of the legion, lying under the present church. Further, the *via principalis* was uncovered, which passed towards the archway of the *porta principalis dextra*. The fort served as a civilian settlement area in Late Antiquity, with the exception of the small fort, and while doing so, experienced a fundamental structural transformation.

The first occupying troops were presumably the *cohors V Breucorum*. From AD 122 to the 3rd century Zeiselmauer was the garrison of the *cohors II Thracum equitata pia fidelis*, later of border troops. After a prolonged, abandoned period, there was a re-colonization of the ruins in the 9th/10th century.

Component part 28a was constructed after the middle of 4th century over the removed parts of the north-western fan tower as a small fort with inner courtyard. This upright building with a square ground plan, standing upright to this day, was designed for a small military unit, while the rest of the fort area served as a civilian settlement. The antique building structure, which has been preserved up to the rooftop, together with the granary and the eastern front of the fort (component part 28d), is one of the most important monuments of Central Europe.

### Component part 28b
#### Zeiselmauer – Kastell
#### Zentralbereich

For description see Component part 28a.

Component part 28b, the Medieval parish church with an adjoining church square, was built in the late Carolingian period, using ancient building parts such as foundations above the Roman central buildings. The sanctuary of the flags of the legion is preserved under the church in the form of an archaeological crypt. The intact ancient archaeological layers are found under the church square.

### Component part 28c
#### Zeiselmauer – Kastell
#### Hufeisenturm

For description see Component part 28a.

Component part 28c is a preserved horseshoe tower of the southern front, accessible from the basement of the primary school ("Volksschule").
ID No | Component part | Description
--- | --- | ---
30 | Wien – Legionslager Zentralbereich | The legionary fortress was built on a flood proof plateau oriented northwards to the Danube today's Danube Canal. The proximity to the Limes Road and the location near the Danube allowed quick transport of troops and the monitoring of the river crossings into the settlement area of the Germanic tribal confederation of the Marcomans. The overall successful selection of the site is confirmed by the new settlement from the High Middle Ages and the expansion later on to the residential city of the Babenbergs and Habsburgs.

The center of the settlement with the legionary fortress *Vindobona* was located in the Medieval city center of Vienna and was delimited by the Ottakringerbach (stream) in the west and the river Wienfluss in the south and east. The ancient banks of the Donau, which followed the course of today's Danube Canal, aligned itself in the north. The layout of the fortress walls and the trenches stands out against the cityscape even to this day, since the Roman fortress wall was partially repaired during the Middle Ages and was presumably continuously used until the end of the 12th century as a city wall of Vienna in the earlier times.

Already during the first construction phase at the end of the 1st century AD, the fortress walls as well as the main buildings (*principia, praetorium*) were built in stone, while the troop barracks consisted of clay bricks up to the second half of the 2nd century and had a foundation made of stone only afterwards. Not only the ground plans and phase configuration of the soldiers' accommodation could be documented on the Judenplatz and on the square 'Am Hof', but also the infrastructural facilities, such as ovens for baking, hearths, heating systems and a workshop area.

In addition to the layout of the fortress (Tiefengraben - Naglergasse - Graben - Rotenturmstraße) and the location of three gate-systems (*porta principalis sinistra* at Tiefen Graben, *porta principalis dextra* in Kramergasse, *porta decumana* on the Tuchlauben), interior construction as well as stretches of road have been proven with certainty multiple times (the *via sagularis* with its canal system, numerous sections of the *via principalis* bordered with porticoes, the tribunes' houses at the Hohen Markt located north of it, the barracks at the Wildpretmarkt and Judenplatz, the Baths on the Marc-Aurel-Strasse and the *fabrica* Am Hof).

In late Roman times, the fortress was reconstructed with the inclusion of well-preserved parts of the older fortification fittings and the interior construction was adapted. From the 4th century, the areas within the fortress’s military fort were used as a settlement area for the civilian population. The last reconstruction phase in the *Vindobona* fortress took place in the...

29 | Klosterneuburg – Kastell und Vicus | Component part 29 was erected on a prominent plateau projecting northwards to the Danube, which afforded a far-reaching view of the river and the river basin with numerous Danube creeks adjoining the northern side. This enabled control of the river and a river crossing in the settlement area of the Germanic tribal confederation of the Marcomans. The overall successful selection of the location is confirmed by the construction of the Babenberg residence and the Diocese on the site of the fort in the 12th century.

The ruins of the fort are now completely under the site of the Monastery of the Canons Regular of St. Augustine (Augustiner Chorherrenstift), partly built over by the Medieval and baroque monastery complex, their sacral and profane adjoining buildings and the various associated courtyards and squares.

The fort, whose ancient name is not being handed down, shows a northeast-southwest-oriented, long-rectangular ground plan of about 2.2 hectares and was terraced slightly sloping towards the Danube.

Immediately south of the fort, the *vicus* is connected to the area of the Diocese and the Town Hall square, from which a 5 m wide road dating back to the 2nd/3rd century is well-known. This street connected the fort with the Limes Road at the foot of the Buchenberg. During Late Antiquity, the Glacis, which had originally been cleared of control structures, was used for simple wooden buildings.

Parts of the fort, such as the way in which the masonry of the eastern fort, the fort’s bath and a cistern are preserved and visible, others are preserved with their structure underground. The *vicus* adjoining the fort to the south is preserved due to its structures lying deep under the present ground surface.

Fächerturm, Ostmauer | The architectonic ensemble of component part 28d, together with component part 28a, is one of the most impressive examples of Roman fortification architecture north of the Alps. The box gate of the *porta principalis dextra*'s ancient building structure preserved up to the attic, owes its exceptionally good preservation to its reconstruction to a fort in Late Antiquity and the continued use during the Middle Ages, as a tithe barn for the Diocese of Passau. The eastern fort wall preserved in original building structure runs between this gate and the preserved north-eastern fan tower.

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first half of the 5th century. The buildings, which are now of less quality made of dry masonry wall, are no longer oriented towards the fort’s axis, thus resulting in a post-military use by the population of the ancient world.

There has been evidence of a port from Late Antiquity, directly towards the north of the fortress. As early as the Roman Imperial Period, a naval base in Vindobona for parts of the classis Pannonica has to be assumed, due to the strategically important position at the Danube. For Late Antiquity, a praefectus of the classis Histriceae has been mentioned in the Notitia Dignitatum (Occ. 34:28), a unit stationed earlier in Carnuntum.

Component part 30 covers the Hohen Markt as the only larger free area in densely populated urban areas. To some extent, there are excellently preserved tribune houses of the legionary fortress under this square. Preserved remains of two such houses with peristyle courtyard, the residential areas of high-ranking Roman commanders, are accessible underground from the Roman Museum at the Hohen Markt and are well preserved. There are a number of room units, which had been fitted out with floor and wall heating, which can be visited.

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<th>ID No</th>
<th>Component part</th>
<th>Description</th>
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<tr>
<td>31</td>
<td>Carnuntum – Legionslager – Befestigungen, Zivilstadt, Vici, Gräberfelder</td>
<td>The legionary fortress Carnuntum was built in a geographically favourable location just before the entrance of the Danube into the narrowing of the Hainburger gate (Devín Gate) and at a transition of river going back to the prehistoric era in time, the part which was the so-called Bernsteinstraße. The flood proof location at the Limes Road was also of crucial importance. Despite these still clearly recognizable conditions, the early Medieval central town of Hainburg did not emerge over the ancient ruins, but directly at the Hainburger gate. The Limes Road continued to exist as a &quot;road to Hungary&quot; and further formed the main route to Hungary. Component part 31 covers the area between Bad Deutsch-Altenburg and Petronell-Carnuntum, where the legion fortress and the auxiliary fortress are located. The canabae legionis (Fort-City) was located in the municipal area of Bad Deutsch-Altenburg; the civilian town with the suburbs is located in the west, in the area of Petronell-Carnuntum. Individual larger monuments, water pipes and streets could be identified adjacent to the settlement zones by means of aerial photography and the results of the geophysical survey. In the western slope of the Pfaffenberg, an aqueduct can be closed due to an array of columns. There are two practice fortresses on the south. At least ten further temporary fortresses stretch out south of the village of Petronell-Carnuntum. The most famous archaeological monument in Austria, the “Heidentor” (Heathen’s Door) is located on the outskirts of the civilian town, about 900 meters south of the city wall. Nearby four superimposed exercise fortresses were discovered using geophysical prospecting methods. The Heidentor, a 14.5 m high four- column structure (Quadrifrons) from the middle of the 4th century, forms the most famous symbol of Austria’s Roman past and is the only ancient monument of Carnuntum visibly preserved over the centuries. The legionary fortress, which was explored archaeologically from 1877-1914 and from 1968-1977, covers an area of 18-19 hectares. The original timber-earth fort from the middle of the 1st century AD was transformed gradually to a stone fortress during the reign of Vespasian (AD 69-79), and subsequently renovated and rebuilt several times. A large part of the buildings was erected by the legio XIII Gemina (“The Twinned Fourteenth Legion”), which was replaced by the 15th legion, and which remained in Carnuntum until Late Antiquity. The most recent construction measures date from the beginning of the 5th century. The canabae legionis surrounded the legion fortress in the east, south and west. At the time of their greatest expansion, they stretched over an area of about 130 hectares, clearly exceeding the civilian town, which was half the size. Their appearance was characterized by many large buildings. Particularly noteworthy is the Palace of the imperial legate of Upper Pannonia, identified for the first time in aerial photography in 2012. Opposite to it was the large meeting place (campus) of the legion. A large building in the eastern part of the city can be construed as a baths due to the numerous bathing facilities. Among the religious sanctuaries, which have been evidenced in the city, the temple area, which was partially uncovered in 1978–1991, dedicated to the cult of the Iuppiter Heliolopolitanus is worthy of special mention. It is the only example of this cult outside the province of Syria, which is situated in the Asia Minor, situated east of the Empire. An amphitheater preserved in the area which was built in the 70ies of the 1st century is also part of the canabae which was rebuilt and expanded once again towards the end of the 2nd century AD. The elaborately designed Imperial Gallery or the Governor’s Gallery is found on the south side of the spectator terraces. A mounted auxiliary unit was stationed in the Auxiliary Fort near the Grabenstrasse. This military fortress had been laid out as a 4-hectare timber-earth fortress in the Flavian Era and was converted during the first decades of the 2nd century AD predominantly in stone. There is evidence for the ala I Thracum victrix as garrison of the stone fortress.</td>
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Modern road construction led to the exploration of cemeteries along the ancient radial roads, whereby elaborate tomb architecture such as funeral altars, pillar monuments or tomb chapels as well as *tumulus* tombs were found.

The civilian town of *Carnuntum* on the western edge of the modern village of Petronell had been surrounded by a city wall since the Severan period. Its center forms a *Forum*, which is more than 9300 m² in size, with a *basilica* and single-room shops (*tabernae*). An approximately 65 × 45 m building complex on the south side of the forum was the office of the *curia*, *tabularium* and the office of the highest city official.

The Forum’s baths in the civilian city bordering the Forum on the north, originated during the Severan period and were already destroyed by a fire in the years between 260 and 280 AD. The antique monuments discovered in the part of the civilian city located in the east of the forum, were preserved after the end of scientific researches, according to the international standards of archaeological preservation of monuments and are presented in the form of restored ruins, partial and full reconstructions *in situ*.

The amphitheater of the civilian city is found in the southern part of the city, and has been reconstructed several times after it was built in 2nd century AD. To the west of the amphitheater, there is a building complex 2,800 m² in size with an inner courtyard where a 19 m diameter exercise arena (*ludus*) could be verified. *Carnuntum* is considered to be the most important archaeological monument landscape of Austria. Its special characteristics include the close interconnection of military and civilian functions, so that the archaeological monuments of *Carnuntum* exemplify all aspects of a northern garrison and border town of the Roman Empire. Partially preserved *in situ*, partially structures as an archaeological park, but preserved to the greatest extent but substantially underground and only visible by means of modern prospecting methods, the territory around the Legion Fortress of *Carnuntum* is one of the most important military and civilian settlement complexes on the northern border of the Roman Empire.

### Description

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<tbody>
<tr>
<td>32</td>
<td>Bratislava-Rusovce – Gerulata, rímsky vojenský tábor (kastel)</td>
<td>The Roman fort Gerulata is situated on the northeast edge of Rusovce, a borough of Bratislava, the capital of the Slovak Republic. The adjacent territory is characterized by a mildly profiled lowland terrain with an elevation of 130 to 136 meters above sea level. The nearly square-shaped fort was protected by a stone wall, defensive ditch, ramparts and gates on each side of a right-angled plan. Based on results of the archaeological research, it is possible to identify four construction phases of the fort, with the oldest traces of buildings dating back to the second half of the 1st century AD, the most recent to the end of the 4th century AD. The site’s contemporary presentation shows the fourth stage of construction – a fortified stone tower (29 × 30 m), which was built into the corner of the older fort. Nowadays it is protected as a national cultural monument and represents a component of the nominated property. The tower had 12 massive pillars forming a courtyard. The depth of the foundations of the pillars and the perimeter walls of the tower (3 – 4 m) indicate that the tower could have had up to three storeys. Near the centre there is an asymmetrically positioned well, which is today indicated by a copy of the original well. On the east side of the fort an original interior floor from the fourth construction phase has survived. Currently, sections of the fort’s bare walls are presented in situ within the framework of the exterior premises of the museum “Ancient Gerulata” in Rusovce. The buffer zone - Historic zone Rusovce comprises the remaining parts of the fort, outside the museum area, as well as the remains of civilian settlement and cemeteries from the Roman period, situated underground, below contemporary municipality of Rusovce.</td>
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<td>33</td>
<td>Bezenye-Büdösküti-szántók – Gerulata 4. őrtorony</td>
<td>The watchtower can be found near the western part of Bezenye, ca. 1.6 km to the northeast of the canal <em>Lajta bal parti csatorna</em>. This watchtower does not lie on the Limes Road, but next to the road providing a direct connection between Carnuntum and Ad Flexum. The exterior dimensions of the square structure were 6.95 × 7.2 m and its interior dimensions were 3.75 × 4 m. The thickness of the walls varies between 1.45–1.75 m, and buttresses protruding 0.5–1 m were successfully identified at the corners. The entrance to the tower was on the eastern side and on the basis of aerial photographs it was surrounded by a rectangular double ditch. The element of nominated property includes the site of the watchtower identified in aerial photographs and excavation. The buffer zone comprises the lots containing the element of nominated property, cutting off the lots pf the roads.</td>
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<td>34</td>
<td>Lébény/Mosonszentmiklós Barátföldpuszta – Quadrata</td>
<td>This site is situated near the northeastern border of Lébény, next to the Route 1 from Győr via Vienna.</td>
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</table>
The dimensions of the stone fort are 115 × 113 m. The towers of the fort, which originally were square internal towers on the corners, were reconstructed in a slightly trapezoidal form in the first half of the 3rd century, and presumably at the same time it was expanded with semicircular protruding tower sections. During the course of the rebuilding of the fort datable to the first half of the 4th century, the corner towers were reconstructed in a fan shape – similarly to several other forts. However, these towers had smaller dimensions than it was customary within the previous vallum (fortification system) of the fort, not being built upon the fort’s earlier ditch as can be seen elsewhere. The fossa (ditch) surrounding the stone fort was 4.5 m wide and 2.6 m deep.

A military vicus, known so far from aerial photographs and intensive survey, developed around the fort. Most of the area of the fort is not under cultivation, only a narrow strip on the northern facade of the fort is ploughed. Most of the area of the fort lies in a wooded and bushy area behind the present-day buildings of Barátföldpuszta.

The element of nominated property includes the sites of the fort and the settlement surrounding it, as well as the road that have been identified through aerial photographs. The buffer zone comprises the lots containing the element of nominated property.

The ruins of a Late Roman military structure are situated in the Toronyvári Fields on the banks of the Moson Danube on the border area of Kunsziget. The Roman wall construction, which is in a good condition, represent the corner of a military building, it belongs either to the central tower of a fortified river port or to a watchtower.

The element of nominated property covers the known extent of the fort and the settlement surrounding it, as well as the road that have been identified through aerial photographs. The buffer zone comprises the lots containing the element of nominated property.

The site is situated on the northern edge of Abda municipality in the area of cultivated fields. The watchtower can be identified as a light spot of about 25 × 25 m on an aerial photograph taken in 1961. Roman building fragments can also be observed on its slightly protruding mound.

To the south, a section of the Limes Road that has been identified in aerial photographs and field walks led to the watchtower in the Roman period. Its slightly raised embankment and gravel bed can be followed to the banks of the Rábca River.

The element of nominated property includes the sites of the watchtower and the road that can be identified by survey and in aerial photographs. The buffer zone includes the lots containing the element of nominated property.

This watchtower on the border of Győrszentiván, near the former Véneki Inn, across from the Véneki ferry was not located along the Limes Road, but instead directly on the bank of the Danube.

The size of the building was 25 m and it was encircled by a ditch with a diameter of about 115 m. Its date cannot be precisely determined. This site is a field and it can be reached by paved road.

The element of nominated property includes the area of the watchtower’s ditch identified in aerial photographs and the site of the building remains that can be identified on the surface. The buffer zone is comprised of the lots containing the element of nominated property.
ID No | Component part | Description
--- | --- | ---
40 | Gönyű Nagy-Sáros-dűlő – Arrabona 11. útállomás | The Arrabona 11 road station is located in the western border of administrative area of the village of Gönyű, near the Kossuth Lajos street, to the north of Route 1. The four major chambers of the road station building with stone foundations and adobe walls were located close to the entrance, and the rear section of the building created an enclosed courtyard. The dimensions of the building were $16.7 \times 21.8$ m, and its ground plan was slightly irregular, in the form of a parallelogram. An enclosing ditch ran around the *mutatio*, which had a break on the south side where a gravel entryway was formed from the Limes Road. The element of nominated property includes the enclosing ditch known from the excavation of the road station. The buffer zone covers the lot containing the element of nominated property.
41 | Ács Vaspuszta – Ad Statuas segédcsapat tábort | The fort can be found in the western part of administrative area of the village of Ács, on the bank rising above the Danube lies the auxiliary fort. The stone fort was $106$ m wide, its estimated length was $112$ m. The thickness of the surrounding wall was $104$ cm. The element of nominated property covers the extent of the fort, including the wall sections that are in a subsequent position, in the channel of the Danube, due to landslides on the loess river bank. The buffer zone is comprised of the lots that contain the element of nominated property, but in Ács the lot of the Danube channel has been cut off.
42 | Ács Bum-Bum kút – Ad Mures segédcsapat tábort | The auxiliary fort can be found to the north of Ács, in the vineyards of the area called Bumbum-kút, to the west of the Concó Stream, on its high bank. The dimension of the fort could be determined on the basis of an aerial photograph from 1954, and were $130 \times 175$ m. Its northeastern section has been destroyed due to erosion by the Danube. During the course of the excavation a horseshoe-shaped Late Roman tower was discovered in its southeastern corner. Based on aerial photographs and surface observation, the traces of the *vicus* could be identified about $200$ m from the fort to the south and to the east, the Limes Road ran directly along the southern side of the fort. The element of nominated property includes the fort and its ditches, and to the north up to the foot of the high river bank. The buffer zone runs along the borders of the lots containing the currently known extent of the former *vicus*.
43a | Komárom – Brigetio V. menettábor | This is a camp identified from the air in 1994, from geophysical survey in 2015 and from trial excavation in 2016 in the Tatai-útra-dűlő to the south of Szőny on the south side of the road to Tata. Its dimensions were $155 \times 120$ m. The entrance to the camp can be identified on its eastern side. On the basis of its size it may have been a *cohors* camp. The element of nominated property is the extent of the camp that can be identified in aerial photographs. The buffer zone runs along the borders of the lots containing the element of nominated property.
43b | Mocsai – Brigetio VI. menettábor | This is a *cohors* camp to the northwest of Boldogasszony-puszta in the Boldogasszonypusztai-szöldők to the south of Szőny on the south side of the road to Tata. Its dimensions were $95 \times 140$ meters, it is oriented northwest–southeast and has rounded corners. The element of nominated property is the extent of the camp that can be identified in aerial photographs. The buffer zone runs along the border of the lot containing the element of nominated property.
43c | Komárom – Brigetio, VIII-XI, XXXII. menettáborok | Five camps cutting across one another can be observed from the air in the area bordered by the Szőny–Füzitői-csatorna and Mocsai-ér in the Komárom–Szügét-járó-dűlő to the south of Almásfűzítő–Nagylónia and to the southeast of the Almásfűzítő fishing pond. Camp VIII is large, its corners are rounded, its calculated dimensions are $310 \times 210$ m and its orientation is turned slightly to the southwest of the east–west direction. The depression of its southern ditch can be observed even on the surface. On the basis of its size it was constructed for an *ala milliaria*. Brigetio – IX camp: This is a smaller camp discernible in the interior of camp VIII. Its ditches are parallel to those of camp VIII. Its dimensions were $205 \times 160$ m, which corresponds to the size of an *ala* or a *cohors equitata* camp. Brigetio – X camp: This is a slightly rhombus-shaped camp with dimensions of $225 \times 155$ m about $30$ m to the east of camps VIII–IX. Its ditches are parallel to those of camp VIII. On the basis of its size it probably was built for an *ala* unit. Brigetio – XI camp: The majority of this site lies on the site of camp X, and its orientation is northeast–southwest, about $45$ degrees off from the previous camps. Its eastern rounded corner lies outside the area of camp X. It is small with dimensions of about $85 \times 125$ m. The
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<tr>
<td>43d</td>
<td>Naszály – Brigetio, XII, XXXIII. menettáborok</td>
<td>Brigetio – XII camp: This is a camp oriented to the southwest–northeast lying to the west of the Almás-puszta at the southern bend of the road leading to the Boldogasszony-puszta. Brigetio – XIII camp: This camp lies on the site of camp XII and its ditches are parallel with camp XII. The element of nominated property is the extent of the camps that can be identified in aerial photographs and geophysical survey. The buffer zone runs along the border of the lots containing the element of nominated property, cutting off the linear lots.</td>
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<tr>
<td>43e</td>
<td>Naszály – Brigetio, XIII-XIV menettáborok</td>
<td>Brigetio – XIII camp: This is a camp identified to the north of the Almás-puszta on the western side of the road from Almásfűzitő to Naszály. Brigetio – XIV camp: The ditches of a smaller camp can also be observed on the site of camp XIII. The element of nominated property is the extent of the camps that can be identified in aerial photographs. The buffer zone runs along the borders of the lots containing the element of nominated property, cutting off the linear lots.</td>
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<td>43f</td>
<td>Naszály – Brigetio, XV menettáborok</td>
<td>Brigetio – XV camp: This is a camp identified to the south of the Szőny–Fűzitői-csatorna on the western side of the road from Almásfűzitő to Naszály.</td>
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<td>43g</td>
<td>Naszály – Brigetio XX, XXXIV menettáborok</td>
<td>Brigetio – XXXIV camp: It lies to the northeast of the Almás-puszta to the south of the Szőny–Fűzitői-csatorna.</td>
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<tr>
<td>43h</td>
<td>Komárom/Mocsá – Brigetio XIX. menettábor</td>
<td>Brigetio – XIX camp: This is a camp identified in the Mocsai-útra-duľő to the west of the road leading from Szőny to Mocsá.</td>
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<tr>
<td>43i</td>
<td>Komárom/Mocsá – Brigetio XX. menettábor</td>
<td>Brigetio – XX camp: This is a camp lying about 350 m to the northwest of camp XIX.</td>
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<td>43j</td>
<td>Komárom/Mocsá – Brigetio XXI. menettábor</td>
<td>Brigetio – XXI camp: This is a camp oriented to the northeast–southwest, with dimensions of 170 × 115 m and rounded corners that lies to the south of the Boldogasszonypusztai-szőlő in the Komáromi-úti-duľő. One of its entrances can also be discerned on the southwestern side. On the basis of its size it was a cohors milliaria camp. Brigetio – XXII camp: Its ditches can be discerned within camp XXI and its orientation is the same as the larger camp. Its dimensions were 105 × 60 m. On the basis of its size it can be placed amongst the camps for numeros units. The element of nominated property is the extent of the camps that can be identified in aerial photographs and geophysical survey. The buffer zone runs along the border of the lots containing the element of nominated property.</td>
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<tr>
<td>43k</td>
<td>Mocsá – Brigetio XXII, XXXIII. menettáborok</td>
<td>Brigetio – XXII camp: This is a camp oriented to the northeast–southwest, with dimensions of 170 × 115 m and rounded corners that lies to the south of the Boldogasszonypusztai-szőlő in the Komáromi-úti-duľő. One of its entrances can also be discerned on the southwestern side. On the basis of its size it was a cohors milliaria camp. Brigetio – XXIII camp: Its ditches can be discerned within camp XXII and its orientation is the same as the larger camp. Its dimensions were 105 × 60 m. On the basis of its size it can be placed amongst the camps for numeros units. The element of nominated property is the extent of the camps that can be identified in aerial photographs and geophysical survey. The buffer zone runs along the border of the lots containing the element of nominated property.</td>
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<tr>
<td>43l</td>
<td>Mocsá – Brigetio, XXIV. menettábor</td>
<td>This is a camp identified on the border of Komárom in the Szabadosoki-duľő by aerial archaeology and geophysical survey. It is oriented to the northeast–southwest and has dimensions of 295 × 185 m. On the basis of its size it was an ala milliaria camp. The element of nominated property is the extent of the camp that can be identified on aerial photographs and geophysical survey. The buffer zone runs along the border of the lots containing the element of nominated property.</td>
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| 43m  | Mocsa – Brigetio, XXV-XXVI. menettáborok | Brigetio – XXV camp: This is a camp oriented to the northwest–southeast with rounded corners, a rectangular shape and dimensions of 240 × 165 m lying in the Tófenek-dűlő. On the basis of its size it was an *ala* camp.  
Brigetio – XXVI camp: This was a camp with rounded corners and dimensions of 245 × 190 m that is 75 m to the southwest of the previous camp and oriented 90 degrees from it. On the basis of its size it was an *ala* camp.  
The element of nominated property is the extent of the camps that can be identified on aerial photographs and geophysical survey. The buffer zone runs along the border of the lots containing the element of nominated property, cutting off the road. |
| 43n  | Mocsa – Brigetio, XXVII. menettábor | According to aerial photos and geophysical survey, this is a camp to the south of camp XXVI, oriented to the northwest–southeast. Its dimensions were 230 × 150 m. On the basis of its size it was an *ala* camp.  
The element of nominated property is the extent of the camp that can be identified on aerial photographs. The buffer zone runs along the borders of the lots containing the element of nominated property. |
| 44   | Komárom-Szőny – Brigetio municipium | The component of the nominated property is located at the bank of the Danube River. The dimensions of the civilian town were nearly 350 m (north-south) by 950 m (east-west). The best known part of the municipality is the central part of the core zone at the Vásártér (so called market place) of Szőny, a not overbuilt area, where the excavations conducted by László Borhy and Emese Számadó unearthed dwelling houses with wall paintings and small finds of extraordinary importance. According to the hypothesis of László Borhy, the amphitheatre of the civil town could have been built at the western part of the civil town.  
The element of nominated property encompasses the extent of the civilian town that can be identified on earlier aerial photographs, except for the site of the cemetery where the survival of the archaeological remains is doubtful. The buffer zone runs along the borders of the lots containing the element of nominated property, and also includes the cemetery and the streets bordering the element of nominated property. |
| 45   | Komárom-Szőny – Brigetio legió tábor és katonaváros | A large field of remains of Roman presence to the east of Komárom, at Szőny was identified with Roman Brigetio. The site was one of the four legionary forts in Pannonia, it was the garrison for the *legio I adiutrix*.  
The legionary fortress was located about 2,800 m to the east of the mouth of the Váh River. A portion of the site has been built upon in the present day, but the fortress’ *praetentura* side between the railway and the Danube is still open. Residential houses were built on the southwestern section. In the 1930s the opportunity arose for the excavation of the southern gate of the fortress and the examination of the fortress’ *vallum* (fortification) system. The 540 × 430 m fortress with 1.8 m walls was surrounded by a double ditch and its defense was ensured by semicircular side and corner towers.  
The *canabae* connected to the legionary fortress spread to its south and east. An oil refinery stands on one part of its site, and archaeological finds are discovered to the present day during the course of work involving excavation on its land. The street network of the *canabae* is clearly discernible in the area under agricultural cultivation between the refinery and Szőny, and the southern border of the city can be clearly determined on the basis of aerial photographs. In the aerial photographs three streets of the former town can be observed, which curve following the arch of the corner of the fortress.  
The element of nominated property covers two separate sites: the sections of the legionary fortress and some parts of the military town to the east and west of the fortress, that have not been built upon, including the site of the enormous building (interpreted as bath) in the northwestern part of the *canabae*. The northern border of the nominated property is the southern edge of the dam running along the Danube bank. The buffer zone covers the area of the southern border of the legionary camp and in part to the north and east of the military town. The area of the oil refinery is not included, but the buffer zone includes the assumed territory of the amphitheatre of the *canabae* in the western part of the military town, identified by 18th century travellers. |
| 46   | Iža – “Kelemantia”, rímsky vojenský tábor (kastel) | The remains of the counter-fort are located east of the town of Komárno, approximately 2.2 km southwest of the centre of the municipality of Iža, in location called Leányvár, on the left bank of the Danube, at an elevation of approximately 108 – 111 meters above sea level. Its area appears slightly above the surrounding flat plain terrain as a square-shaped low ridge accentuated in the western, northern and eastern part by the residues of ramparts and ditches. The surface is grass covered, lined with a row of trees in the north-west. |
At the time of its construction after 175 AD, the counter-fort was situated on the northern periphery of the Roman Empire, technically in the Barbaricum, built opposite the fortress Brigetio as a military base during the Marcomannic Wars. These military campaigns are reflected by temporary camps built by troops drawn together around the counter-fort. The temporary camps have been investigated by aerial archaeology and geophysical survey. At the end of the Marcomannic Wars, the Romans built a stone fort on the site of a destroyed wood-clay construction with a permanent military garrison. This massive counter-fort covers an area of 172 × 172 m. The fortification walls rose to the height of 4 – 5 m. A large part of the ruins of the counter-fort buildings remain buried under the ground. All that can be seen are certain parts uncovered by archaeological research, generally, torsos of foundations of the original massive stone walls.

The area of the counter-fort with uncovered parts of the architecture, supplemented with information panels containing texts and drawn reconstructions, is freely accessible for visitors. The buffer zone includes the vestiges of adjacent temporary camps remaining underground.

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<td>47</td>
<td>Neszmély Kalin-hegy – Azaum/Odiavum 4. őrtorony</td>
<td>This site is the watchtower is located in the east part of Neszmély, on a hill (Kalin-hegy) to the south of present-day Route 10 surrounded by defensive ditches. The lengths of the northern ditches running east–west are 27 and 51 m. The longer sides of the system of ditches are 40 and 98 m long. The hilltop can only be accessed on foot and it is overgrown with bushes. The element of nominated property is the area enclosed by the line of the watchtower’s ditches that can be identified in aerial photographs. The buffer zone includes the lots containing the element of nominated property.</td>
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<tr>
<td>48</td>
<td>Neszmély – Azaum/Odiavum 5. őrtorony</td>
<td>According to evidence from aerial photographs, a Roman watchtower stood on the ridge of the loess hill rising above Route 10. The tower was surrounded by oval ditches oriented in a northwest–southeast direction. Their dimensions were 36 × 45 m, and 17 × 23 m. It can be only reached on foot and hill is covered with bushes and trees. The element of nominated property is the area enclosed by the line of the watchtower’s ditches that can be identified in aerial photographs. The buffer zone includes the lots containing the element of nominated property, although only a part of the lot that stretches for a long distance at the foot of the hill.</td>
</tr>
<tr>
<td>49</td>
<td>Nyergesújfalu Sánc-hegy – Crumerum segédcsapat tábor</td>
<td>This Roman auxiliary fort is found on the western edge of the developed area of Nyergesújfalu on the hill Sánc-hegy, which rises right next to the Danube. It can be identified on the basis of aerial photographs, but excavations have not yet been performed on the site of the fort. Its dimensions are about 105 × 110 m, and its northwestern corner has fallen victim to erosion by the Danube. The element of nominated property is the site of the fort that can be identified in aerial photographs. The buffer zone includes the lots of Sánc-hegy (except the modern cemetery at the eastern side of the hill), which cover the Roman era vicus.</td>
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<tr>
<td>50</td>
<td>Tokod/Tokodaltáró Vár-berék – erősített raktárbázis, villa és vicus</td>
<td>This Late Roman storage base is located in the area called Várberék, to the northeast of Tokod. The ground plan of the storage base has dimensions of 122 × 140 × 115 × 142 m and is slightly irregular. The construction may have been adapted to the towers that had been erected previously, and this can explain the slightly crooked lines of the walls at the towers. The defense of the storage base was ensured with horseshoe-shaped side and corner towers and a 7 m wide, 3–3.5 m deep ditch. Its single gate was framed by rectangular protruding towers. A large horreum was excavated in its interior. To the west of the fort lies a large villa estate, whose ground plan is precisely discernable on aerial photographs. The walls of the excavated fort were renovated as a monument and are open to visitors. The vicus, inhabited in the Early Imperial and Late Roman period respectively, was partly excavated to the northeast of the storage base. The groundplan of a Late Roman villa estate known from small-scale excavations could be identified on aerial photos in the northeastern vicinity. The element of nominated property covers the Late Roman storage base, Late Roman villa estate and the earlier settlement as known today, ignoring the sections that have already been destroyed. The buffer zone includes the lots containing the element of nominated property.</td>
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<tr>
<td>51</td>
<td>Esztergom Várhegy – Solva segédcsapat tábor</td>
<td>The Castle Hill of Esztergom (Várhegy) rises above the Danube in the centre of the present-day town Esztergom. The remains of the Roman auxiliary fort Solva can be found on the top of the hill, below the royal (later archepiscopal) castle and cathedral. The element of nominated property is the lots of the Basilica and the Vármúzeum, the two lots where Roman remains have been found. The slopes of Várhegy Hill to the north, south and west comprise the buffer zone. The eastern side was not designated as part of the buffer zone.</td>
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because there was once a valley there that has been filled in since Roman times, so the Roman fort could not have extended there.

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<td>52</td>
<td>Esztergom Búbánatvölgy – Solva 8. őrtorony</td>
<td>This watchtower was constructed in the Búbánat Valley to the east of Esztergom and to the west of the mouth of the stream flowing into the Danube. Its walls extended upwards have survived to a height of 0.7 m. The interior dimensions of the tower are 7.15 × 7.15 m, the walls are 1 m thick and the entrance is on the southern side. The element of nominated property only includes the area that has not been built upon between the present-day house and the road, where the conserved foundation walls of the watchtower are. The buffer zone is comprised of the entire lot.</td>
</tr>
<tr>
<td>53a</td>
<td>Esztergom/Pilismarót Hideglelős-kereszt – magaslati erőd</td>
<td>The Late Roman hillfort with an irregular ground plan can be found to the east of Búbánatvölgy, on the top of the Hideglelőskereszt-hill. The northern part of the fort has been destroyed by rock quarrying, but it may have originally had a triangular ground plan. On the southwestern side there are three and on the eastern side two towers that can be identified protruding a third of their size from the wall. The walls of the fort are 1.05 m thick, the southeastern wall is 102 m long and the measurable length of the eastern wall is 90 m. The interior dimensions of the towers were 4.35 × 4.8 m.</td>
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<tr>
<td>53b</td>
<td>Esztergom/Pilismarót Hosszú-hegy oldala – limesút</td>
<td>The Limes Road in this section runs along the range of hills rising above the Danube. Its path cutting through the houses of Búbánatvölgy can be identified, but the loess soil has sunk down. Leaving Búbánatvölgy to the east the Limes Road can be clearly followed as a berm road, passing the fort at Hideglelős-kereszli and continues on with traces of its original paving visible in places, adapting to the terrain and arriving at Route 11 in Pilismarót – Basaharc. The path is broken in one place, at the Lázkereszt Quarry, where the Roman road fell victim to modern rock quarrying.</td>
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<td>53c</td>
<td>Pilismarót Basaharc – Solva 10. őrtorony</td>
<td>Solva 10 watchtower: This watchtower can be found between the bank of the Danube and Route 11. The Danube has washed away its northern half. The measurable thickness of the remains of the southern wall of the tower visible in the forested flood plain is 1-1.1 m and the internal dimension was 7.1 m. The southern walls of the tower can be still observed during low water levels in the wooded floodplain between the road and the Danube.</td>
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<tr>
<td>54a</td>
<td>Pilismarót Basaharc Emerenciások – Solva 11. őrtorony</td>
<td>The upright walls of the watchtower located to the west of the Pilismarót ferry were still standing in the 18th century. According to a description from the 19th century, the height of the upright walls was 2-4 m. The Danube has washed away the northern wall of this tower, but the southern half was excavated by Sándor Soproni in 1978. The southern wall was 1 m thick and 9.8 m long. The square ditch surrounding the tower ran 8 m from the wall. The entrance to the tower was on the southern side. An earlier tower surrounded by a round ditch datable to the end of the 1st century and a 2nd century tower that followed this stood on the site of the tower.</td>
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<td>54b</td>
<td>Pilismarót Basaharc – Solva 13. őrtorony</td>
<td>The watchtower stands 200 m to the east of the ferry at Szob, immediately on the Danube bank. We also know of this from Sándor Soproni’s excavation in 1978. Only the southern wall of the watchtower has survived, which was 10 m long and 1 m thick. Its entrance was on the southern side and the opening for the door was 97 cm. The square defensive ditch with rounded corners ran 8 m from the wall.</td>
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<tr>
<td>54c</td>
<td>Pilismarót Basaharc – Solva 14. őrtorony</td>
<td>This watchtower can be found on the Danube bank, 5000 m to the east of Solva watchtower. Its interior dimensions were 7.5 × 7.5 meters and the walls were 1.1 m thick. The remains of a ditch from an earlier tower were also discovered below this tower. This earlier tower may have been constructed at the end of the 1st century or the beginning of the 2nd century.</td>
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<td>55</td>
<td>Pilismarót Malompatak – Solva 19. kisérőd</td>
<td>This forlet is situated cca 3 km to the northeast of Pilismarót, immediately on the Danube bank, 260 m to the north of the mouth of the Malompatak stream. The dimensions of the forlet, are 12.35 × 12.25 m, and its walls are 1.4 m thick. The square pillar found in the middle of the tower held up the floor of the upper story. On the eastern side there was a small courtyard containing a residential building with four rooms that has been partially washed away by the Danube, and on the northern side there were two kilns that were used for producing ceramics with smoothed decorations. On the other three sides a fence and ditch circled the tower. Its entrance was on the southern side. The element of nominated property is the lot of the tower, as well as its extension towards the Danube, where there are also remains. The buffer zone includes the two neighboring lots to the southwest where there is a dirt road ensuring access presently, as well as the two other</td>
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lots bordering the element of nominated property, a road and the Danube, the latter of which has been cut off in line with the northern end of the road’s lot.

**ID No** | **Component part** | **Description**
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56 | Pilismarót Kis-hegy – Ad Herculem magaslati erőd | The Late Roman hillfort lies on a hill within the town of Pilismarót. It has an irregular shape with dimensions of 340 x 133 m, and with horsehoe-shaped towers at the southern wall. A horreum (granary) and two buildings with apses were discovered in its northern half. The element of nominated property contains the remains of the fort walls surveyed by József Beszédes and Gábor Bertók in 2016, except for the pieces of the wall that have been carried down by erosion from their original site to the foot of the hill. The buffer zone includes the lots containing the element of nominated property.

57 | Dömös – téglaégető kemencék | The site is located in the village Dömös, in the Bartók Béla street, where two brick firing kilns were unearthed by Márta Kelemen. The firing chamber of kiln number I was 6.2 x 5.2 m, while the nearby kiln number II was smaller, with a firing chamber of 5.4 x 5.1 m. The orientation of the kilns is the same, north–south, but on the basis of the structural differences kiln number I may be the earlier. The element of nominated property is the lot containing the brick firing kilns. The buffer zone is the lots lying to the northwest and southeast, as well as the road to the southwest that ensures access.

58 | Visegrád Gizellamajor – kiserőd | The Late Roman fortlet can be found in Visegrád-Diós, next to the Route 11, at the 47. km. Nowadays there is a riding school in the vicinity of the component, whose northern edge has been covered by Route 11. The fortlet had a square ground plan, 34.3 x 34.3 m, with fan-shaped corner towers at its four corners. Its entrance faced north, towards the Danube. The interior structures were 5 m wide, constructed on the interior side of the fort walls on all four sides. The northwestern corner tower was wider than the other three, and its entrance did not open from the fortlet’s corner, but from the northern side. This tower contained the fortlet’s baths. The fortlet was protected to the west by the stream once called Keserű víz, and by a water filled moat on the other three sides. The fortlet was constructed on a site of strategic importance in the Danube Bend region, where the section of river between the forts at Visegrád-Sibrik-domb and Pilismarót-Kis-hegy could be observed and smoke or light signals could be sent in either direction. The element of nominated property is comprised of the lot containing the exhibited parts of the fortlet, as well as Route 11, which covers parts of it. The buffer zone is the lot bordering the element of nominated property to the south, as well as the road bordering the element of nominated property to the east, the lot boundaries of the stream and Route 11 and the portions of the Danube riverbank lot up to the corners of the lot boundaries. Another important aspect is that the stream bordering the fortlet to the east also existed in Roman times and was an integral part of the moat surrounding the fortlet.

59 | Visegrád Lepence – Solva 35. örtorony | This watchtower is located ca. 40 m to the right bank of the Lepence-stream, next to the Route 11. The dimensions of this tower with four interior pillars were 18.35 x 18.35 m, and on the basis of the construction inscription found near its entrance it was built in 371. Its walls have survived to an average height of 2 m. An enclosure wall and ditch encircled the tower. During the excavation, three statue heads were found alongside the construction inscription in the wall debris in front of the entrance. These were portraits of the emperors Valentinian, Valens and Gratian that were re-sculpted from earlier gravestones and grave sculptures. The element of nominated property is the lot that contains the watchtower. The buffer zone is the parking lot neighboring the watchtower to the northwest.

60 | Visegrád Kőbánya – Solva 24. örtorony | The watchtower is located next to Route 11, and is open to the public. The watchtower is 10 x 10 m. A hearth constructed of stone was built in the northeastern corner, and later a pillar was placed in the middle. Its entrance opened to the east, towards the mountains. The element of nominated property corresponds to the lot of the watchtower. The buffer zone includes the three lots neighboring the watchtower, as well as the section of Route 11 in front of the watchtower, because its ditches presumably lie under the road.

61 | Visegrád Sibrik-domb – magaslati erőd | This fort located to the north from Visegrád Castle, on the top of the hill Sibrik-domb rising above the Danube. The fort is triangular, or rather bell-shaped, with dimensions of 117 x 130 m. The walls are 1.05–1.15 m thick, and there are U-shaped wall towers and fan-shaped corner towers. We know of two interior buildings constructed on the inner side of the walls.
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<tr>
<td><strong>62</strong></td>
<td><strong>Visegrád</strong>&lt;br&gt; Szentgyőrgy-puszt –&lt;br&gt; Solva 28. őrtorony</td>
<td>The entrance to the fort was around the middle of the Danube façade, where a horseshoe-shaped tower was found. In its second period a double gated entryway was constructed on the site of gate towers that had presumably been demolished. In its third period a 14.2 × 12.9 m tower with a round pillar holding up the floor of the upper story was built on this same site. The border of the element of nominated property runs along the boundary of the lot that contains the fort – but on the western side it follows the wall of the tower used in the Middle Ages rather than the inadequate lot boundary. Included in the buffer zone are two neighboring lots.</td>
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<tr>
<td><strong>63</strong></td>
<td>**Verőce Dunamező-dűlő, Solva 38. kikötőerőd</td>
<td>This watchtower is situated on a hillside facing the Danube. The dimensions of the tower are 10.4×10.2 m, and its walls were 1.05 m thick. Its southern wall, which was reexcavated in 2016, remained in good condition, being able to be shown on display for public. The border of the core zone has been determined by the excavation data of Péter Gróf from 2016. The buffer zone comprises the boundaries of the lot of the core zone.</td>
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<td><strong>64</strong></td>
<td><strong>Dunabogdány</strong>&lt;br&gt; Váradok-dűlő – Cirpi segédcsapat tábor</td>
<td>This site is located immediately on the left bank of the Danube, on the side of the Barbaricum, next to the Route 12, to the east of the village Verőce. The fortified river-port (bridge-head, according to another terminology) consists of a central tower, two corner towers and of side walls, running down to the Danube. The central tower is 23 × 18 m and has two interior pillars, the flanking walls are 14 m long and 2 m thick, and they end in 5 × 5 m corner towers. The walls that ran down to the Danube have not survived because the river has washed them away, but the foundation piles for the southeastern corner tower were examined on the riverbank during the old excavation of István Paulovics before the second world war. The element of nominated property comprises the exhibited ruins. The buffer zone is the lot where the ruins are located.</td>
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<tr>
<td><strong>65</strong></td>
<td>**Leányfalu Benzinkút – Cirpi 2. őrtorony</td>
<td>The auxiliary fort Cirpi was located in the fields called Váradok-dűlő, immediately on the bank of the Danube. It was 124 × 147 m in size, with 1.2 meter thick walls. The size of an interior corner tower of the fort was 2 × 2.2 m, the towers have been rebuilt in the 4th century with horse-hoe shaped and fan-shaped design. The dimensions of the trapezoid inner tower in the eastern corner of the fort (Restkastell) from the last building period of the structure are 17 × 16.5 m. The element of nominated property is the lot border that encloses the remains of the fort that rise above the surroundings. The buffer zone contains the known extent of the settlement (vicus) that developed around the fort along the borders of the lots involved, which do not, however, correspond with the actual boundaries of cultivation.</td>
</tr>
<tr>
<td><strong>66</strong></td>
<td>**Gőd Bócsaúttelep – erőd</td>
<td>The preserved remains of this watchtower can be seen in the centre of Leányfalu next to Route 11 neighboring the gas station to the north. The watchtower had a square ground plan, about 16 × 16 m. Four interior pillars held up the upper levels. The thickness of the walls averaged 1.6 m, the entrance opened to the south, and on the western side of this a staircase led upwards. Traces of a wooden structure of unknown purpose were observed on the western and part of the northern walls. The walls have survived to a height of 1 m. The watchtower was surrounded by a wall, which enclosed a 32.5 × 32.5 m area, and their average thickness was 0.7 m. The element of nominated property is represented by the territory encompassed by the watchtower’s enclosure wall. The buffer zone includes the area of the lot that surrounds the watchtower.</td>
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<td>ID No</td>
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<td>67a</td>
<td>Szigetmonostor-Horány – Ulcisia 8. kikötőerőd</td>
<td>The Ulcisia-8 fortified river port is situated immediately on the right bank of the Danube, cca. 200 m to the south from the ferry between Dunakeszi and Szigetmonostor-Horány. The fortified river-port (bridge-head, according to another terminology) consists of a central tower, two corner towers and of side walls, running down to the Danube. The central tower has a ground plan of 14 × 22 m, with two pillars in its interior. There are smaller corner towers at the northwestern and southwestern corners. The eastern wall of the tower continues to the north and south with side walls 14 and 16 m long, respectively, which also end in corner towers. The walls running down towards the Danube from these latter towers have been washed away by the river. The element of nominated property in Szigetmonostor contains the known walls of the tower, the eastern and western borders are provided by the lot boundaries, and to the north and south it has been demarcated by connecting the corners of the lot boundaries. The buffer zone in Szigetmonostor encompasses the channel of the Danube, too, the Danube is also an archaeological site in both towns.</td>
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<tr>
<td>67b</td>
<td>Dunakeszi Duna sor – Ulcisia 9. kikötőerőd</td>
<td>The Ulcisia – 9 fortified river port is situated on the left bank of the Danube, at the Horány-Dunakeszi ferry in the overbuilt area of Dunakeszi. The fortified river-port (bridge-head, according to another terminology) consists of a central tower, two corner towers and of side walls, running down to the Danube. The ground area of the fortified river port was 50.5 × 43 m. The central tower may have been about 19.5 × 17 m, and the foundations of the walls were 3.5 m thick. There was one trapezoidal corner tower at the end of each of the flanking walls to the north and south of the Danube. The measurements of the southeastern one were 5.36 × 5.7 m, and it had 1.3 m thick walls. We do not know how far the walls extending from the corner towers to the banks of the Danube reached, but just as with similar structures in Verőce and Dunafalva, there were certainly corner towers on these ends as well. The element of nominated property in Dunakeszi corresponds to the borders of the lots that contain the remains. The buffer zone in Dunakeszi also runs along the lot boundaries around the lots of the nominated component part, on the west to the Danube. The Danube is also an archaeological site in both towns.</td>
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<tr>
<td>68</td>
<td>Szentendre Ulcisia – segédcsapat tábor</td>
<td>The auxiliary fort can be found to the south of the downtown of Szentendre in an overbuilt area. The fort had a ground area of 205 × 134 m. During the first phase there were recessed towers, and then these were replaced by U-shaped wall towers and fan-shaped corner towers. In addition to the principia building we know details from two other interior buildings. It was surrounded by a double ditch, and of its four gateways, presumably three of them were walled off with horseshoe-shaped towers in the later period. The element of nominated property is the presently known extent of the fort, including and extending along the borders of the lots encompassing the ditches. It only differs from the lot boundaries at the roads. The border of the buffer zone to the east and west supplements the element of nominated property up to the lot boundaries of the present day roads. We do not know of the extent of the settlement that developed around the fort. It may have been to the south of the fort for the most part, and therefore the designation of the buffer zone was not determined by it.</td>
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<tr>
<td>69a</td>
<td>Budapest III. kerület – Aquincum municipium, Amfiteátrum, szentély, vízvezeték</td>
<td>The site of the municipium Aquincum is situated in the northern part of the 3rd district of Budapest, where the Roman remains of the civil town of Aquincum are in an unbuilt area at the two sides of the Szentendrei Street. The north-south oriented line of the aqueduct running via legionary fort along the Szentendrei street, divides the site into two parts: the western, mostly unexcavated part is known from geophysical survey, the eastern, mostly excavated part with conserved ruins belong to the archaeological park of the Aquincum Museum. The first traces of the settlement of the civilian town are from the last third of the 1st century, but it only really became a city during the reign of the emperor Hadrian, when it earned the title of municipium. This was when the town walls and the amphitheater were constructed and the streets were paved and provided with sewage mains. The dimensions of this walled town were 500 m along the north-south axis, and much larger along the east-west axis, although this length is not known. It earned the rank of colonia in the time of Severus (in 194), which represented a new golden era in the life of the city. At this time the aqueduct that transported the waters from the springs of the present-day Római Baths to the legionary fortress could supply the civilian town as well. We are familiar with the town centre and the forum from this period. Its buildings were the curia (the meeting hall of the town representatives), the basilica (the building for the administration of justice), shops, the large public baths and the macellum (market hall).</td>
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We know of numerous baths, residences and shrines from the civilian town. This was when the town reached its greatest extent, and suburbs were established along the western and southern walls. The residences of the more well-to-do were decorated with high-quality mural paintings and mosaics. The two most significant mosaic finds, one from house number XXI depicting the punishment of Dirce and the other from the private bath in the large residence number XIV depicting wrestlers, can be seen underneath the protective structure in the archaeological park.

The headquarters of the town’s cloth makers’ association, which also acted as the fire brigade, was remodeled in the time of Severus and stood at the southern town gate. Amongst its remains were the now world-famous metal components of a water organ and its bronze inscription, according to which the valuable instrument came into the association’s possession in 228.

The town is encircled by the cemeteries and industrial areas utilized during the various periods. During the construction of the gasworks, the most significant potters’ colony was discovered in the eastern suburb of the municipium beyond the town wall. Here the potter Pacatus manufactured his vessels with relief designs characteristic of the 2nd century (according to the current classification, this is part of the buffer zone).

The amphitheater with a capacity for about 6,000 people was constructed no later than the time of the emperor Antoninus Pius alongside the northern edge of the northern wall of the civilian town.

The element of nominated property of the municipium, taking into account the property boundaries, is circumscribed by the path of the aqueduct, the well houses on the territory of the Római Baths, the area enclosed by the city wall and the amphitheater. At the same time, due to lot boundaries, a few of the suburban buildings of the civilian town are also included, such as the inn to the south as well as a part of the northern, eastern and western suburbs. The northernmost part of the component is the area of the well-houses used as sanctuaries with altars, which are in fact the sources of the aqueduct. The remains of the well houses are still visible in the territory of the Roman Baths.

The buffer zone includes the gladiator school and the graveyards of the cemetery along the Aranyhegyi-árok to the west, the buildings of the Kaszásdűlő suburb to the south, and the potters’ colony and the watchtower at the former gasworks to the east, as well as the most recently discovered stone building on the Római riverside. The last visible pillar at the southern end of the aqueduct, which has been moved from its original site, is also included in the buffer zone.

During excavations conducted at Nánási út 3 in Budapest’s 3rd District in 2010, the remains of a watchtower the size of a Late Roman fortlet were found that was built during the time of the emperor Valentinian I. The length of its northern wall exceeds 19 meters, and the distance measured between the eastern and western wall surfaces is 16 meters.

The site of the legionary for of Aquincum is situated in the centre of the 3rd district of Budapest called Óbuda (Old Buda), where large scale excavations were performed in the 1970-es, before the construction works of the blocks of flats and the Flórián supermarket (store house) at Flórián square.

The earliest military fort of an ala in Óbuda was built in the year 73, and was only rebuilt in stone in the first half of the 2nd century. The fragments of this were uncovered under the Aquincum (today Ramada Plaza) Hotel, and the line of the fort wall as well as the location of the two gateways has been indicated in the paving. During the course of the excavations the headquarters building (principio) and the barracks also came to light.

Presumably the legionary fortress also had an early palisade phase from the time of the emperor Domitian (after 89), but the extent of this is unknown at the present. The stone fortress is from no later than the Hadrian era (98–138), and has an area of 476 × 570 m with internal square towers. The towers of the southern gate were also square, extending partially beyond the wall surface and it may be presumed that the other gateways were also like this. The eastern gate was remodeled, and octagonal towers were erected. Of the defensive works and interior buildings, the elements that are known and are in part exhibited are the largest building complex of the fortress, which were the military baths that are at the Flórián tér underpass (according to an inscription placed in 268, these are the thermae maiores, or “larger baths”), the house of the tribunus laticlavius (deputy commander) and the shrine to Mithras constructed in this house at the southern gate, the eastern and southern fortress gates and a section of the barracks.

In the 4th century a Late Roman fort was erected stretching to the banks of the Danube, utilizing the eastern wall of the legionary fortress. We know of horseshoe shaped towers along
the southern wall, and between these there were arched sections of wall. Horseshoe shaped towers reinforced the arching southern wall of the fort in the sections that protruded. Its gateway was located on the western edge of the southern wall. The military town (*canabae*) surrounding the legionary fortress from the 2nd–3rd century extended to the line of the present Bécsi út. Of the numerous ornate residences known from their remains, the so-called Hercules Villa on Meggyfa utca can be visited (70b). The military amphitheater stood on its southern edge (70c). South of this line there were also Roman buildings in Budaújlak, however these did not follow the system of roads from the legionary fortress and its urban structure is more scattered than that of the military town.

The cemeteries and industrial areas of the military town can be found along Bécsi út and Lajos utca. Three graveyards at the lot at Bécsi út 3–5 – Cserfa utca – Lajos utca 4–6, as well as the remains of a brick firing kiln on the lot at Bécsi út 120–128 have been rehabilitated. There was also a cemetery at one time to the north of the military town.

In the Late Roman period the area of the *canabae* also shrunk. The inhabitants made efforts to move closer to the fort, and burials appeared in the abandoned northern and western sections of town. Significant from an architectural perspective is the sepulchral structure with three apses (*cella trichora*) excavated at the corner of Raktař u. – Hunor u. – Kunigunda u. – Körte u. and displayed to the public. The governor’s palace that is currently underground can be found on Hajjógyári Island. It was built by Hadrian, who later became emperor, and its decorative furnishings can be seen in an exhibit at the Aquincum Museum. The largest construction took place at the end of the 2nd century and the beginning of the 3rd century. Later, in the last third of the 3rd century, it was necessary to abandon the palace due to the rise in the level of the Danube. The area of the inlet is connected to the palace, and the remains of the dock can be found under water, where in the spring of 2003 the remains of dock structures made of stone and wood were documented.

The excavation and planned display of the remains of the governor’s palace is an important means to demonstrate the Roman period precedents to the current Hungarian capital, Budapest, and its leading role in the region.

Most parts of the military town that are not on display now are completely covered, and access to them is only possible through preliminary excavations performed during the course of construction projects.

There are three component parts of the nominated component (70a-c). The largest area, taking into account the lot boundaries, contains the *ala* fort and the legionary fortress, the late Roman fortress, the governor’s palace and the Táborvárosi Museum.

The buffer zone encompasses the entire military town, bounded by the lot borders: Budaújlak to the south, where Roman era stone buildings stand, and the western side of Bécsi út, where there was a cemetery and industrial area, lay outside the territory of the military town, but were an integral part of it. We consider it important to include the industrial structures in the buffer zone, which are memorials connected to the military that can be preserved, but not to include the cemetery. The situation in the northern part of the military town is similar. We do not consider the graves of the Raktárrét Cemetery as a part of the World Heritage, but the Mozaik utca bridgehead and the stone buildings extending under the Auchan store are.

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<tr>
<td>70b</td>
<td>Budapest III. kerület – canabae, Hercules-villa</td>
<td>The Hercules Villa was excavated at Meggyfa Str. 21, at the northern part of the military town of the Aquincum legionary fort. The <em>villa urbana</em> of 2nd century origin is exhibited as a museum with its partly reconstructed wall paintings and with its famous mosaic floors from the time of the Severus dynasty. The most precious mosaic, whose iconographical program may have been designed in Alexandria, depicts the mythological confrontation between Hercules and the centaur Nessus. The Hercules Villa comprises an independent component part as a nominated unit in the northern part of the military town.</td>
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<tr>
<td>70c</td>
<td>Budapest III. kerület – Katonavárosi amphitheatrum</td>
<td>The <em>canabae</em>’s amphitheatre is located in a natural depression used early on as a practice ground (the area enclosed by Nagyszombat u. – Viador u. – Pacsirtamező u.). It comprises a separate core zone unit to the southern edge of the military town. Its dimensions are 131.8 × 108.4 meters, the amphitheatre with its double ringing walls and a capacity of 12-13,000 people was built by the engineering corps of the <em>Legio II adiutrix</em> and there is an associated shrine to the goddess Nemesis, too.</td>
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<td>71</td>
<td>Budapest V. kerület Március 15. tér – Contra Aquincum ellenerőd</td>
<td>The Roman fort is situated at Március 15. tér in the 5th District of Budapest, in the downtown of Pest, opposite the Gellért-hill. Its published ground plan was 86 × 84 m, and it was built with fan shaped corner towers and two U-shaped towers on each side. Its walls were 3.4 m thick. We do not know about its</td>
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The precise path of the 2350 m long section of the Limes Road between Érd and Százhalombatta can be presumed on the whole plateau of Érd on the basis of the aerial photographs, implemented with supplementary records (excavation, milestone marker). Due to this, and taking into account the documentation from the excavation in 2012, the element of nominated property is the 1200 m long northern section of the Limes Road in various properties from the northern part of the plateau until the border line between the towns Érd and Százhalombatta.

In the excavated area, as well as on the rest of the plateau, the current dirt road runs alongside the embankment of the former road. In these locations the Roman road has survived in good condition, while in other places the surface and structure may be disturbed. In the direction of Százhalombatta to the south of the administrative border it has been destroyed for the most part, with only its path and limestone foreign to the area indicating its presence. The ditch(es) of the road in these areas may still exist below the lots.

The southern, mostly disturbed section in the area of Százhalombatta is not nominated. The entire area of the lots indicated as the element of nominated property, is the buffer zone.
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<td>75a</td>
<td>Százhalombatta-Dunafüred – Matrica segédcsapat tábor</td>
<td>The fort is located to the south of the city part called Százhalombatta-Dunafüred at the Danube bank, partly overbuilt by the earthworks erected in 1809 against the troops of Bonaparte Napoleon. The fort had a ground area of $155 \times 152$ m and the wall was 70 cm wide. The corners were rounded, the interior towers were square, and we know of a semicircular tower on the southeast corner as well as a fan shaped tower from a later construction period on the northwest corner. The gate towers protrude 1/3 of their size in front of the wall surface. The fort is surrounded by an earlier and a later ditch. We know of the principia building from the interior of the fort. The borders of the element of nominated property are the walls and towers of the fort, as well as the single known ditch.</td>
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<tr>
<td>75b</td>
<td>Százhalombatta-Dunafüred – Matrica vicus és fürdő</td>
<td>Matrica vicus is located around the fort. From the vicus surrounding the fort (with stone houses built after the marcomannic wars), the partly conserved building with apses and hypocaust that was previously excavated, conserved and exhibited underneath a protective structure is part of the element of nominated property. The buffer zone of the component parts 75 a-b corresponds to the currently known extent of the vicus, along the lot borders. It does not include the lots belonging to the MOL Danube Refinery, since the archaeological elements that were discovered there were destroyed during construction or during the excavations that preceded construction.</td>
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<td>76</td>
<td>Ercsi – limesút</td>
<td>The Limes Road that runs straight for 18 km from the oil refinery in Százhalombatta to the southern border of Ercsi has been built upon by today, but to the south of Ercsi it runs unhindered for a 4 km section and its path is preserved by a road through the fields that is still used today. This section that has not been built upon is clearly visible up to the Iváncsa access road in several aerial photographs since 1940. From there to the south until the fort of Vetus Salina the path of the road in places runs along the same path as Route 6, but its identification is uncertain. The element of nominated property is the southern part of the Roman road section determined on the basis of aerial photographs. The buffer zone comprises the lots containing the element of nominated property.</td>
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<td>77</td>
<td>Rácalmás Szesszió II. – Vetus Salina 8. örtorony és limesút</td>
<td>This is a tower to the south of Rácalmás and to the east of Route 6, discovered from an aerial photograph in 1994. The tower is surrounded by a square double ditch, the dimensions of the inner being 35 m and the outer 60 m. The dark spot appearing in the middle of the image suggests that the tower was made of wood. Limes Road: On the western edge of Rácalmás to the east of the Vetus Salina – 8 watchtower, a section of the Limes Road can be identified from photographs and on the ground. The element of nominated property is the watchtower and the path of the road. The buffer zone is the same as the borders of the lots containing the element of nominated property.</td>
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<td>78a</td>
<td>Dunaújváros Öreg-hegy – Interisa vicus és fazekaskemence</td>
<td>The component part is situated to the north of the centre of present day Dunaújváros town, on the northern part of the hill called Óreg-hegy. The site of the auxiliary fort is an unbuilt area and the northern part of the vicus is partly overbuilt by family houses. The southern part of the vicus is today partly a grassy area, partly overbuilt by blocks of flats; their territory has not been nominated. The earliest fort was established to the south of the later one, but only a brief section of its ditch is known. Its width was 165 m. While its length cannot be precisely determined due to riverbank landslides, it can be estimated to have been around 190 m. On the retentura side a double row of posts supported the wall, into which sod was also inserted. In a section on the southern side only a sod wall was discovered. The stone fort was constructed at the end of the Marcomannic Wars and afterward, and its 1.2 m thick foundation wall was set along the outer edge of the palisade fort’s ditch. The distance between the old and the new defensive lines was chosen so that the earth dug out of the new ditch, which was significantly wider and deeper than the earlier one, would provide the material necessary to construct the agger (rampart). Due to the danger of landslides, the eastern walls were moved 20 meters to the west, however, the side gates stayed where they had been earlier. The narrowed section of the ditch of the palisade fort was discovered here, as well as the single gate tower of the stone fort’s southern gate, which had earlier been set on four wooden columns, and then a double stone gate tower completed during the remodeling at the time of emperor Commodus. The porta decumana and the porta principalis sinistra were also similar, however it is possible that the porta praetoria was not constructed at all on the upper edge of the high river bank.</td>
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The dimensions of this fort, which leaned a bit into the form of a parallelogram, were 176 × ca. 200 m. The Late Roman period, probably during the time of Constantine II, was when the fort was remodeled. Filling in the earlier ditch, the new defensive ditch was significantly further away, fan shaped towers were erected at the corners. The main portion of the fort is today an archaeological park. The vicus has in part been built upon, but the military bathhouse is show non display for public under a protective roof. The bathhouse with frescoes, stucco decorations and glass windows excavated by Zsuzsanna Újlaki-Pongrácz is found near the northern edge of the Dunaújváros Óreg-hegy loess plateau, about 80 meters to the northwest of the fort's northern gate, in the northern part of the vicus. The element of nominated property includes the excavated portions of the military baths, the fort and the area of the vicus lying to the south of the fort. Separate elements of nominated property are comprised of the building with an apse, the semi-detached house and the presently reinterred pottery kiln (78b-d). The buffer zone of the component parts 78a-d contains the river bank, the lots neighboring the baths and the roads along the element of nominated property in the east, and in the west the lots neighboring the fort along the lot borders. The buffer zone of the building with an apse, the pottery kiln and the semi-detached house connects up with the element of nominated property of the fort and vicus.

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<td>78b</td>
<td>Dunaújváros Óreg-hegy – Intercisa vicus</td>
<td>In 1972-73 Zsolt Visy uncovered a 12 meter long, 8 meter wide building with an apse dated to the 4th century near the southwestern edge of the cemetery, not far from the country road, now expanded to a high-speed motorway, connecting to the Óreg-hegy plateau from the north.</td>
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<td>78c</td>
<td>Dunaújváros Óreg-hegy – Intercisa vicus</td>
<td>The semi-detached building excavated by Zsolt Visy in 1972 with a square ground plan and stone foundation that has a central dividing wall separating it into two equal sections, each with three rooms and an entry hall, and located 200 meters to the southwest of the Roman period military fort.</td>
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<tr>
<td>78d</td>
<td>Dunaújváros Óreg-hegy – Intercisa vicus és fazekaskemence</td>
<td>The fourth object of the vicus that is part of the element of nominated property is the pottery kiln to the south of the semi-detached house, which was excavated by Zsolt Visy in 1970 and then reinterred, but could be exhibited in the future. This kiln with an unusually deep (5 meter) vaulted stokel is a type characteristic of Asia Minor and the Near East, which was introduced to Intercisa by Syrian soldiers.</td>
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<td>79a</td>
<td>Kisapostag – Intercisa 5. őrtorony</td>
<td>The three watchtowers (Intercisa 5, 6, 10. burgi) make up separate elements of nominated property, which has been bound together in the nomination document by a long section of the Limes Road. The road itself was nominated only as buffer zone, since it is covered by present day Route 6. The Intercisa – 5 watchtower is located directly beside the gas station built in 1993 on the west side of Route 6. It is surrounded by a double ditch with a square shape, whose outer dimensions were about 50 × 50 m.</td>
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<tr>
<td>79b</td>
<td>Kisapostag – Intercisa 6. őrtorony</td>
<td>This is a watchtower lying to the northeast of the Dunaújváros airport on the western side of Route 6. It was surrounded by a double ditch, and on the eastern side the ditches were closer to one another. The dimensions of the inner ditches at their axes were 24.76 m, and the outer ditches were 48.4 m.</td>
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<tr>
<td>79c</td>
<td>Kisapostag – Intercisa 10. őrtorony</td>
<td>This is a tower surrounded by a rhombus-shaped ditch that lies on the top of a hill to the north of the intersection of the Kisapostag access road on the western side of Route 6, but a small distance away from it. The axes of the rhombus-shaped ditch enclosed a 42 × 47.7 meter area. Limes Road (part of the buffer zone of the component parts 79a-c): The Roman road has survived south of the Danube Steelworks (today: Dunaferr). It runs to the west of the Intercisa – 15 tower, both can be identified on the basis of an aerial photograph from 1940. Here the path of the Limes Road is the same as that of a minor paved road, and running further from here to the southeast the present-day Route 6 covers the Roman road, whose straight path is certain for 5,500 m. The buffer zone is partly comprised of the borders of the lots containing the elements of nominated property. The whole path of the Limes Road in the southern part of the territory of Dunaújváros (to the south of the Dunaferr company), in the territory of Kisapostag and in the northern part of the territory of Baracs belongs to the buffer zone, too, since it is covered entirely by the modern Route 6.</td>
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<td>ID No</td>
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<tr>
<td>80</td>
<td>Baracs – Annamatia segédcsapat tábor és vicus</td>
<td>The Roman auxiliary fort was erected on the loess bank rising above the Danube on the border of the village of Baracs-Templomos. The first palisade fort’s length on the north-south axis was 165 m. Its eastern section has been washed away by the Danube, so its remaining width in its northeastern section is 95 m and it is 40 m in the southeastern section. The investigations identified the northern gate of the palisade fort, the two ditches encircling the fort that are 2.2 and 1.2 m wide, as well as the postholes of the principia of the palisade fort. The stone fort that followed was erected with 1 m thick walls, two “V” shaped, 3.8 m wide ditches and 4.4 m recessed trapezoidal towers on the corners. This fort was remodelled in the 4th century with horseshoe shaped towers, the earlier ditches were filled in and the porta decumana was closed off with a “U” shaped tower. The dimensions of the excavated northwestern Late Roman tower were 11 × 9 m and its walls were 2.2 m thick. The porta principalis sinistra was constructed with recessed gate towers, and the interiors of the towers were 1.3 × 2.5 m. Of the internal buildings only the length of the principia is known, which was 24 m. Excavations have not taken place on the site of the vicus, but its buildings and settlement structure can be clearly seen in aerial photographs, rich amount of Roman find material is known from survey. The element of nominated property is the site of the vicus identified by aerial photography and field walks as well as the remaining portions of the fort. The buffer zone is comprised of the lots containing the element of nominated property, as well as a lot to the west up to the nearest natural borderline, a stream, since it can be hypothesized that the vicus extended to there.</td>
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<tr>
<td>81a</td>
<td>Dunaföldvár 6. főút, 86-86 kmsz. - limesút</td>
<td>The well designed and sturdily constructed Roman military sections to the north and to the south of Dunaföldvár run unhindered for sections through various fields. The three sections that have not been built upon are clearly visible in several recently made aerial photographs, detected also by survey. The first, 960 m long nominated section of the Roman road south of the Lake Felső runs below Route 6 (at the 85th-86th kilometers from Budapest), and after the bending of the Route it runs straightforward through the fields via the Route 61 which runs to the west from the town center of Dunaföldvár.</td>
</tr>
<tr>
<td>81b</td>
<td>Dunaföldvár Alsó-homoki-szőlő - limesút</td>
<td>The second, 1200 m long nominated section of the Roman road is situated to the southeast of the town center of Dunaföldvár. It runs to the south through vineyards and gardens.</td>
</tr>
<tr>
<td>81c</td>
<td>Dunaföldvár Buncsik - limesút</td>
<td>The third, 1400 m long nominated section of the Roman road runs further to the south of the previous section, into the direction of Bölcske.</td>
</tr>
<tr>
<td>82</td>
<td>Solt Duna meder – Annamatia 12. kikötőerőd</td>
<td>The Roman remains lying in the Danube riverbed at Bölcske, at the sandbar called Bölcske Rock. This fortified river port was 60–80 m long and 30–40 m wide. Significant debris and stone blocks can be found along the edge of the sandbar, in part collapsed into the riverbed. The underwater remains of a Late Roman military fortification could belong to a watchtower or fortlet respectively, but they must have been most probably part of a fortified river port (bridge-head, according to another terminology) consisting of a central tower and two corner towers. There must have been a counterpart of the river port at the left bank of the Danube at Solt, but the evidence from earlier surveys is uncertain, only the extant Roman substance has been nominated. The element of nominated property contains the area of the remains that have been located. The buffer zone includes the lots that ensure access from Bölcske by water to the element of nominated property.</td>
</tr>
<tr>
<td>83</td>
<td>Bölcske Leányvár – Annamatia 7. őrtorony</td>
<td>Annamatia – 7 watchtower: A tower with a rhombus-shaped ditch is clearly discernable in aerial photographs on a hill rising to the west of the inn in the Leányvári Valley. Its dimensions are about 60 × 67 m. The element of nominated property is the area of the watchtower known from aerial photographs. The border of the buffer zone is the same as the borders of the lots containing the element of nominated property.</td>
</tr>
<tr>
<td>84</td>
<td>Bölcske Gabonás – Annamatia 8. őrtorony</td>
<td>The ditches of a watchtower can be observed in several aerial photographs of a cultivated field on the western side of Route 6 at the 98th kilometer marker. The tower’s location is marked by a darker spot and was enclosed by a double ditch with a square shape, whose side edge was parallel to the Limes Road. The dimensions of the outer ditch measured at its axis were about 55 m, and the inner ditch was about 30 m.</td>
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The element of nominated property is the area of the watchtower as revealed in aerial photographs. The border of the buffer zone is the same as the borders of the lots containing the element of nominated property.

Annamatia – 9 watchtower: The ground plan of a Roman watchtower can be seen on a hill rising to the south of the valley of the Gyűrűs Stream on archival images and aerial photographs taken in the 1990s. The double system of ditches outlines a regular square with rounded corners, whose side is parallel to the Limes Road and there are only a few meters between them. The dimensions of the outer ditch measured at the axes were about 57 x 57 m and the inner ditch was about 31 x 31 m.

Limes Road: This section of the Limes Road is not built upon and runs to the west of the present-day highway in a southerly direction all the way to the valley of the Gyűrűs Stream. This Roman road, which was also depicted on an 18th century map, is clearly visible in archive images from the 1950s and 1960s, as well as more recent aerial photographs. The Limes Road and the Annamatia 9 watchtower are discernable to the south of the stream valley in photographs from the 1990s as well as satellite images.

The element of nominated property is the watchtower and a 400 m long section of the Limes Road as determined from aerial photographs. The buffer zone includes the lots containing the element of nominated property.

This fort lies in the southern part of Dunakömlőd on Sánc Hill, which rises from the western side of the present-day Route 6. Its extent and date have been successfully revealed by regular archaeological research that has been continuing since 1987. According to this, the earliest fortification was a palisade fort from the middle of the 1st century with a length of 260 m. The length of the late Roman stone fort with a double ditch constructed on its site was 250 m on the north-south axis. The width of both forts on the east–west axis is unknown, since the erosion of the hill’s eastern side by the Danube has caused significant destruction, and the current width of the hill varies between 30 and 50 m. During the course of excavations, the relationship between the defensive ditches, the fort walls and the gate towers on the north and south sides was established and one of the barracks buildings was discovered on each side. The western wall of the fort can be followed on the western edge of the plateau in north-south direction.

At the beginning of the 5th century the fort was abandoned, but from its stones a 10 x 10 m tower-like fortlet was constructed behind the southern gate. A fragment of a foot from a larger than life size bronze statue of an emperor was discovered on the site of the fort.

The extensions of the auxiliary vicus to the north of the northern gate and the defensive ditches and to the south of the southern gate are known from small-scale excavation records. The famous bronze Jupiter Dolichenus triangle in the Hungarian National Museum in Budapest could belong to a Jupiter Dolichenus sanctuary, which must have been stood in the vicus.

The element of nominated property encompasses the remaining parts of the fort and the plateau of the hill to the north and south of the fort. Parts of the vicus related to the fort were located to its north and south, in front of the northern and southern gates. The borders of the element of nominated property were drawn along the contour lines to the east and along the lot borders to the west. An exception to the latter made up of the three lots located next to the fort’s southern gate, where there are presently exhibited remains, so the border of the element of nominated property here also follows the contour lines. The border of the buffer zone runs along the lot borders at the foot of the hill.

During the course of a rescue excavation in 1989 on this site located on Püspök Hill in Csámpa belonging to the town Paks, next to Route 6. It was possible to document a Roman wall foundation. The wall and the Roman archaeological layers excavated with it belonged to the eastern portion of a Roman watchtower.

The element of nominated property covers the remains of the eastern portion of the watchtower, cutting away by Route 6. The border of the buffer zone is the same as the borders of the lots containing the element of nominated property.

Route 6 cuts through a hillock to the north of Dunaszentgyörgy. This hill rises from the southern bank of a minor stream. A Roman watchtower once stood on this hillock, whose ditches are discernable in aerial photographs as well as on the ground. Parts of the western portion of the double ditch (2 meter deep, 3-4 meter wide) surrounding the tower were discovered during the construction of Route 6 at the excavation in 2006. The largest extent of the tower’s ditches – as compiled from the evidence – was 55 x 55 m.
<table>
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<tr>
<th>ID No</th>
<th>Component part</th>
<th>Description</th>
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<tr>
<td>89</td>
<td>Fadd Bodzás-dűlő – Lussonium 9. őrtorony és limesút</td>
<td>The element of nominated property covers the watchtower. The border of the buffer zone is the same as the borders of the lots containing the element of nominated property, cutting through the lot border of Route 6 in the south.</td>
</tr>
<tr>
<td>90</td>
<td>Szekszárd/Tolna Mözi-dűlő – Alta Ripa 2. őrtorony</td>
<td>This square watchtower encircled by a rhombus-shaped double ditch with 42 meter long sides was able to be identified from a Google satellite image. The 4th century surface finds verified its existence, so did the geophysical investigation and excavation in 2010, documenting the rhombus-shaped ditch that was 2,5 meter deep, 4-4,5 meter wide, and another ditch that was 1 meter wide and deep. The first two separate elements of nominated property, two sections of the road (E and D) comprise the sites of the road’s two well visible remaining sections that can be identified from aerial photographs. The buffer zone includes the lots containing the elements of nominated property, in the case of modern roads cutting off their lot borders.</td>
</tr>
<tr>
<td>91a</td>
<td>Öcsény/Szekszárd Örögvettetés E – limesút</td>
<td>The element of nominated property is comprised of the easternmost section of the remaining portions of the so-called Örögvettetés Roman road that can be identified in aerial photographs. The buffer zone includes the lots containing the element nominated property, in the case of modern roads cutting off their lot borders.</td>
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<tr>
<td>91b</td>
<td>Öcsény Örögvettetés D – limesút</td>
<td>The first two separate elements of nominated property, two sections of the road (E and D) comprise the sites of the road’s two well visible remaining sections that can be identified from aerial photographs. The buffer zone includes the lots containing the elements of nominated property, in the case of modern roads cutting off their lot borders.</td>
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<tr>
<td>91c</td>
<td>Öcsény Örögvettetés (Mőzs - M6-M56 5. lelőhely) C – limesút</td>
<td>Two elements of nominated property are comprised of the remaining sections of the so-called Örögvettetés Roman road that can be identified in aerial photographs. The path of the Roman Road has been cut into two sections (B and C) by the construction of motorway M6, these sections are the two elements delimited separately on both sides of the motorway. The buffer zone includes the lots containing the element of nominated property, in the case of modern roads cutting off their lot borders.</td>
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<tr>
<td>91d</td>
<td>Öcsény Örögvettetés (Mőzs - M6-M56 5. lelőhely) B – limesút</td>
<td>Two elements of nominated property are comprised of the remaining sections of the so-called Örögvettetés Roman road that can be identified in aerial photographs. The path of the Roman Road has been cut into two sections (B and C) by the construction of motorway M6, these sections are the two elements delimited separately on both sides of the motorway. The buffer zone includes the lots containing the element of nominated property, in the case of modern roads cutting off their lot borders.</td>
</tr>
<tr>
<td>91e</td>
<td>Öcsény Örögvettetés (Oltoványi-dűlő) A – limesút</td>
<td>The element of nominated property is comprised of the easternmost section of the remaining portions of the so-called Örögvettetés Roman road that can be identified in aerial photographs. The buffer zone includes the lots containing the element nominated property, in the case of modern roads cutting off their lot borders.</td>
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<td>92</td>
<td>Ócsény Gábor-tyanya – Alisca segédcsapattabor és vicus</td>
<td>The Alisca auxiliary fort to the north-northeast of Ócsény is a Roman fort identified in an unusual location, on a ridge extending into the marshy floodplain of the Danube. No excavations have been performed on this auxiliary fort that in Roman times could be reached by a causeway (the Ördögvettetés = Devil’s Dyke) branching off from the Limes Road. Its ground plan was only determined by the geophysical survey performed within the context of the project in preparation for the nomination. According to this, its dimensions were about 140 × 140 m. This fort, which certainly had already been erected in the 2nd century, was constructed with a double ditch and recessed towers, but was remodeled in Late Roman times: the corner towers were reconstructed in a horseshoe shape in the 4th century and after the ditch closest to the wall was filled in, a new ditch was dug further from the wall. The traces of the vicus associated with the fort can be identified to the north and to the south of the castellum. The element of nominated property contains the fort and the southern part of the vicus. The buffer zone includes the lots containing the element of nominated property.</td>
</tr>
<tr>
<td>93</td>
<td>Ócsény Soványtelek – Alisca 3. őrtorony</td>
<td>This watchtower located on the eastern side of Route 56 was partially excavated between 1992 and 1994. It was a 17.5 × 17.5 m tower with 2.2–2.3 m thick walls and four large (2 × 2 m) pillars in its interior (together with the area surrounded by the enclosure wall). In 2007 a 12-15 meter wide section of the enclosing ditch was also discovered. The border of the element of nominated property runs along the known and presumed outer edge of the watchtower’s outer enclosing ditch. The border of the buffer zone is the same as the borders of the lots containing the element of nominated property.</td>
</tr>
<tr>
<td>94</td>
<td>Bátaszék Kanizsa-dűlő – utállomás</td>
<td>This road station was constructed on a rise next to the Lajvér Stream and was bounded by a 7–8 m wide surrounding ditch. The ditch presumably functioned as a drainage ditch, since there are no signs indicating a defensive function. The area enclosed by the ditch is 42 × 43 meters in size and the building is located in the northern half of this area. The 34 × 19 meter building with a rectangular ground plan was enclosed with supporting walls that were 2.5 Roman feet (70–75 cm) wide. The building was divided into rooms by interior partition walls. The individual rooms had terrazzo or packed clay floors, and one of them could be identified as a nearly 15 m² bathing room equipped with a hypocaust heating system. The border of the element of nominated property is the outer edge of the road station’s enclosing ditch. The border of the buffer zone is the same as the borders of the lots containing the element of nominated property.</td>
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<tr>
<td>95</td>
<td>Báta – Ad Statuas 2-3. őrtornyok és limesút</td>
<td>Ad Statuas – 2 watchtower: This tower is located on a small rise on the border of the town of Báta. It was known from the same aerial photo as the Ad Statuas – 3 watchtower. In the spring of 2010 a more recent picture was taken of the tower. The identification of this tower surrounded by a double ditch (measuring about 50 × 47 m) is made certain by the Roman coin finds discovered here. Ad Statuas – 3 watchtower: This watchtower is located on the border of Báta to the east of Route 56. The tower surrounded by a ditch of about 32 × 32 m was first observed in an aerial photograph made in 1950. A new image of it was taken in 2010. Coin finds from the 4th century have been found on the surface of the tower and in its surroundings. Limes Road: Route 56 turns in a westerly direction to the north of Dunaszekcső near the county border. The Limes Road, which up until that point ran along the same path as the modern road continues on straight in a nearly northerly direction to the western part of the border of the town of Báta. The path of the road can be clearly distinguished and in several places its gravel surface can be seen. In the spring of 2010 a gas main being installed cut through the Limes Road, so its clay foundation and ditch could be seen in cross-section. The element of nominated property contains the sites of the Limes Road and the watchtowers as can establish from the aerial photographs and from the surface. The border of the buffer zone is the same as those of the lots containing the element of nominated property, but it only includes the narrowest portion of the forested strip along Route 56 to the west and the service road intersecting with Route 56.</td>
</tr>
<tr>
<td>96</td>
<td>Dunafalva – Contra Florentiam Lugio 1. kikötőerőd</td>
<td>The remains of the fortified river port can be found in the neighborhood of the present-day ferry port between Dunaszekcső and Dunafalva on the left bank of the Danube, opposite to the auxiliary fort of Lugio (Late Roman Florentia). The fortified river-port (bridge-head, according to another terminology) consists of a central tower, two corner towers and of side walls, running down to the Danube.</td>
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The central tower was 16 × 22 m and its foundations were 3.5 m, but only the impressions of posts serving as foundations remained. The side walls and the corner towers were 1.5 m thick, and the remains of the wall of the southeastern corner tower survive, as well as a small section of wall of the northwestern corner tower.

The border of the element of nominated property is the boundary of the fortified river port as determined by the researchers from the University of Pécs. The border of the buffer zone to the east is the eastern border of the lot 0315/2, to the north and south it is the borders of this same lot extended to the west to the nearest cut-off point of the Danube riverbed’s (04/2) western border and the western border is the western border of the Danube riverbed.

According to aerial photographs, remains of a Roman building can be observed in a 50 × 50 m area in the cultivated fields to the west of Route 56, to the south of the village Dunaszekcső. The excavation led by Olivér Gábor in 2012 has shown, that the amount of Roman stamped bricks and tiles visible on the fields belonged to a military brick firing kilns used by the cohors of the nearby auxiliary fort Lugio.

The military fort of Altinum can be found on the border of Kölked atop a hill rising above the so-called Várhegy-dűlő area. A survey using a magnetometer was performed on the fort: in the area of about 6.5 ha surveyed, the image of a Late Roman fort built with oval, U-shaped and round towers and fan-shaped corner towers took shape. The size of the fort surrounded by ditches was about 200 × 180 m, and its northeastern section has been destroyed.

On the basis of field walks, the auxiliary vicus surrounds the fort in a semicircle outside the designated element of nominated property.

The element of nominated property contains the extent of the auxiliary fort and the Late Roman fort that can be determined on the basis of their traces on the surface. The borders of the buffer zone are the same as the borders of the lots containing the element of nominated property.
2.b. History and Development

2.b.1. History

At the beginning of the Imperial period Rome extended its authority over European areas across the Alps. Under the reign of Augustus (27 BC – 14 AD) most of the regions and tribes south of the river Danube were brought under Roman control. At this time, Augustus extended Roman authority to the line of the Danube over battles fought between 15–9 BC. In scarcely twenty years the province of Illyricum, whose territory was expanded in this manner, was split into two with the part further from the Adriatic Sea becoming an independent province, Pannonia, at the beginning of the reign of the emperor Tiberius. In this period this did not necessarily imply the direct rule over a region defined by a fortified frontier, but often this only meant that Rome became the dominant power in an area of influence. The tribes from the areas of the province Illyricum to the north of the Drava River were given relative autonomy temporarily. In the first decades the provincial army was stationed in the interior section of the province, with 2-3 legions and a contingent of auxiliary troops attached to them whose size is not precisely known. The area of Roman interests was defined by a demarcation line with small military posts along the Danube, which was set up in the first half of the 1st century AD. During the reigns of Claudius and Nero (41–68 AD) new fortifications were constructed along the Danube. The strategic goal of the Claudius era military occupation of the entire territory of Pannonia, during which the auxiliary troops were sent both to the interior and to the areas near the border in order to control the major roads, the intersections of roads and the Danube crossings of major significance. It was during this period that the northern areas lost their partial autonomy. Only in Pannonia at the endpoints of the more important diagonal roads and at river crossings larger forts were constructed. These include the first legionary fortress at Carnuntum (ID No 31) and the auxiliary forts of Arrabona/Győr (ID No 38), Brigetio/Szőny (ID No 45), Solva/Esztergom (ID No 51), Aquincum – II (Budapest, Bem tér) and Lussonium/Paks (ID No 86).

After the creation of the provinces of Raetia, Noricum and Pannonia an open frontier existed. Some of the tribes south of the Danube stood in a client relationship to Rome and Rome regarded them as being part of the Roman Empire. Under the reign of Vespasian (69–79 AD) the Roman army strengthened the existing positions through larger forts forming a systematic military occupied boundary. It is possible that control along the line of the Danube was exerted additionally by the fleet. In the 1st and 2nd centuries several legionary bases were established in Regensburg (DE; ID No 6a-h), Enns (ID No 14f-g), Wien (ID No 30) and Carnuntum (AT; ID No 31), Komárom (ID No 45) and Budapest (HU; ID No 70a). More than 100 auxiliary forts, temporary camps, several late Roman fortresses and bridgeheads and hundreds of watch-towers were found on the territories of the four countries. Along the frontier line the forts are 10 to 30 km apart. The density of watchtowers varies according to the topographical conditions in which they lay. The towers recorded in Hungary for example – particularly during the later Roman period – were built 1 to 2 km apart from each other. There have been watch- and signal towers, which were situated in ideal position to observe the whole length of the river and the Limes Road. The Limes Road connected the forts and mostly ran along the river. There are exceptions to this situation where the topography was difficult. Then the road swayed to the hinterland with byroads to the individual forts and watch-towers along the riverbank. In most cases additional physical earthworks or barriers were unnecessary, as the defence was provided by the river itself.

Following Trajan’s conquest of Dacia in 106 AD the former large province of Pannonia was divided for political and military reasons. With this decision went a redistribution of legions and auxiliary troops along the whole stretch of the Danube clearly reflecting the Roman anxiety about neighbouring powerful tribes. In difference to Raetia and Noricum, where the capitals were situated in the hinterland, the capitals of the new Pannonian provinces were positioned at the Danube in Carnuntum (ID No 31) and Budapest (ID Nos 69 and 70).

One of the most significant periods of crisis in the history of the Frontiers of the Roman Empire – The Danube Limes was the time of the Marcomannic Wars (166–180 AD). Many fortifications and especially
the civilian hinterland, which played an important role for recruiting, providing supplies and living space for the veterans, were attacked, raided or even destroyed several times by barbarian tribes. Destruction levels have been identified on many sites in the Danube Limes provinces. To deal with that problem a large army was brought together under the command of the Emperor Mark Aurel in the Middle Danube area at Wien (AT; ID No 30) and later on around the legionary fortress of Brigetio (HU; ID No 45). Such a major expedition involved troops from outside the immediate area. A large number of temporary camps around Komárom and at Iža (SK; ID No 46) beyond the Danube with the function of a springboard for the campaigns in enemy territory are proof on the ground. The Roman army finally defeated the barbarian tribes in 180 AD. The frontier system in the era of the victorious Emperor Commodus (180–192 AD) was strengthened by watchtowers and burgi.

The period of the Severian emperors (193–235 AD) brought not only the restoration of the demolished forts and civilian settlements but also the most flourishing time for the Danubian provinces. This era stood in great contrast to the middle and second half of the 3rd century, when a major decline in the settlement structures and the living conditions took place. There were many reasons for this decline: civil wars inside the Empire and constant threat from the powerful enemies beyond the Danube. The significance of the Danube limes and its army has been increased during the crisis. The army defended the frontier against the invading Goths and other German tribes, and the Sarmatians, but at the same time it took over the responsibilities for the entire Roman Empire which was temporarily split into three or more parts.

The destroyed and demolished structures of the Danube provinces only slowly regained their earlier form. The earliest historical and archaeological data about the construction of forts and roads and the erection of watchtowers comes from the reign of Diocletian (284–305 AD). As a result of Diocletian’s governmental reforms every province was divided to two, in general one along the limes and the other in the rear. In the 4th century, the altered relationships of power and ethnicities in the foreground of the frontier in the Carpathian basin compelled Constantine (308–337 AD) to separate the Sarmatian and Germanic groups from one another, who were dealing with both internal and external stresses, with a system of earthworks surrounding a large section of the Great Hungarian Plain. In the second half of the reign of Constantine II (337–361 AD) the military fortifications were remodelled in expectation of severe assaults, or in other words they were given large, protruding towers, the number of gates were reduced and the ditches were dug stretching further from the walls of the forts, as well as being wider and deeper than previously. Valentinian (364–375 AD) continued the strengthening of the Danube limes. In addition to his construction of forts, the establishment of numerous watchtowers is also connected with his rule. In the second half of the 4th century, the horseshoe-shaped towers were replaced with round ones. The great building programs of the 4th century may be seen in all Danube provinces. Due to the threat also civil towns erected town walls, and the provincial government let built several depository bases in order to preserve grain and animal herds. Large sections of the Fortiers of the Roman Empire – The Danube Limes were now guarded by the above mentioned watchtowers. The function of small bridgeheads on the left bank of the river Danube was to safeguard the landing of boats to enable small-scale campaigns. The last significant overall military building process took place under the reign of the Emperor Valentinian and later in the last quarter of the 4th century, when tower-like fortifications (burgi) and massive watchtowers, like Bacharnsdorf (ID No 21), were constructed. At the end of the 4th century AD the latest building project was executed. Due to the lower number of soldiers in the troops the size of the forts was reduced by building new walls in the corner of the old forts due to much smaller garrisons available. Often, the local population lived inside the old fortifications, which had been at least partly abandoned by the Roman army. There were built also 3–4 storey high towers with extra thick walls in the territory of late Roman forts, like in Paks-Dunakömlőd (ID No 86). In some places small hillforts were built on top of steep hills and mountains, proving the insecure situation of the provinces. These smaller fortlets – along with the watchtowers that were in partly erected earlier – and the hillforts comprised the final defensive system of the Danube provinces in the first half of the 5th century.

The state of equilibrium that existed into the 5th century was disrupted by the appearance of the Huns and the influx into the Empire of the Germans who were fleeing before them, which led in time to the abandonment of territories and provinces. The frontier in Raetia, Noricum and Pannonia finally broke down under their attacks and was given up by Rome step by step from the 430’s onwards until 487/88 AD.
2.b.2. History of research

There is little direct evidence for what happened to the sites along the *Frontiers of the Roman Empire – The Danube Limes* after the Romans had to give up control over the southern bank of the river. The treatment of destroyed or abandoned Roman monuments in the early post Roman periods is a particular question. Place names, like “Burgstall” or “Heidenstatt” and a few Medieval texts indicate that in many places upstanding walls must have existed for a long time. Other buildings, especially at the Limes in Austria and Bavaria, are still standing and used in our times, so they must have been considered somehow. However, we cannot be sure that there was continuous occupation at these places except, for perhaps Regensburg (ID No 6), or that they represent only later reuse. In any case, at least from Medieval Times onwards these structures must have been roofed over again as a lot of leftovers from the Roman military installations along the Danube were the nuclei of new development. A good number of them formed the core of or were incorporated into town defenses. Additionally, to these indications about Roman structures there are a few early records to old buildings, like in the *Gesta Hungarorum* in the 12th century (to Budapest/Aquincum; ID Nos 69 and 70), and about the discovery of inscriptions and coin treasures from the 14th century. Certainly the first post Roman construction phase led to a considerable number of discoveries of inscriptions and building stones as can be deducted from their frequent use as *spolia* in Romanesque churches and buildings, sometimes in prominent visible positions and usually with a new Christian meaning. However, most of the obvious ruins were just used as quarries for contemporary constructions, especially in the lowland in Hungary where there is no stone. The period of Humanism from the later 15th century onwards led for some time to an intensive discussion about the past. Triggered by the discovery of Greek and Roman scripts we see the first “scientific” approach towards Antiquity. In particular the Medieval copy of a late Roman world and road map, named after its temporary owner in Augsburg *Tabula Peutingeriana*, enabled a new perspective through obviously Roman place names and specific distances marked between them. The map covers the whole of the *Frontiers of the Roman Empire – The Danube Limes* and further down the river to the Black Sea. Wolfgang Lazius (1514–1565) was someone who systematically and correctly tried to associate Roman place names with sites on the ground in Austria and Hungary. The debate about that correlation is still vivid, in particular among volunteers, as the copy of the map includes a lot of errors and inconsistencies. This period sees also first collections of Roman finds especially coins and inscriptions, usually through noble men. A particular instance is the record of a Roman inscription beyond the Danube at Trenčín (today Slovakia). Sometimes these activities have a political dimension, e.g. for Maximilian I or Matthias Corvinus, as sovereigns tried to support their claim to power by establishing a link to the great past. Some of these collections form the core of present day museums, like what became later the Archäologische Staatssammlung München, the Kunsthistorisches Museum Wien, and the National Museum in Budapest. For some sites we have descriptions from this time, e.g. by Johannes Turmair, named Aventinus (1477–1534) in modern Bavaria and Austria and Antonio Bonfini (1427/34–1502) in Hungary. In rare instances even excavation reports are known, so for e.g. for Carnuntum. With the appearance of printed books a few pictorial documents of Roman sites on the Danube were produced. This was also the time for which we know about isolated concerns about the preservation of Roman ruins.

The later 17th and the 18th centuries are marked by a general disinterest in Roman sites on the Danube, except perhaps for a few foreign travelers’ reports for Austria, Slovakia and Hungary. Two Englishmen, Richard Pococke (1704–1765) and Jeremias Milles (1714–1784), even discussed the function of buildings they saw. With the systematic recording of military installations and of the landscapes in general in the later 18th and 19th century a lot of Roman sites along the Danube were surveyed and recorded systematically for the first time, usually by military personal, most prominently Count Luigi Marsigli, who published his work in 1726 and who covered large tracts of the Danube Limes down to Croatia. Mátyás Bél (1684–1749) recorded in his monograph many archaeological remains along the Limes and utilized the maps of Sámuel Mikoviny (1698–1750). This approach culminated in the military survey ordered by Joseph II (1780–1790), which documented many sites in Hungary which were soon to be overbuilt by modern fortifications. Military surveys in the 19th century followed that tradition. In 1814 Benjamin
Chiapo [Csapó], the official land surveyor of Fejér County surveyed the traces of the Limes Road between Érd and Dunaföldvár in Hungary.

The discovery of sites like Pompeii and Herculaneum in Italy and a new understanding of the values of excavations, resulting in the foundation of the subject of Classical Archaeology through Johann Joachim Winckelmann (1717–1768), stimulated archaeological research at the Frontiers of the Roman Empire – The Danube Limes (western segment), too. Isolated Excavations in Enns (ID No 14), Vienna (ID No 30), Carnuntum (ID No 31) and Budapest (ID Nos 69 and 70) started in these days and let for the first time to a wider understanding of the relation of Roman sites and Medieval and modern places, but may be seen also rather in a wider context of the beginning of a Romanticized approach towards ruins, leading to the construction of quite a lot of artificial ruins in parks, sometimes reusing old stones. This time saw also the first measures towards a preservation of the remains of ancient buildings, like a decree of Maria Theresia (1740–1780) about preservation and publication of archaeological results, and a stipulation of Franz I concerning the Heidentor at Carnuntum (ID No 31), which needed protection from being dismantled (this, on the other side, shows what still happened to many of the other Roman ruins: stone robbing, reuse, and eventually agricultural activity across their surface). The Roman bath of Budapest/Aquincum (ID No 69a) got a protective building.

In the 19th century this led to a different understanding of culture and a particular interest in regional and local history (“Heimat”), often with a connotation of “national values”. Private associations founded by an interested bourgeoisie, some existing till today, focused on the understanding of what was to be found in front of the own door. To the initiatives of Flóris Römer most of the bigger museums in Hungary were founded in the last quarter of the 19th century. This approach included attempts of the presentation of the discoveries e.g. in newly founded local museums and collections (“vaterländische Sammlungen”). This development was supported by the legal situation for archaeological finds in the countries along the Frontiers of the Roman Empire – The Danube Limes (western segment), were (in Hungary till 1949, in Slovakia till 1950, in Bavaria and Austria still today) ownership of finds follows the ‘Hadrianic division’, according to which one half is owned by the finder and the other half by the owner of the ground were a find was made.

Only later on-site preservation, like at Eining started to play a role. Milestones were the privately funded excavations in Schlögen (ID No 11) 1838 (followed almost immediately by a publication of the results), a few years later e.g. at Enns (ID No 14), Eining and, much more systematically, at Iža (ID No 46) and Intercisa (ID No 78). New town developments connected with interventions into the ground caused additional discoveries, as the large inscription of the porta principalis dextra of Regensburg 1873. Although the construction of the first railways did not respect Roman sites particularly, as e.g. at Enns (ID No 14) and Brigetio (ID No 45), the Central-Commission zur Erforschung und Erhaltung der Baudenkmale in Austria realized the potential of linear measures and published 1868 a brochure about the significance for historical and archaeological discoveries. In Hungary a National Committee for Monuments was set up in 1877 and dealt particularly with Budapest/Aquincum. It was supported by the law on monuments in 1881. Towards the end of the 19th century, some activities can be seen again in wider political circumstances, like a temporary competition between activities at Eining/Abusina, supported by the kingdom of Bavaria and at the Saalburg, supported by the Prussian Emperor. Many of the excavations at that time were led by non-professionals and experienced large public support. At Eining, e.g., a local priest was the leading man. Excavated parts were restored, partially under the addition of several layers of stone, and presented to the public under newly erected protective roofs. During this period archaeology also started to find its way into teaching and the universities in Central Europe. Important for these new institutes were activities in the field, like the excavations at Carnuntum (ID No 31) by the University of Vienna and at Budapest/Aquincum (ID Nos 69 and 70).

To concentrate and direct activities towards Roman military sites in Germany 1892 the Reichs-Limeskommission was founded. However, its work mostly concentrated on what is known from that time onwards as the Obergermanisch-Raetischer Limes (Upper German-Raetian Limes; now part of the World Heritage Site ‘Frontiers of the Roman Empire’). Nevertheless, the following decades saw increased archaeological activity on the Danube Limes in Bavaria, too.

Most likely, the founding of the Limeskommission der kaiserlichen Akademie der Wissenschaften in Austria for the research of the Roman Limes 1897 was a response to this in Austria. A similar response
was intended to be given also in Hungary, and it was discussed among scientists in the first decade of the 20th century, but the World War I and its consequences didn’t allow fulfilling the plan. However, the great scale excavations in Aquincum (ID Nos 69 and 70), Intercisa (ID No 78) and some other sites, like Iža (ID No 46) and Pilismárd (ID Nos 55 and 56) at the same time proved the efficiency of the Roman archaeological research in Hungary.

However, not all the activities of those times were seen unanimously positive. Parallel to the development of new ideas in heritage conservation under the maxim of giving preference to the original the idea of leaving the context untouched competed with a lot of treasure hunting without any respect to the archaeological circumstances, partially motivated by a continuing quest of some museums for presentable. This caused a lot of criticism and resulted in Bavaria 1908 in the foundation of a state organization for the protection of ancient monuments (Bayerisches Landesamt für Denkmalpflege). Its explicit goal in the founding years was to limit excavations to those places where no preservation of the sites was possible. This approach led in Austria to a renewed view onto the late Roman constructions at the Danube Limes, too.

After World War I the economic crisis all over Europe led to reduced interest in the sites along the Frontiers of the Roman Empire – The Danube Limes (western segment). This may have been supported by the rising influence of National Socialist-ideology which considered the Roman period as a time und foreign occupation. Nevertheless, the founding of a national Institute for the protection of monuments in Austria (Bundesdenkmalamt 1919) paralleled by a relevant law in 1923 which led 1926 to a first official act of inscription and protection of a monument along the Danube Limes (northeast corner of the legionary fortress at Enns, ID No 14 g), and a similar development which led to establishment of the Governmental Commissariat for the Protection of Monuments in Slovakia, also in 1919, show the rising understanding of the importance of at least statewide unified approach based on a regulated system of protection. Unfortunately, competences were reduced under National Socialism, although some sites which were given a national importance were researched intensively, e.g. Carnuntum. On the other side, large scale construction of airports, military barracks, concentration camps etc. led to a number of discoveries although due to time pressure the extend of following excavation was limited. Hungary took a different path, remaining for many years unhampered in respect to the Roman history, with a systematic publication of research aspects in the Dissertationes Pannonicae of the University of Budapest and in the Archaeologia Hungarica of the National Museum. The law on monument protection of 1929 organized the way of the excavations, regulated the method of the premium for the finders, introduced the category of the protected areas, and clarified the responsibilities among museums and other research institutes. World War II led to an almost complete halt of research on the Frontiers of the Roman Empire – The Danube Limes (western segment). The following times of economic miracle in Austria and Germany till the 1970s and the phase of reconstruction in Slovakia and Hungary experienced an extreme discrepancy between constructions everywhere, also in archaeological sites, and financial and personal resources to excavate those sites prior to destruction. Along the whole of the Danube Limes under consideration we have to state – in our present day terms – quite a lot of unrecorded or only extremely limited recorded loss of archaeological substance. Only gradually, often depending on individuals, there was awareness for the need to document what was on the way to be destroyed. In particular, in cities with town or county archaeologists, like Regensburg, Straubing, Künzing, Passau, Linz, Enns, Wien, Bratislava, Győr and Budapest, more and more rescue excavations preliminary to private and public constructions, in particular in new developments increased our knowledge about individual sites on the Frontiers of the Roman Empire – The Danube Limes immensely. This led to the consideration of areas associated with the military sites. E.g. at Künzing (ID No 8) several hectares of the military vicus were investigated. Nevertheless, in these times a good number of large scale research programs were set up, too. At Intercisa (ID No 78) large scale excavations were executed in the cemeteries, in the fort and in the vicus, at Passau (ID No 9) and Regensburg (ID No 6) the potential continuity between the Roman and early Medieval times was the topic. Carnuntum (ID No 31) and Budapest/Aquincum (ID Nos 69 and 70) experienced almost permanent research excavations dealing with the Roman military and associated sites. The research of Lussonium (ID No 86) was started in the 1980s by the University of Pécs and a new phase in the research of Brigetio (ID Nos 44 and 45) in the 1990s by the University of Budapest. Knowledge beyond the forts defenses and known places increase dramatically with aerial photography, in Slovakia and Hungary after the fall of the
Iron Curtain, through Otto Braasch and Hungarian scholars.
In any case, for many of the sites along the *Frontiers of the Roman Empire – The Danube Limes* in the past 30 or 40 years an amazing amount of facts and understanding has been gathered. In quite a number of instances these were studied and summarized in academic work, often as PhD’s, and subsequently published. A number of these publications are of importance for the understanding of the *Frontiers of the Roman Empire – The Danube Limes* way beyond their particular topic of one site. The Union Académique Internationale adopted as its 80th international research program Corpus limitis imperii Romani (CLIR), initiated by Hungary in 2011. Its international database will provide a wide range of entries for common research and heritage protection, including site management.

Partially due to new heritage laws (Bavaria 1973, Hungary 2001), but also due to a general feeling for its need, in all states large and systematic inventories of the heritage, including the archaeological heritage, were set on their way in the last quarter of the 20th century, in parts continuing till present days, leading to the inscription of many sites into lists of protected monuments (where there is a constitutive system). These inventories, originally only in files and printed, now in various databases, formed the basis of this nomination. Another basis are the strict legal systems in each of the countries involved and related state institutions which guarantee structured and competent dealing with all heritage matters. They are supported by a large number of volunteers, usually working in some kind of cooperation with those institutions.

In the last decades a number of summarizing volumes tried to tackle with particular stretches of the Danube Limes. Additionally, guide books most parts of the *Frontiers of the Roman Empire – The Danube Limes* provide an easy approach to many of the sites for the general and interested public included many of the sites selected for this nomination. In relation there is the goal by the people responsible to increase the experience of many of the Roman sites along the *Frontiers of the Roman Empire – The Danube Limes* by information panels, apps and popular publications. Considerably risen has also the awareness that in particular excavated sites need intensive restoration or even protective buildings. A good number of them are under the care of local institutions and associations some of them founded more than a hundred years ago. It brought us back to believe, mentioned already in 1856, that the best way of preservation of ancient monuments is to retrieve them from oblivion, to present their values and to raise interest in them.

Due to the very different development from site to site we recognize at present different levels of knowledge and research. For many places where there have been intensive excavations, knowledge is high but preservation therefore is given only in small(er) parts. Elsewhere, we know little about a site but can assume that conditions for the preservation are very good. In general, we can state that at sites which are not overbuilt the whole site is fully accessible preserved over the whole area. However, plowing and earlier interventions to extract stones and finds may have reduced the surviving stratigraphy considerable. On the other hand, sites overbuilt by Medieval settlements may show complete destruction through wells, cellars, latrines etc. on a limited scale but consist of extremely well conserved layers from the earliest times of a site through its complete history to its end and reuse much later.
2.2.3. History and development of the individual component parts

A short description of history and development including the history of research of all the nominated component part is given in the following table.

Table 2.2
Description of the history and development of the individual component parts

<table>
<thead>
<tr>
<th>ID No</th>
<th>Component parts</th>
<th>History and Development</th>
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<tbody>
<tr>
<td>1</td>
<td>Bad Gögging – Heilbad</td>
<td>After the arrival and permanent employment of a legion in the province of Raetia the sulfuric springs near the existing civil settlement at Bad Gögging were used to develop the spa baths of legio III Italica. From the late 2nd century AD onwards an extensive thermal building complex was erected and developed as at least three different building phases indicate. In the early Christian period the central basis of the Roman baths was converted into a place of worship. The basin was filled in, when a first pre-Romanesque church was constructed. Later the Romanesque church of St. Andreas was erected on top of the central basin of the Roman spa baths. Subsequent to the archaeological excavations the church was converted into a museum, in which the central water basin of the Roman spa with its hip-baths forms the main exhibit. History of Research: ♦ 1959/75: Excavations by A. Radnóti and H. U. Nuber ♦ 1998: Excavations by H. U. Nuber and G. Seitz on the occasion of the renovation of St. Andreas church ♦ 2006: Excavations by H. U. Nuber on the occasion of road work</td>
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<td>2</td>
<td>Eining-Weinberg – Wachtturn und Heiligtum</td>
<td>Presumably in a first phase, a wooden tower with a stone base was erected in the 2nd century AD. According to fragments of a building inscription a small sanctuary of Mars and Victoria and a large barrack-like building were added in AD 226 or 229. The end of the buildings on the “Weinberg” hilltop seems to coincide roughly with the fall of the Raetian Limes in AD 254. A large number of iron crosses found during the excavations show that the area was used by a Christian community in the Early Medieval period. History of Research: ♦ 1916-1918: Excavations by P. Reinecke</td>
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<td>3</td>
<td>Weltenburg-Am Galget – Kleinkastell</td>
<td>In about AD 40 the Roman army for the first time established a continuous line of control to protect the northern frontier of the province Raetia. The fortlet at Weltenburg-Am Galget was one of a whole series of earth and timber forts erected on the south bank of the river Danube and linked by a military road at that time. According to pottery and small finds the military presence at the site was limited to the Claudio-Neronian period without subsequent occupation. History of Research: ♦ 1979: Discovery from the air by O. Braasch ♦ 1989: Designation of the eastern part of the fortlet for housing development and subsequent archaeological excavations by M. M. Rind ♦ 2017: On behalf of Bavarian State Conservation Office geophysical prospections (magentometry) by C. Mischka (Friedrich-Alexander-Universität Erlangen-Nürnberg)</td>
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<td>4</td>
<td>Regensburg Großprüfening – Kastell und Vicus</td>
<td>In the course of the Marcomannic Wars in the seventies of the 2nd century AD legio III Italica was moved to its new base at Regensburg (component parts 6a-i). In this context a small military garrison was based at Großprüfening to guard the confluence of the rivers Naab and Danube, as the Naab valley functions as a natural communication line between the Danube valley and the area north of it. The fort was surrounded by an extensive civil settlement/vicus. Whereas the civil settlement/vicus presumably was destroyed and abandoned in the mid 3rd century AD the fort seems to have been occupied until the 80s of the 3rd century AD. Results of excavations and geophysical prospections indicate that after the abandonment of the fort its area was partly leveled to erect a tower/burgus in the former northwest corner. This tower/burgus was probably constructed in the 4th century AD and protected by a ditch. According to pottery and small finds the Roman</td>
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Volume I
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<th>ID No</th>
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| 5a-b  | Regensburg Kumpfmühl – Kastell und Vicus | At the end of the reign of the Emperor Vespasian (69-79 AD), or shortly thereafter, an auxiliary fort was established on the Koenigsberg in the Kumpfmühl district on a slope overlooking the Danube valley. The fort housed *cohors III Britannorum quingenaria equitata* and later *cohors II Aquitanorum quingenaria equitata*, both of them being part-mounted regiments with a nominal strength of 500. Archaeologically, the progression from earth and timber to stone construction was determined. The fort was used to monitor the traffic routes into the Barbaricum and to the south to the provincial capital of Augsburg/Augusta Vindelicum. In the historical context of the Marcomannic Wars the fort and military vicus at Kumpfmühl were destroyed and subsequently abandoned in the third quarter of the 2nd century. This incident is illustrated by a treasure-hoard for which gold, silver, and bronze coins provide a latest date of AD 166/7. History of Research:  
♦ Early 18th century: Localisation of the fort at Kumpfmühl and the legionary fortress by G. G. Plato  
♦ 2nd half of the 19th century: Excavations in the Roman cemeteries of Regensburg, in Kumpfmühl and in the old city of Regensburg by J. Dahlem  
♦ 1924-1930: Excavations in the fort and vicus at Kumpfmühl by P. Reinecke  
♦ 1989: Discovery of the treasure of Kumpfmühl  
♦ 1994-95: Excavations in the fort at Kumpfmühl |
| 6a-i  | Regensburg – Legionslager | In the course of the Marcomannic Wars Emperor Marcus Aurelius (161-180 AD) raised three new legions. One of them, *legio III Italicca*, was moved to the Danube in the 160s. Initially partly based at Eining-Unterfeld (part of WHS Ref: 430ter), it finally built its legionary fortress at Regensburg to become the largest military base in Raetia. The Danube bend was chosen as the site. The remains of a previous settlement on the Danube had to be levelled. The construction work on the 24.5 ha large legionary fortress certainly lasted several years. At the east gate substantial parts of a monumental building inscription, formerly 8-10 m long, were found that dates the construction of the fortress to 179 AD. In the 3rd century, a fabrica or armamentarium was built along the eastern wall. Sources dating to c. 200 AD give evidence that "Legio" and "Reginum" were used as place names for the legionary fortress and its *canabae legionis*, the nearby civil settlement.  
Dating evidence from destruction layers indicates that the destruction of the Mid Roman Regensburg did not coincide with the final destructions along the Raetian Limes, where occupation ended around 254 AD. At Regensburg at various places burnt destruction layers can be dated to the years around 280 AD. Hereinafter occupation was considerably reduced and the civilian population withdrew into the fortifications of the legionary fortress. Until the mid 5th century, Castra Regina, as Regensburg is called in the Notitia Dignitatum, was still occupied, as the excavations in Niedermünster church (component part 6i) showed. The fortifications of the legionary fortress were used well into the Medieval period, parts of them surviving visible until today in the cityscape. History of Research:  
♦ Early 16th century: first descriptions by J. Turmair, known as Aventinus  
♦ 18th century: Localisation of the fort at Kumpfmühl and Legion’s Fortress by G.G. Plato |
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<tr>
<td>♦ early 19th century: Research on inscriptions and the large cemetery by R. Zirngibl and B. Stark</td>
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<td>♦ 2nd half 19th century: Excavations in the cemeteries, Kumpfmüh and in the old town by J. Dahlem</td>
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<td>♦ 1895-1935: Investigations by G. Steinmetz</td>
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<td>♦ 1924-1930: Excavations in the area of the fort of Kumpfmüh by P. Reinecke</td>
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<tr>
<td>♦ 1963-68: Excavations inside the fortress under the Niedermuenster church by K. Schwarz</td>
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<tr>
<td>♦ since 2nd half 20th century: continuous excavations and observations during urban archaeological developments</td>
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<td>♦ 1989: Discovery of the treasure of Kumpfmüh</td>
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<td>♦ 1994-95: Excavations in the fort at Kumpfmüh</td>
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7a-b **Straubing – Kastelle**

Several Roman forts of the late 1st to mid 3rd century AD are situated east of the Medieval city center of Straubing. The oldest well-known fort of them is the so-called Westkastell IV, which was built in the early Flavian period and was destroyed during the time of the Marcomannic Wars. In contrast to that, at the nearby "Ostkastell" a total of three earth-and-timber building phases (Ostkastell I-III a) and one stone building phase (Ostkastell III b) could be identified.

The first wooden building phase (Ostkastell I) probably existed since the late 1st century AD. A second earth-and-timber building phase (Ostkastell II) was erected in the Domitianic period. At the latest in the Hadrianic period, the third earth-and-timber construction phase (III a) followed. With about 3.2 ha, this fort housed **cohors I Flavia Canathenorum milliaria sagittariorum**, a part-mounted infantry unit of double strength, which had been raised in Syria. In the mid 2nd century the fort was rebuilt in stone (phase III b). Up to the arrival and subsequent deployment of **legio III Italica** in the context of the Marcomannic Wars, Straubing/Sorviodurum, with altogether about 1500 soldiers garrisoned in the west and east forts, housed the largest military garrison on the Raetian Danube Limes. The Ostkastel III was probably destroyed by a fire and abandoned in the middle of the 3rd century AD.

In the context of the reorganization of Roman frontier defence Straubing became a Roman military base again around AD 300. The Roman Army did not return to the open space of the lower terrasse, where the Mid-Roman forts had been situated, but moved to St. Peter’s church hill not far west of the Mid-Roman forts. This promontory was strategically well chosen and provided good views over the surrounding area. A few Early Imperial finds possibly indicate an Early Roman military presence at the site during the Claudio-Neronian period although no related structural remains are known so far. Late Roman walls and finds prove the existence of a Late Roman fortification. The coin series of St. Peter’s church hill ends in the early 5th century AD. Brick stamps possibly indicate that a vexillation of **legio III Italica** was garrisoned at Staubing, to which no reference is given in the Notitia Dignitatum. Partly it was also supposed that German-Bohemian foederati were present.

**Research History:**

- 1898-1913: Excavations on the Ostenfeld by the Historical Association for Straubing and the surrounding area
- 1909: Location of the fort III by F. Ebner
- 1976-1978: Excavations at the north gate of the Fortress III by J. Prammer
- 1978: Establishment of the municipal archaeology by Straubing, followed by numerous excavations in the Roman city area by J. Prammer
- 1981, 1984: Finding the Late Roman cemeteries of Azlburg I and II
- 1984: Discovery of the West Fort IV
- 1986: Discovery of the Roman harbour
- 2009: Geophysical measurements in the area of the Fort III by TUM School of Life Sciences Weihenstephan
- 2011: Ground Penetrating Radar measurements in the area of the southerm defences by Terrana Geophysik
- 2013: Magnetometer survey on the site of Fort III by the Bavarian State Conservation Office
Künzing/Quintana was a Roman military site from the early 2nd to the 5th century AD. In the 2nd and 3rd centuries the Roman fort at Künzing/Quintana housed a part-mounted cohort of 500 men. In the south-east of the civil settlement of this fort a wooden amphitheatre was erected in the Late Antonine period (respectively in the last quarter of the 2nd century AD) and used only for few decades.

Research History:
♦ 1829-31: Mapping of the location of the fort by the Baron of Mülzer (Royal Governmental President)
♦ 1870s: Determination of the layout of the military fort by means of small excavation trenches by chaplain J. M. Schmid
♦ 1897/8: Excavations on the fortification and of the regimental chapel by Dr. F. Pichlmayer
♦ 1914: Discovery of late Roman graves west of the fort
♦ From 1928 onwards: Observation of construction measures by civil engineer H. Neubauer
♦ 1958-66: Excavation of large sections of the fort by H. Schönberger and F.-R. Herrmann (Roman-Germanic Commission)
♦ 1978: Discovery of the thermal baths, emergency excavations in the new development area Girching (settlement and cremation graves of the middle caesarian period at the south Vicus) and discovery of indirect indications for the location of the late Roman fort by Th. Fischer
♦ Starting from 1980: Numerous rescue excavations in the civil settlement (vicus)
♦ 1998: Discovery of the mithraeum (Mithraic temple)
♦ 2001: Opening of the Archaeological Museum Quintana in Künzing
♦ 2003/4: Discovery and superficial excavation of the amphitheater

The old city of Passau with its historic suburbs occupies a unique topographic position at the confluence of the rivers Danube, Inn and Ilz. In addition to that, in the Roman period the river Inn formed the border between the provinces Raetia and Noricum. North of the Alps, the provincial border was identical with the border between the Gallic and the Illyrian costumes districts. Archaeological finds indicate Roman occupation at the Old Town peninsula of Passau from the Claudian period onwards. From the late 1st century AD onwards at Passau both banks of the river Inn were occupied by Roman settlements. Around AD 90 on the Norican river bank the auxiliary fort and military vicus of Boiodurum was constructed that is known by excavations. With at least two recorded building phases it flourished until it was destroyed and abandoned in the mid 3rd century AD. On the Raetian river bank Mid Roman occupation could be proved by small scale excavations, although the area is heavily built over by the old town of Passau. Whereas a Roman military occupation possibly is indicated by ditches, civil occupation of the 2nd-3rd century AD is proven by a variety of structural remains, inter alia by the excavations in the church of Niedernburg monastery, where parts of three 3rd century AD strip buildings could be recorded that were destroyed by a fire in AD 280/285.

In the course of the Late Roman reorganisation of the Raetian frontier defence Passau saw the construction of the late Roman fort Boiotro on the Norican river bank. Massive structural remains as well as archaeological finds indicate that the quadriburgium type fort was built around AD 300 and occupied by the Roman army until about AD 375. About 3 km downstream the river a watchtower (burgus) was erected at Haibach, which was occupied well into the 5th century. Further Late Roman settlement activity is attested for the eastern parts of the area of the old town of Passau by historical sources as well as by archaeological excavations. For the late 4th and/or early 5th century AD the Notitia Dignitatum records a tribunus cohortis novae Batavorum for Batavis, the Raetian part of Roman Passau. Excavations below the church of Niedernburg monastery revealed massive structural remains of a Late Roman granary, which most probably was part of the fort mentioned in the Notitia Dignitatum. In addition to that the excavations produced unique evidence for the material culture used by the inhabitants of a Roman military garrison in the western segment of the Danube Limes during the second half of the 5th century AD. This again is perfectly matched by the historic record of Vita Sancti Severini, the only surviving historical record for the history of and Roman life in the provinces of Raetia and Noricum ripense during the later 5th century AD. A monastic community mentioned there for Boiotro can be correlated with the archaeological evidence of a late 5th...
ID No | Component parts | History and Development
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| | | century AD re-occupation of the ruins of the fort Boioto on the Norican bank of the river Inn. Altogether the historical and archaeological sources available for and from Passau provide unique insights into the life of Roman soldiers and civilians for the 2nd half of the 5th century, i.e. into the period when Roman rule came to an end in the western half of the Roman Empire and Roman frontier control finally ended at the western segment of the Danube Limes.

Research History:
- Middle Imperial and Late Roman forts Passau-Altstadt (ID No 9a)
  - 1978-80: Excavation in the Church of the Holy Cross in the Monastery of Niedernburg (internal structures of the fort) by R. Christlein, Bavarian State Conservation Office
  - 1980: Discovery of the end of the easternmost ditch with associated post-holes, Bavarian State Conservation Office
  - 1987: Continuation of the excavation of the ditch discovered in 1980 by H. Bender, Bavarian State Conservation Office
  - 1985/6 Discovery of the 2nd ditch by S. Arnold, Bavarian State Conservation Office
  - 1989, 1994: Location of the 3rd, 4th and 5th ditch by J.-P. Niemeier, Municipal Archaeology Unit Passau
- Late Roman fort Passau-Boitro (ID No 9b)
  - 1974: Excavation by R. Christlein, Bavarian State Conservation Office
  - 1977: Excavation by the Bavarian State Conservation Office
  - Late Romanburg Passau-Haibach (ID No 9c)
  - 1906/6: Discovery by F. J. Engel
  - 1978/9: Excavations by H. Bender, Bavarian Academy of Sciences

10 | Oberranna – Kleinkastell | Late Roman fortlet, which could have had a preceding building from the 2nd Century AD on account of the findings.
Research History:
- The first investigations were carried out in 1840 by the Excavation Association of Schlögen.
- In 1960, the south-west front was cut up during dredging activities and subsequently uncovered by the Oberösterreichische Landesmuseum (Upper Austrian State Museum).
- Investigations in 2005 showed leveling with findings from the Roman period.
- In 2012, geophysical prospections and a test excavation were carried out around the building on behalf of the Upper Austrian State Museum and the Society of Archeology in Upper Austria.
- Before the construction of a protective structure excavations in the interior of the fortlet were carried out 2016/17.

11a-b | Schlögen – Kastell und Vicus | The antique name of the 0.65 hectares fortlet with a slightly distorted rectangular floor plan (110 × 69 m) is not known. Loviacum or Ad Mauros are taken into consideration. In the 3rd century AD a garrison by the cohors V Breucorum, as well as the legio II Italica is presumed, through brick stamps. For Ioviacum, a base fort of the Danube fleet and a Liburnarian unit of the legio II Italica is mentioned in Late Antiquity.
Two building periods can be detected with the same base area: from the fort of the first period only the outer fort wall is known. It was founded not later than AD 170 and was destroyed by a damaging fire just after AD 300. In the later 4th century, there was a new construction of the fort, which continued to the 5th century. Parts of the principia, retentura, praetentura and the streets were excavated.
The vicus was probably there before the fort from the middle of the 2nd century and existed well into the 5th century AD. Of the two building periods, the older stone building phase dates back to the middle of the 2nd century AD, the younger one included wooden wickerwork buildings, which were destroyed by a fire during Late Antiquity.
Research History:
- First excavations in the fort took place 1837/8 by the Excavation Association of Schlögen in 2016/17.
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<td>♦</td>
<td>Further studies were carried out in 1937 under the direction of E. Swoboda (Austrian Archaeological Institute) and from 1957 to 1959 by L. Eckhart (Upper Austrian State Museum).</td>
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<td>♦</td>
<td>From 1838-1840 J. Gaisberger carried out excavations in the settlement area, which were continued only in 1937 by E. Swoboda (Austrian Archaeological Institute).</td>
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<td>♦</td>
<td>During the course of construction work, L. Eckhart conducted emergency excavations in the years 1958/9</td>
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<td>♦</td>
<td>In 1984, new construction measures required investigations to be carried out by Ch. Schwanzar (Upper Austrian State Museum).</td>
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<td>♦</td>
<td>On behalf of the Society of Archaeology in Upper Austria, geophysical surveys were carried out in 2013 on the free areas of the Fort and Vicus, which still showed numerous building ground plans.</td>
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<tr>
<td>♦</td>
<td>2013-2015: Archaeological excavations in the bathing complex before the erection of a protective structure</td>
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<td>12</td>
<td>Hirschleitengraben – Wachturm</td>
<td>The two-phase building, roughly square in shape on the floor plan, is enclosed by a horseshoe-shaped trench on the west, east and south sides. The original 6 × 6 m tower was built at the end of the 2nd or beginning of the 3rd century. In the 2nd half of the 4th century the watchtower was extended towards the east and south and the ground level was raised. For this more recent building phase, a brick with the stamp of the dux Ursicinus gives an indication of the erection during the reign of emperor Valentinianus I (AD 364-375).</td>
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<td>Research History:</td>
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<td>♦</td>
<td>Subsequent to the discovery in 1936, the first archaeological investigations were carried out till 1939.</td>
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<td>♦</td>
<td>Other excavations including conservation measures took place in 1991, under the supervision of the national monuments authority (Bundesdenkmalamt) in 1991.</td>
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<td>13a-b</td>
<td>Linz – Siedlung und Befestigung</td>
<td>The Martinsfeld forms the western part of the Schlossberg in Linz, which extends along the southern bank of the Danube. Here a Late-Celtic settlement was established, which developed continuously up to the Roman settlement. The earliest records of the Roman dwelling and workshops are dated to the first half of the 1st century. From the Martinsfeld the Roman settlement developed on the southern slopes of the Romerberg to the western part of the old town. The largest extent of the ancient settlements is documented for the middle ages, which can be traced south to the cemetery of the sisters of the cross. Military presence is attested in Lentia by inscriptions and finds. The presence of the ala I Pannoniorum Tampiana victrix is confirmed in Late Antiquity, parts of the legio II Italica and equites sagittarii (a mounted archer’s unit) are documented. While the mid-imperial fort of Lentia could be first for the first time in Altstadt in Linz in 2015, the military presence in Late Antiquity shifted to the high ridges of Schlossberg. Research History:</td>
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<td>♦</td>
<td>After first archaeological investigations around the Martinskirche in 1947/48, detailed researches were made by the Linz city museum from 1994 to 2015.</td>
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<td>♦</td>
<td>The moat on Schlossberg was examined in 2000 by the Bundesdenkmalamt (Austrian Federal Monument Office).</td>
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<td>14a-g</td>
<td>Enns – Legionslager, Canabae, St. Laurenz, Gräberstraße</td>
<td>The earliest traces of Roman settlement were found near the river Enns, at the foot of the Georgenberg in Mauthausnerstraße. At the end of the Marcomannic Wars, the legio II Italica was transferred to the Danube, where it built its fortress in Lauriacum. The beginning of the fortress construction was commenced around AD 185, and the completion was accepted on the basis of a building inscription for the period between AD 200 and 205. At the same time, the planning of a civilian settlement was begun west of the legionary fortress; parallel to this, the area north of the fortress was developed for settlement purposes (canabae legionis). Possibly, the rapidly flourishing settlement was given the rank of a municipium under Emperor Caracalla (AD 211-217), indicated by fragments of a municipal law which with a high degree of probability, but not absolute certainty refer to Lauriacum. During the 3rd century the civilian settlement fell victim to a fire disaster, but was rebuilt soon afterwards. As a result of the Diocletian reform of the army and administrative at the end of the 3rd century, parts of the legion were subdivided, the originally unitary province of Noricum divided into a part south of the Alps (Noricum)</td>
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Mediterraneum) and Noricum Ripense between Alps and Danube. Even when parts of the units of Legio II Italica were moved after the military reforms concluded by Emperor Constantine (AD 306-337), Lauriacum continued to be of military significance. As in most of the Danube forts, after the withdrawal of troops, the space was used as a civilian settlement within the protective walls of the legionary fortress. From this late period, simple buildings have been found which superimpose the military infrastructure.

The main function of Lauriacum is particularly evident in the early Christian Bishop’s church within the legionary fortress. The long Roman presence in Lauriacum/Enns corresponds to the holding period of the cemeteries, which range from the 1st to the 5th centuryAD and include both cremations and inhumations. The early Christian churches, which are both proven archaeologically as well as written sources and small findings, underline the unique position of Lauriacum / Enns for the history of early Christianity at the Austrian Limes section. In the biography of Saint Severin, completed by Monk Eugippius in AD 511, the place is portrayed as a late Roman, city-like settlement. The Romans lived within the protective walls of the former legionary fortress. Bishop Constantius of Lauriacum is the only known Late-Roman – Early Christian bishop on the Austrian Danube. In addition to his ecclesiastical duties, he also directed the defense of the settlement by a militia group formed by the inhabitants.

Research History:
- The first information on Roman finds from Enns dates from the beginning of the 14th century. The ruins were also mentioned in the travel reports of the following centuries.
- First excavations were carried out in the middle of the 19th century.
- The Museum Association for Enns, which was founded in 1892, carried out further investigations.
- Planned excavations of the inner area of the fortress were undertaken from 1904-1920 by the Limes Commission of the Austrian Academy of Sciences, which was founded in 1897, based on the German model. The first comprehensive plan of the legionary fortress originates from this period.
- From the second half of the 20th century onwards, other sections of the fortress, large areas of the canabae as well as several cemeteries were archaeologically investigated. The expansion of the settlement area and the duration of the settlement were determined, while doing so.

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<td>15</td>
<td>Albing – Legionslager</td>
<td>Tile stamps bear witness to the construction carried out by the legio II Italica, which was moved to the Danube Limes by the Emperor Marcus Aurelius during the Marcomannic Wars in the seventies of the 2nd century. When the legion moved west to neighboring Lauriacum / Enns in AD 190, the fortress was abandoned. The actual causes for the change of location are still unclear but the more convenient river crossing at Enns could have played a role in this matter. There is a discussion that Elegio or Mariniana are the name of the legionary fortress. Research History:</td>
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<td>- Walls and small finds were already found at the beginning of the 20th century.</td>
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<td>- The first excavations took place under M. von Groller (Limes Commission) in 1904/5. While doing so, part of the enclosing wall, gate-systems and towers were uncovered.</td>
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<td>- During construction projects, rescue excavations were carried out by H. Stiglitz (Austrian Archaeological Institute) in 1973 and by G. Ruprechtsberger (Nordico-Museum Linz) in 1985.</td>
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<td>- In 2006, the Porta Decumana was uncovered, during an excavation by the Bundesdenkmalamt (Austrian Federal Monuments Office).</td>
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<td>- In 2007, a survey was conducted in the area of the Principia.</td>
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<td>16a-b</td>
<td>Wallsee – Kastell und Kleinkastell</td>
<td>The identification of the fort as Adiuvense remained controversial for a long time, but recently, the equalization with Locus Felix is suggested. The fort was built in the last decades of the 1st century as a timber-earth fort. In the 2nd century it was rebuilt in stone and used until 5th century. In the 2nd century, the fort was probably the garrison of cohors I Aelia Brittonum. The legio II Italica, the legio X gemina pia fidelis, and the cohors V Breucorum are handed down as other troops. Late Antique conversions took place under the dux Ursicinus.</td>
</tr>
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</table>
Research History:
♦ Due to the topographical location and the regular organization of the historical area, a Roman fort was presumed under the Medieval market since the 2nd half of the 19th century.
♦ Smaller archaeological investigations, stone monuments and random discoveries as well as the systematic examination of construction sites from the 60s of the 20th century confirmed the assumption.
♦ Although the late Roman fortlet was already located in 1987/88, the archaeological investigations (2011-2013) necessary before the construction of a social housing project led to its partial exposure and preservation as an accessible ruin in the basement accessible at ground floor of the new building.

17 Ybbs – Kleinkastell
A building inscription in Ybbs, which had been transferred to Vienna in 1508 and is lost today, describes a burgus erected around AD 370 by *milites auxiliares Laurieciensis*, which until now had not been located. The latest researches have shown the evidence of a fortlet.

Research History:
♦ In 1991, two parallel sections of the walls were unveiled on the occasion of a project for urban renewal in the area between the parish church and the city wall.
♦ In 2014, the outer wall was re-examined and it was found that the form and the dimension were that of a Roman building.

18a-d Pöchlarn – Kastell und Vicus
The first information about Roman Pöchlarn originates from humanists from the 16th century when for the first time gravestones bricked up in the church or put away in the castle had been described. Since the middle of the 19th century small excavations took place. It is only on account of recent excavation results from 1990 that it is ensured that only about the south-eastern-third of the former fort is preserved, while the other two thirds have been destroyed by the Danube. The ancient name *Arelape* is passed down in the *Tabula Peutingeriana*, the *Itinerarium Antonini* and the *Notitia dignitatum*. *Cohors I Flavia Brittonum miliaria* are mentioned as garrisons. For Late Antiquity *equites Dalmatae* as well as a naval base are known. Recent archaeological investigations in the area of church square and Thörringplatz have provided important insights into the history of the fort, such as the proof of a first Roman marching camp, which was followed by a first timber-earth-fort during the 2nd half of the 1st century, from which two east-west oriented crew barracks were excavated. Around the turn of the 2nd century, new barracks and a western stone fort wall with a square tower was built on the inside. During the 2nd century new construction of the barracks with changed orientation and construction took place. A part of this was developed further during the 3rd century with the same orientation as stone buildings, while wooden buildings in swell beam construction remained also in use. Last extensions date to Late Antiquity.

Research History:
♦ Pöchlarn is known as a site of Roman monuments since the 16th century. Already around the turn of the 19th and 20th century, a Roman fort had been suspected, similar to other areas in the Austrian Danube region – due to the regular street patterns and the oral tradition regarding architectural remains and V-shaped trenches that had been observed in several locations in the town centre, and yet all attempts to locate them had failed. The actual location and extension could be verified only with the pre-construction-archaeological investigations in the last two decades.

19 Blashausgraben – Wachturm
The watchtower was built during the course of the expansion of the Danube Limes and was in use till the 5th century.

Research History:
♦ During renovations on the Blashauskapelle, Roman findings were uncovered in 1990.
♦ Archaeological investigations in 2014 provided proof of the watchtower.

20 St. Johann im Mauerthale – Wachturm
The watchtower was built during the course of the expansion of the Danube Limes and was in use till the 5th century.

Research History:
♦ An architectural investigation took place in 2015.
Archaeological and geophysical investigations in 2016 have shown that the watchtower is still largely preserved in its floor plan.

Research History:
- Since the 19th century, it was presumed to be a building structure from the Roman era, but only in 1965 it was recognized as a Roman fort ("burgus").
- Investigations were carried out by H. Stiglitz (Austrian Archaeological Institute) in 1970.
- In 1985, the Austrian Federal Monuments Authority (Bundesdenkmalamt) commissioned a building survey and restoration.

In 1994 a building analysis was done by H. Ubl (Austrian Federal Monuments Authority).

Already in the 19th century, a Roman watchtower had been postulated in the region around Windstallgraben.

However, the building was only discovered in 1952, during deforestation due to road construction work.

The first archaeological investigations were carried out in 1970 by H. Stiglitz (Österreichisches Archäologisches Institut (Austrian Archaeological Institute)).

From 1992 to 1994, the architectural remains were recorded and preserved by M. Moreno-Huerta and H. Ubl (Bundesdenkmalamt). A previous building was identified during this work.

According to current research, seven construction periods of the 1st to 5th centuries AD are seen, which were associated with extensions and partial positional shifts. The first two periods (AD 70/80–120/140) are marked by the V-shaped trenches of two wooden earth forts. The Northern front was taken over in the first period of the stone period (period 3) and remained until period 5. In period 2 an expansion took place in the south and west, which remained unchanged in the oldest stone fort.

For the stone fort, a total of five construction periods are assumed, the fronts of periods 3 and 4 being identical. The oldest stone fort (period 3, AD 130/140–170/180) had a square floor plan (175 × 175 m). Its western and southern front are similar to the Medieval city wall, while the unchanged northern front between the younger field tower at the parsonage and the tower at the Nikolaihof disappeared.

The stationing of the cohors I Aelia Brittonum around AD 140/150 is considered as an occasion for the erection of the fort. After a fire, the destroyed barracks were restored in period 4, possibly during the reign of Commodus (end of fire after AD 251).

In a continued retention of the floor plan, in the period 5 (AD 260/270–360/370) at the NW, NE and SW corners fan-shaped towers were erected and the interior was redesigned, which is connected with the stationing of the legio I Noricorum. Period 6 (AD 370/380–450) brought a significant change when the northern front was advanced to the Danube. As a result, the interior has been enlarged by about one third, although not built on. In the first half of the 5th century three powerful horseshoe towers, including a gate tower of the eastern front arose. The horseshoe tower of the northern front became the essence of the present day’s castle in the Middle Ages. The one belonging to the western front is integrated into the Medieval city walls and forms an access to the castle and the museum. The fort interior was
increasingly used for civilian purposes during the later period. Only settlement activity is detectable for period 7 (AD 450–480/500).

The fort was built in an excellently selected place at the exit of the Danube from the narrow valley of Wachau to a wide basin landscape. From here, a hydrographically predefined river crossing opened up the old paths into the settlement areas of the Marcomans settling in the north and the Rugier mentioned in the Vita Severini. The successful selection of the location is confirmed by the new settlement from the early Middle Ages.

Research History:
♦ Although Roman ruins at Mautern were already known in the 11th century, the archaeological explorations were pursued only from the 19th century onwards, whereby especially the priests of the nearby Benedictine monastery of Göttweig made significant contributions.
♦ From the 12th century, when Bishop Otto of Freising identified the fort of Favianis, which was mentioned in the Vita Severini, for the first time with the aspiring Babenberg residential city in Vienna, the question of Mautern or Vienna were at the center of the scientific discourse.
♦ In the 19th century, not only were the outlines of the Roman military fort recognized for the first time, but above all the cemeteries belonging to it; up to the post-1945 period, above all, committed laymen made significant contributions.
♦ In the second half of the 20th century, the Austrian Archaeological Institute and the Federal Monument Office undertook numerous pre-construction-archaeological investigations, which became necessary due to the modern expansion of the settlement, which provided knowledge regarding the architectural history of the fort, the vicus and the cemeteries to the western world.

25a-e Traismauer – Kastell und Kleinkastell

Although since 16th century, a military fort had been assumed in the city center, only the archaeological investigations carried out from 1966 onwards provided definite evidence. Originally equated with the road station Trigisamum, the identification with Augustiana mentioned in the Notitia dignitatum is undisputed today.

The first fort from the Early Imperial period, presumably a two-phase or three-phase timber-earth fort, has been known so far only at individual sites. Its location corresponds more or less to the stone fort, however, the walls are located somewhat within the perimeter of the stone walls at the north and east front.

According to an inscription from the Wienertor ('Vienna Gate'), the stone fort was built by the equestrian unit ala I Augusta Thracum in the first half of the 2nd century and enlarged to the timber-earth fort. So far excavations proved a roughly rectangular ground plan with an inner area of 3.75 hectares. In the 4th century construction of horseshoe tower and fan-shaped tower. The parts of this latest stone building phase (Wienertor 'Vienna Gate', Reckturm 'Reck Tower', Haus Venusbergstrasse 10) which stand upright up to this day, were used again during the Middle Ages and continue to characterize the landscape of Traismauer.

The ala I Thracum (victrix?) is known as the first garrison. From the second third of the 2nd century the ala I Augusta Thracum is verified. The equites Dalmatae ("Dalmatian horsemen") garrisoned during Late Antiquity.

A new settlement is confirmed from the early Middle Ages.

Research History:
♦ Because of the honorary inscription of the Ala I Augusta Thracum, which has been built into the wall over the gate of the castle, a fort has been assumed in Traismauer since the 16th century.
♦ At the turn of the 19th to the 20th century, the same was assumed on the basis of the regular street patterns at the town center and near the church, but only in 1966 investigations during building resulted in the detailed knowledge of the architectural history of the visible fortifications and the inner building structure of the fort.

26 Zwentendorf – Kastell, Vicus, Gräberfelder

The first information of the ruins in Zwentendorf date back to the 19th century. At that time, massive walls were apparently preserved. Archaeological investigations took place in 1953-1961. The identification of the fort, which has been disputed for a long time, could be verified recently with the help of a label made of lead with Asturis mentioned in the Notitia dignitatum.
While the northern half of the fort had eroded due to Danube floods, extensive archaeological studies could be made on the southern area. The first timber-earth fort could be seen with a trapezoidal ground plan, the trenches of which ran obliquely towards the north-west, probably following the course of an arm of the Danube. The expansion in stone took place for the first time in the early 2nd century. In Late Antiquity the fort was reinforced with fan towers at the corners and horseshoe towers on the south and west front. The porta decumana was remodeled into a small protruding gate-building with a small passage. At the same time, barracks were rebuilt and the principia expanded.

There was continued use of the fort area as a civilian settlement in Late Antiquity and in 10th/11th century as a burial ground. Subsequently, the south-eastern fan tower was converted to a fort to be utilized up to the 14th century.

It is disputed to some extent that troops garrisoning the fort were deduced only out of tile stamps but legio ii italica, the legio I Noricorum and units of the OFARN group have been established.

Research History:
- The first information of the wall remains in Zwentendorf date back to the 19th century.
- In some cases, remains of massive wall of the fort, which were blown up, were visibly preserved up to the middle of the 19th century.
- Around 1870, parts of the south-eastern corner tower (so-called Krottenturm) might have still been visibly well-preserved.
- Before the Second World War, K. Hetzer drew attention to numerous Roman findings.
- Finally, excavations took place in the fort area from 1953 to 1961 under the direction of E. Vorbeck and H. Stiglitz (Austrian Archaeological Institute) and F. Hampl (Niederösterreichisches Landesmuseum).
- Under the direction of St. Groh (Austrian Archaeological Institute), larger areas south and south-west of the fort were subjected to geophysical surveys in 2001/2, whereby the remains of settlements and graves were revealed.
- Because of the removal of gravel, rescue excavations were necessary in the western area of the vicus, and in the adjoining cemetery on the west, which were carried out by the Austrian Federal Monuments Authority (Bundesdenkmalamt) in 2003-2009.

The ruins of the fort Comagena (Comagenis) of the Tabula Peutingeriana, the Itinerarium Antonini and a main place of the Vita Sancti Severini lie under the Medieval old town of Tulln. Despite its initial identification in the 19th century, the localization of the fort was possible only due to archaeological research after 1980. On the basis of a fort construction inscription found in year 2000 in the porta principalis dextra (AD 104), a reconstruction work on one of the oldest timber-wooden fortresses from the late first century had taken place around the 1st to 2nd century in a stone fort, by the ala I Commagenorum. The eastern, southern and western fronts of the fort are still apparently partially preserved, while the northern front has been eroded by the River Danube. No less than a two-phase system of V-shaped trenches was located in front of the fort walls. Two catastrophic fires are known from the 3rd century. A more extensive restructuring work of the fort was done around the middle of the 4th century. The fan towers at the south-west and the south-east corner originate from this period. After another fire disaster, the last construction measures were carried out under the Roman military chief dux Ursicinus. It appears that the fort has been reduced in size during Late Antiquity, as its north-west corner had been sealed off by a V-shaped ditch; the small fort itself so far is not archaeological confirmed. The bulk of the fort’s area served as a civilian settlement area.

Through the presence ala I Commagenorum, that was stationed here to the 3rd century, it can be confirmed, that the fort was the base of the Danube fleet and the garrison of an equestrian military unit (equites promoti Comagenis) in Late Antiquity. In the 5th century, an occupation of troops of Germanic confederates is archaeologically documented. After a long phase abandonment, new settlement of the ruined site in the 9th century and its development into a Medieval city center.

A new settlement is confirmed from the early Middle Ages.

Research History:

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<td>27a-b</td>
<td>Tulln – Kastell</td>
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After observing ruins and graves during the 19th century, which were mainly owed to the enthusiastic laymen, systematic archaeological investigations took place with preparatory measures for the construction only around 1980, because of the modern expansion of the town.

Cannabiaca, which is mentioned in the Notitia Dignitatum, is accepted as the ancient name for Zeiselmauer.

A timber-earth fort built in the last decades of the 1st century AD was gradually renewed in stone by the middle of the 2nd century. From the beginning of the 4th century, fan towers were built, which are partly visible to this day. Towers with a horseshoe-shaped layout between the corners of the fort and the gates verified the 1.4 m thick fort wall. Two forward V-shaped trenches, separated by a wall, could be seen on the north side. Several remains of buildings of military barracks could also be identified in the fort area, near the principia with a sanctuary of the flags of the legion under the present church. Further, the via principalis was uncovered, which runs to the archway of the porta principalis dextra. In Late Antiquity, the fort, with the exception of the fortlet, was used as a civilian settlement area and experienced a fundamental structural transformation.

The first occupying troops were presumably the cohors V Breucorum. From AD 122 to the 3rd century Zeiselmauer was the garrison of the cohors II Thracum equitata pia fidelis, later of border troops.

After a prolonged, settlement-free period, there was a re-colonization of the ruins in the 9th/10th century.

Information of Roman findings from Zeiselmauer is known since the 18th century. At that time, the mighty ruins were considered Roman, but later on were seen as Medieval, despite first archaeological investigations from 1904-1911 to the 1920s of the 20th century. The Fortlet situated in the NW-corner was called interpreted as a street tower by the excavators. Only the archaeological and structural investigations carried out from 1969 provided the conclusive proof of a Roman fort.

The oldest timber-earth fort was built around AD 80 and had several construction phases. Around AD 100, it received the first stone buildings and brick-built barracks. Reconstruction work took place in the 3rd and 4th centuries, which is testified by residential quarters, barracks, officers’ housing and the bath house. Also parts of the fort wall and ditches as well as a horseshoe tower were uncovered, which superimposed the older inner tower of the eastern flank. The last recognizable settlement layer within the fort is characterized by simple wooden buildings with mud-plastered lattice work. These buildings were destroyed by a fire disaster at the end of the 5th century. For a long time, the fort ruins lay deserted and were only re-settled in the High Middle Ages.

A total of three interdependent cohorts of auxilia troops for the fort of Klosterneuburg are known: cohors Montanorum prima (about AD 80 to about 102), cohors II Batavorum (until just before AD 128), cohors I Aelia sagittariorum (evidenced up to the 3rd century but probably they were stationed in Klosterneuburg up to the military reform in the 4th century). The late antique garrison is unknown because of the poor sources.

References to a military settlement already in the first decades of the 1st century AD are available. From AD 98, the legionary fortress was built with a rectangular ground plan (400 × 500 m) by the legio XIII gemina, which was stationed here until AD 101. This unit was followed by the legio XIII gemina Martia victrix, which was moved to Carnuntum in AD 114. The legio X gemina, is considered as the most significant legion, which remained in its location of Vindobona till the 5th century.

First archaeological investigations by F. Kenner at the end of the 19th century were able to locate the legionary fortress.
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<td>♦</td>
<td>Predominantly at the end of the 20th and beginning of the 21st century, through excavations many details of the Roman legion’s fortress became known to the Viennese municipal archaeology department.</td>
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<td>♦</td>
<td>Carnuntum – Legionslager, Kastell, Befestigungen, Zivilstadt, Vici, Gräberfelder</td>
<td>With the gradual integration of the Eastern Alps and the Danube region into the Roman Empire around the turn of the century, the region around Carnuntum became the hub for the connection between Northern and Southern Europe. The decisive factor was its location on the northern border of the Roman Empire and at the intersection of the Limes Road with an intra-European long distance trade route, the so-called Amber Road (Bernsteinstrasse), which was simultaneously of the greatest military-strategic significance as marching route for the Roman military. Carnuntum was mentioned as a Celtic city in the year AD 6, near which a winter camp was built. Around the middle of the 1st century, the sudden burst in settlement followed the respective military requirements and political circumstances, which led to a close integration of military and civilian settlements. From the time of Emperor Trajan’s reign (AD 98–117), Carnuntum was the capital of the province of Upper Pannonia and residence of a consular governor. Its largest extent of about ten square kilometers reached the city at the end of the 2nd and beginning of the 3rd century AD. The oldest traceable Roman settlements in Carnuntum date to the middle of the 1st century AD, when the legio XV Apollinaris was moved to the Danube area and built its base in Carnuntum. The extended canabae legionis developed around this fort. Towards the end of the 1st century, another fort was built for an equestrian military unit of 480 military personnel as reinforcement. To the west, the civilian settlements extended; during the reign of Hadrian (AD 117–138), the city was given the rank of a municipium. When Septimius Severus was proclaimed emperor by the Pannonian troops in Carnuntum in AD 193, the promotion to the colonia Septimia Aurelia Antoniniana Karnuntum followed. According to the administrative reform of the Emperor Diocletian (AD 284–305), Carnuntum was no longer the residence of the civilian administration but only that of the military administration. After the middle of the 4th century, a gradual deterioration occurred, with the result that the fortress and the city’s settlement areas became more and more deserted since the 5th century AD. The last written mention of Carnuntum in ancient literature can be found from the historian Ammianus Marcellinus, who died around AD 400, who described the city as abandoned and dirty. Research History:</td>
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<td>♦</td>
<td>The humanist Wolfgang Lazius (1514–1565), working in Vienna, recognized ancient Carnuntum in the ruins near Petronell. From then on, there are reports and views of the Heidentor as well as information about ruins and findings.</td>
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<td>♦</td>
<td>Starting from 1885, the newly founded Association of Carnuntinum made an impact on the research activity in Carnuntum. The excavations were carried out together with the Limes Commission of the Imperial Academy of Sciences (Limeskommission der Kaiserlichen Akademie der Wissenschaften), established in 1897.</td>
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<td>♦</td>
<td>From the middle of the 20th century, the areas that were uncovered were preserved to some extent.</td>
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<td>♦</td>
<td>From the 1950s, there was a gradual change from research excavations to rescue excavations with construction measures.</td>
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<td>♦</td>
<td>Bratislava-Rusovce – Gerulata, rímsky vojenský tábor (kastel)</td>
<td>The auxiliary fort Gerulata had an important strategic function – to protect the east flank of the legions stationed at Carnuntum. The military unit Ala I Cannanefatium was based here strategically to guard the northern end of a relatively extensive area in which the main body of the Danube river spreads out into an inland delta. The Romans probably took the name Gerulata from the local Celtic population. The construction of the fort began during the reign of the Flavian dynasty (69 – 96 AD) and four construction stages were identified in its development. The location and extent of the fort during the first stage of construction (around AD 80–170), in a form of a wood-clay fortlet, is indicated by its double v-shaped ditch. The fortlet was rebuilt into a larger stone fort during the second construction stage (after AD 170 – end of the 3rd century). Archaeological excavations have shown that extremely</td>
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intensive building work took place at Gerulata at the end of the 3rd century and during the 4th century, meaning the third stage in the construction of the fort (up to AD 380), connected with the military reforms under the emperors Gallienus and Diocletian. This version of the fort had a smaller, nearly square-shaped area (200 × 200 m) and was enclosed by massive fortified stone walls. In the years around AD 380 the defensive system on the Pannonian frontier underwent structural changes as a result of which the fourth stage of construction took place. The Roman garrison gave up the original Gerulata fort’s area and built a smaller, fortified watchtower in the left corner of the praetentura of the original auxiliary fort. Similar small forts have been found within the perimeter of older forts on the Norican and Pannonian Limes and are dated to the post-Valentinian period.

In 433 the Roman Empire concluded a treaty (foedus) granting Pannonia to the Huns. The borders were abandoned and maintaining the defensive system lost its sense. The border system on the lower Danube remained more or less intact until the end of the 6th century, when Avars and Slavs crossed the Danube into the territory of the Roman provinces. The first written mentions of ancient Gerulata date from Roman times and can be found in the Itinerarium Antonini and the Notitia dignitatum. The location of the fort is also shown on the Medieval copy of a third century AD Roman map, the Tabula Peutingeriana.

Research history:
♦ Excavations by Ágost Sötér, 1888–1891
♦ Excavations by András Graf and military survey by Aladár Rádnoti, 1932–1933
♦ Systematic archaeological research by Ludmila Kraskovská (1961, 1964) and Ján Dekan (1965–1972)
♦ Since 1976, long-term archaeological research of the Museum “Ancient Gerulata” area, currently coordinated by Jaroslava Schmidtová

33 Bezenye Bűdöskúti-szántók – Gerulata 4. őrtorony

This watchtower does not lie on the Limes Road, but next to the road providing a direct connection between Carnuntum and Ad Flexum. The stone tower was excavated by Rezső Pusztai in 1961; buttresses at the corners must have served as support for the wooden chemin de ronde of the upper story. Recently made aerial photos show the surrounding double ditch of the tower. According to the unearthed finds, brick stamps of the legio X gemina from Vindobona and another stamps from the Atilia firma, a workshop in Carnuntum, it can be dated to the 2nd century.

The ground plan and the dimensions (including the thickness of its walls) connects the Bezenye watchtower to the well defined group of analogous towers along the Limes Road between Carnuntum and Ad Flexum representing similar architectural design, although the buttresses at the corners of the Gerulata 4 tower are exceptional.

Research history:
♦ Excavation by Ágost Sőtér, 1886
♦ Excavation by Rezső Pusztai, 1961
♦ Survey of Zsolt Visy 1985
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

34 Lébény/Mosonszentmiklós Barátföld-puszta – Quadrata segédscapat tábor, vicus, limesút

Richard Pococke already described the site in the 18th century as a “square castle, whence the place took its name”. The construction history and precise extent of this fort was successfully determined during the excavations by Dénes Gabler between 1964 and 1974.

A palisade fort datable to the end of the 1st century or the beginning of the 2nd century stood on the site of the later stone fort, but only a few of this fort’s interior buildings, as well as its southern vallum (fortification system) were successfully identified. On the basis of this, the width of the fort was 105 m.

The auxiliary unit cohors IIII voluntariorum civium Romanorum used the fort between 118/119 and 180 A.D.

The stone fort with interior corner towers was constructed at the end of the 2nd century, and its slightly protruding gate towers show its appearance after a remodeling performed at the beginning of the 3rd century. It could be assumed, that the gates were fortified still with timber towers in the first stone period (Severan dynasty), when the cohors Il Alpinorum equitata used the fort in the 3rd century.
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<td>35</td>
<td>Kunszigt Toronyvári-dűlő – Quadrata 2. kikötőerőd</td>
<td>The thick wall section visible on earth near the Danube visited by several archaeologists has been known for a long time as a Late Roman era fortified river port. A trial excavation in 2016 proved the Roman origin of the mortar taken from the excavated wall remains, Late Roman stray finds have been found in the vicinity of the wall, too. The submerged sections of the ruin have also been successfully surveyed during the course of underwater archeological investigations in 2004 and they have been interpreted as Medieval additions to the Roman structure.</td>
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<td>36</td>
<td>Öttevény – limesút</td>
<td>The <em>Limes Road</em> mentioned as “öttevény” in Medieval written sources and presented as a Roman road on a map dated from 1797 can be identified from the ground and from the air. The line of the road running from the auxiliary fort Quadrata via Arrabona could be followed not only from the air, but on the cultivated field, too. It was a significant road section, a well documented source of traffic and communication as late as in Medieval times.</td>
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<td>37</td>
<td>Abda Közép-gyep – Quadrata 3. őrtorony és limesút</td>
<td>The Quadrata 3 watchtower can be identified as a light spot of about 25 × 25 m on an aerial photograph taken in 1961. Roman building fragments can also be observed during survey on its slightly protruding mound, which indicate the existence of a stone tower from the Roman period. To the south, a section of the Quadrata – Arrabona <em>Limes Road</em> that has been identified in aerial photographs and field walks led to the watchtower. Its slightly raised embankment and gravel bed can be followed to the banks of the Rábca River.</td>
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<td>38</td>
<td>Győr Káptalandomb – Arrabona segédcsapat tábor és vicus</td>
<td>The first palisade fort was presumably built in the first half of the 1st century, during the reign of Tiberius, and its dimensions were likely about 230 × 150 m. The palisade fort was reconstructed in stone during the course of the 2nd century. The late Roman fort erected in the 4th century with 3 m thick walls and protected by “U” shaped towers may have had dimensions of about 150 × 150 m. An excavation was performed on about a 40 m section of the southwestern side of the late Roman fort’s wall with the height of 4 meters, including sections of one of the side towers.</td>
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<td>39</td>
<td>Győr-Győrszentiván Károlyháza – Arrabona 4. ótorony</td>
<td>This strategically relevant site at an important crossing place through the Danube has been known since the 1930s. The stone watchtower can be identified in a photograph taken in the 1950s, and has been investigated through field walks. This square building (presently a hill protruding from the surroundings) was surrounded by a rhombic ditch with a diameter of about 115 m. Its location is indicated by Roman stones and bricks in the plowed soil, but its date within the Roman period cannot be precisely determined. Research history: ♦ Survey by Sándor Mithay and Béla Szőke, 1948 ♦ Survey by Zsolt Visy, 1985 ♦ Survey by Péter Tomka, 1998 ♦ Survey by Szilvia Bíró, 2000, 2006 ♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011</td>
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<td>40</td>
<td>Gönyű Nagy-Sáros-dűlő – Arrabona 11. útállomás</td>
<td>The remains of this road station were excavated by Szilvia Bíró in 2007. This building complex was erected in the 2nd century, but constructed in two periods, and was gradually, systematically abandoned during the course of the 3rd century. This chronology is also verified by the dendrochronological analyses of two wooden wells excavated outside the surrounding ditch. The interpretation of the excavated building as a road station used for changing horses and accommodating guests is made possible not only due to the arrangement of its ground plan, but also due to finds discovered here related to culinary and commercial activities, as well as those related to the military. Research history: ♦ Excavation by Szilvia Bíró, 2007</td>
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<td>41</td>
<td>Ács Vaspuszta – Ad Statuas segédsapat tábor</td>
<td>Research identified the fort in the first half of the 20th century, and its chronology and extension were determined during the excavation in 1948 and 1970-72. This fort was investigated by Dénes Gabler in 1970-72. Today only the southern ditch of the palisade fort that can be dated to the reign of Trajan can be identified, along the line of the principia of the later fort. During the reign of Hadrian this palisade fort was reconstructed to the south, further from the Danube, due to erosion. Research identified the unit that constructed the fort as the cohors I Hispanorum, and then from the beginning of the 2nd century cohors I voluntarium civium Romanorum used the fort. The fort that was destroyed during the course of the Marcomannic Wars was reconstructed in stone, when the cohors I Thracum equitata used it. The defense of the 106 x 112 m fort with internal corner towers was ensured by protruding gate towers and a 4 m wide ditch. The river has washed away the northern portion of the fort, although the ruins of the porta praetoria appear out of the Danube even today during times of low water levels. The fort was remodeled in the 4th century, and by filling in the ditch horseshoe-shaped towers that were 9.5 m wide and protruded 11.4 m were erected on the corners. In place of the ditch that had been filled in, a new, deeper and wider ditch</td>
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The southern ditch of the Late Roman fort at Király street could be documented by Eszter Szőnyi in a small-scale excavation in 2005. We know of a contiguous section of the vicus from Széchenyi square, where a site containing wooden framed houses from the 1st century was redeveloped in the age of emperor Hadrian into streets with wells and with clay brick houses on stone ground, and into the marketplace of the Roman vicus with stone buildings on its northern side. Research history: ♦ collecting of archaeological finds in the 19th century ♦ excavation by László Barkóczi in the fort, 1955 ♦ excavations by Eszter Szőnyi and Péter Tomka, 1976, 1978-79, 1981, 1984 in the fort ♦ excavations by Dénes Gabler in the vicus, Széchenyi square, 1968-1969 ♦ small-scale preventive excavations in the vicus since the 1970s, Eszter Szőnyi and Péter Tomka ♦ excavation in the vicus by Szilvia Bíró, 2008-2010 ♦ excavation in the vicus by Judit Pásztókai-Szeőke, 2011
was dug further away. A hoard consisting of 95 coins has been unearthed, perhaps from the time of the incursion of the Quadi in the years 355-356. At the same time as this, the side gates of the fort were walled off. According to the evidence from the finds they were still doing construction on the fort during the Valentinian Dynasty. At the end of the fourth - beginning of the 5th century barbarians probably settled within the walls of the fort, so it can be concluded that by this time the fort had lost its significance.

According to the research of Tibor Nagy, marcomannian immigrants could use the fort in the end of the 4th century under the direction of the tribunus gentis Marcomannorum between Arrabona and Brigetio, i.e. in this or in the subsequent Ad Mures fort respectively. A letter sent by marcomannian queen to St. Ambrose bishop of Milan in 396 about the possibility of conversion and settling of the Marcomanni in Pannonia Prima is attested. The post-valentinian Barbarian-style pottery found by Dénes Gabler in the fort does not contradict to this hypothesis.

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<td>42</td>
<td>Ács-Burn-Burn kút – Ad Mures segédcsapat tábor</td>
<td>Only minor excavations have been performed on this fort. These took place in 1948, from 1966-1972 and in 1989, although Rudolf Gyulay and Borota Berkovics already identified Roman foundation walls on the site in 1886. During the course of the excavations at its southeastern corner a horseshoe-shaped late Roman tower was discovered, and on the basis of this it is certain that the fort was remodeled in the customary manner in the 4th century. During the course of small-scale excavations, the early timber period of the fort from the 2nd century and the first stone period designed after the marcomannic wars could be detected, with the documentation of a multi-roomed clay brick house in the interior of the fort from the Early Imperial period, when the fort was used by a detachment of the legio I adiutrix. On the basis of aerial photographs and surface observations the traces of the vicus about 200 m from the fort to the south and to the east, as well as the Limes Road that ran directly along the southern side of the fort have been able to be identified.</td>
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<td>43a-n</td>
<td>Komárom/Mocsá/Naszály – menettáborok Brigetio környezetében</td>
<td>34 temporary camps have been detected so far through aerial photos with rounded corners, their size, shape and exact location could be determined through the geographic processing of the available data. 21 of them are nominated, because additional field walkings with metal detector, geophysical survey and trial excavations could prove their Roman dating. The camps V-VI and VIII-XV have been first detected by Otto Braasch in 1994, the camps XIX-XXVII and XXXII-XXXIV were realized on later aerial photos taken by Máté Szabó, mostly between 2008 and 2011. The V-shaped ditches of camps V, X, XI, XIII, XIV and XXII were documented by Zsolt Visy, the V-shaped ditches VI, XIX-XXI were documented by Máté Szabó, both in 2016. Based on their size, we can distinguish numerus camps, cohors camps and ala milliaria camps. Some of them overlapped each other, showing more building periods, but not a great deal of time could have passed before the digging of the later ditch, because the orientation of the ditches is almost in every case identical. Most of the camps are contemporaneous with the marching camps detected by Otto Braasch on the left bank of the Danube in Slovakia in the vicinity of the Iža counter-fort, which date to the Marcomannic wars (partly between 176-180) according to the results of archaeological excavations in 1991-1993. The rest of the temporary structures could serve as preliminary practice camps.</td>
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Research history:
- excavation by László Barkóczi in 1948
- field walkings in the territory of the praetorian front, documenting the condition of the site, 2007-2011

Research history:
- survey by Zsolt Visy, 1996
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| ♦ survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011  
♦ geophysical survey by Máté Stibrányi, 2015  
♦ excavations by Zsolt Visy, 2016  
♦ excavations by Máté Szabó, 2016 |
| 44 | Komárom-Szőny – Brigetio municipium | About 2 kilometers to the west of the castra legionis of Brigetio lies its civilian town, a vicus with wooden houses since the 2nd half of the 1st century A.D which was raised to the rank of municipium at the beginning of the 3rd century, during the reign of emperor Septimius Severus. During the reign of Caracalla, in 213/214, Brigetio became part of the province Pannonia Inferior, shortly after the municipium received the rank of colonia (together with the military town), The site was abandoned at the middle of the 3rd century after the reign of Severus Alexander and Gordianus III, its inhabitants moving to the site of the former canabae closer to the legionary fortress. The formerly independent town of Szőny, which now belongs to Komárom, almost entirely covers the former Roman town and its present-day marketplace is notable as a major, contiguous research site. Richard Pococke and Jeremias Milles described at first the borders of the civil town in the 18th century, the survey carried on by László Barkóczi and the analysis of an aerial photo taken in 1951 by Zsolt Visy could define the line of the town walls. The archaeological investigation and rescue excavations into the Roman city have been ongoing since the first half of the 20th century. According to evidence from archaeological observations and aerial photographs taken at the beginning of the 1950s, the civilian town was enclosed with a wall, with towers strengthening its defense. The excavations at the Szőny-vásártér site that have been ongoing since 1992 on the town constructed according to the insula system have uncovered two insulae and six residential buildings richly decorated with mural paintings, workshops and streets paved with stone slabs. Found in one of the residential buildings (the so-called building no. I/a) were fragments from a ceiling painting that has since become famous throughout Europe. It depicted a nude female figure mounting a horse in a round medallion, possibly a depiction of the constellations of Pegasus and Andromeda. To the west of the marketplace (Vásártér), in the Ady Endre Street zone, where László Borhy presumes the civilian town’s amphitheater was located, on the basis of a construction inscription donated to the Komárom Museum.  
Research history:  
♦ Excavation by Aladár Radnóti, 1935  
♦ Survey by László Barkóczi, 1955-1951  
♦ Excavation by Endre Bíró, 1970  
♦ Excavation by Sándor Petényi and Júlia Cseh, 1989  
♦ Excavations by László Borhy and Emese Számadó, since 1992 |
| 45 | Komárom-Szőny – Brigetio legió tábor és katonaváros | The ruins of Brigetio were described as early as in the 15-16th centuries by Antonio Bonfini and Wolfgang Lazius, followed by the 18th century surveys (Richard Pococke, Jeremias Milles, Sámuel Mikoviny, Luigi Fernando Marsigli). A large amount of Roman finds was unearthed and collected during the Budapest-Vienna railway constructions before 1884 and another construction works. Systematic topographical survey and excavations began in 1927 with the leading of István Paulovics, followed in the second third of the 20th century by László Barkóczi, Éva Bónis, Klára Póczy, Endre Bíró and Aladár Radnóti. The results of the investigations into the legionary fortress and the canabae were summarized by László Barkóczi from 1944-1951.  
An ala fort stood on the site – to the east of the later legionic fortress – in the 1st century A.D. whose role was taken over by the castra legionis established during the reign of Trajan around 100 A.D. The vexillationes of the legio XIII gemina, XIV gemina and XV Apollinaris built the fort for the legio XI Claudia, which was replaced by the XXX Ulpia victrix in 105. Around 115 A.D. it became the garrison of the legio I adiutrix until Late Antiquity. Three destruction periods could be observed: at first during the Marcomannic wars, followed by immense reconstruction work in the Severien period. The second destruction occurred during the Age of the Tetrarchy, the last destruction can be dated in the end of 4th century, after the death of emperor Valentinian I.  
Research history:  
♦ Excavation by Aladár Radnóti, 1935  
♦ Survey by László Barkóczi, 1955-1951  
♦ Excavation by Endre Bíró, 1970  
♦ Excavation by Sándor Petényi and Júlia Cseh, 1989  
♦ Excavations by László Borhy and Emese Számadó, since 1992 |
In the 1930s the opportunity arose for the excavation of the southern gate of the fortress and the examination of the fortress’ *vallum* (fortification) system. The 540 m × 430 m fortress with 1.8 m walls was surrounded by a double ditch and its defense was ensured by semicircular side and corner towers. The famous bronze law tablet of Brigetio issued in 311 by emperors Constantine and Licinius was found in 1930 in the southern part of the fort in secondary context. The southern section of the fortress was built upon in the 1940s. To protect the oil refinery constructed on the site, an anti-aircraft artillery battery was assembled on the southeastern corner of the fort, where the remains of a barracks were found. Residential houses were built on the southwestern section.

Since 1998 the topography of the site has been investigated again by new survey and excavation programs by László Borhy and Emese Számadó. Excavations were performed on the site of the legionary fortress in 2015, in part at the location where the fragments of the second bronze law tablet issued by the emperor Philip the Arab was discovered in 2014, and also near the presumed location of the headquarters building. As a result of these excavations early and late drainage systems came to light, as well as the assembly ground at the center of the fortress.

Recent excavations in 2017 unearthed a Late Roman representative apsidal building in the northern part of the fort, which was erected above the former barracks in the age of Valentinian I, who had his headquarters in Brigetio in 375 where he died. The *canabae* connected to the legionary fortress spread to its south and east. The oil refinery stands on one part of its site (this part is not nominated), and archaeological finds are discovered to the present day during the course of work involving excavation on its land. This area was the site of the Mithras and Iuppiter Dolichenus sanctuaries unearthed and published before the 2nd world war, and another temple of Apollo Grannus with portico must have been in the vicinity.

The street network of the *canabae* is clearly discernible in the area under agricultural cultivation between the refinery and Szőny, and the southern border of the military town can be clearly determined on the basis of aerial photographs. In the aerial photographs three streets of the former town can be observed, which curve following the arch of the corner of the fortress.

On the basis of maps from 18th century travelers (Jeremias Milles and Richard Pococke) and aerial photographs the presumed location of the amphitheater of the *canabae* is to the west of the legionary fortress and to the south of present-day Route 10 (this overbuilt area is not nominated). Investigations into the site of the *canabae* that have been ongoing since 2013 provide us with an image through aerial photography of a large, uninterrupted, densely built up settlement pattern interlaced with streets. In addition, the preventive excavation begun in 2014 during the construction of an embankment and continued in 2015 in the context of a planned excavation has led to the uncovering of monumental baths that have survived in extraordinarily good condition, as well as storage buildings (*horrea*) and sections of streets.

In the Late Roman period, up to the 5th century, civilian inhabitants moved into the area of the fortress, and around the fortress on the site of the former *canabae* late Roman burials can be found.

Research history:
- systematic survey and excavation programs by István Paulovics and later other colleagues (László Barkóczi, Éva Bónis, Klára Póczy and Aladár Radnóti, Endre Bíró) since 1927
- survey and excavations of the Eötvös Loránd University, Department of Archaeology (László Borhy, Emese Számadó, Dávid Bartus) since 1997-1998
- Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

46  Ľa – “Kelemantia”, rímsky vojenský tábor (kastel)

The Roman counter-fort in Ľa, at the bridgehead of Brigetio, came into existence at the turning point of the Marcomannic Wars. Research results have proven two main construction stages in the fort’s development. The 1st stage, the wood-clay fort was built around 175–179 AD not as a temporary but as a permanent structure. The construction technology featured significantly wide walls and an ingenious drainage system that allowed for the building of firm, stable and durable structures of considerable size for barracks and other buildings. It is probable that, after the destruction of the wooden-clay fort, shortly before the end of the war, several
The military units were stationed in five temporary camps in the fort’s close surroundings (discovered by the aerial survey in 1990).

The 2nd stage, construction of a stone counter-fort, was probably launched shortly after the end of the Marcomannic Wars under the rule of Commodus (180–192). The counter-fort, which was fortified by a stone wall, was of a regular square floor plan with an area of over 3 ha with rounded corners. Extensive reconstructions of the fortification from the 4th century with a protruding bastion, additional u-shaped structures added to the fan shaped or round gate towers to the corner towers were among the new fortification elements of the Constantine and Valerian period. The western, northern and eastern walls were circled by two (later even five) protective trenches which increased the defendability of the fort. The reason for building so massive fortification walls in Iža was probably due to its location as the outpost on the left bank of the Danube. It was built to hold off strong attacks until reinforcements from the other side of the Danube arrived.

The counter-fort stood almost until the end of the 4th century – the end of the Roman power on the north-Pannonian border. It is still not clear whether it was abandoned by its Roman garrison or plundered.

According to the identical geographical data in Geographia by Claudius Ptolemaeus about Brigetio and the site entitled Kelemantia, certain authors in older historical and archaeological literature identified the Roman counter-fort in Iža with this name. However, this name is not generally accepted by contemporary authors.

Research history:
♦ Research of outer ditches by Jaroslav Bőhm, 1932
♦ Excavations by Mária Lamiová-Schmiedlová and Bedřich Svoboda, 1955–1957
♦ Long-term archaeological research by the Archaeological Institute of the Slovak Academy of Sciences (Ján Rajtár, Klára Kuzmová, Priska Ratismorská, Marek Gere), 1978–now

47 Neszmély Kalin-hegy – Azaum/Odiavum 4. őrtorony

This watchtower is known of from the excavations by Klára Póczy and Ilona Czeglédy in 1959. The round tower was surrounded by three triangle shaped ditches following the shape of the hilltop. The ditches are clearly visible on aerial photos taken in 1954 and 1985. Glazed pottery, smoothed pottery and coins of Constantius II and Valens dated the tower to the 4th century.

Zsolt Visy excavated the site of the wooden watchtower in 1997, more than 50 coins dated to the 4th century came to light.

Research history:
♦ Excavation by Klára Póczy and Ilona Czeglédy, 1959
♦ Survey by Zsolt Visy, 1985
♦ Excavation by Gábor Bertők, Andrea Vaday and Zsolt Visy, 1997
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

48 Neszmély – Azaum/Odiavum 5. őrtorony

According to evidence from aerial photographs a Roman watchtower stood on the ridge of the loess hill rising above Route 1. The tower was surrounded by oval ditches oriented in a northwest–southeast direction. Albin Balogh, who first described the site in the vicinity of an Early Iron Age barrow cemetery, found Roman shards in the area, later survey detected the double ditches of the probably wooden watchtower.

Research history:
♦ Survey of Albin Balogh before 1934
♦ Survey by Zsolt Visy, 1985
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

49 Nyergesújfalu Sánc-hegy – Crumerum segédcsapat tábor

This Roman auxiliary fort is found on the western edge of the developed area of Nyergesújfalu on the site of Sánc-hegy, which rises right next to the Danube. It can be identified on the basis of aerial photographs, but excavations have not yet been performed on the site of the fort. On the eastern side of the fort a section of wall at the eastern gate that has not undergone conservation is visible. The fort was used by the cohorts V Calagiaecorum in the 2nd and 3rd centuries A.D. and by the equites promoti in the 4th century. The fort is in part covered by earthworks constructed in 1706 during the Rákóczi War for Independence at the beginning of the 18th century.
During the construction of the earthworks Roman finds and structures were found, Richard Pococke described afterwards in 1745 Roman foundation walls on the site. Near the earthworks from the Rákóczi War for Independence to the north are the foundation walls of a Baroque chapel dedicated to the Holy Trinity that was built in 1731. A number of Roman period stones and bricks were built into these walls. Traces of vicus with stone structures and Roman small finds were found in the territory of the Sánch hill, at its foot and on its slopes. The Late Roman cemetery of the site has been excavated in 1978 and in 2008-2009 at the southern foot of the hill by Márta Kelemen and Etelka Kövecses-Varga.

Research history:
♦ collecting of archaeological finds in the 18th century
♦ excavation by Albin Balogh in the vicus, 1920s
♦ excavation by Márta Kelemen in the Late Roman cemetery of the vicus, 1978
♦ excavation by Kövecses-Varga Etekja in the Late Roman cemetery of the vicus, 2008
♦ excavation at Route 10 by Edit Tari, 2009
♦ field walkings in the territory of the fort and vicus, documenting the condition of the site, 2007-2011

We know of this storage base and the earlier Roman settlement from the excavations by András Mócsy in the 1960s. The defense of the military structure was ensured with horseshoe-shaped side and corner towers and a 7 m wide, 3-3.5 m deep ditch. Its single gate was framed by rectangular protruding towers. A large horreum (granary) was excavated in its interior, small scale buildings including buildings with apses were discovered by geophysical survey and trial excavation in 2016 by József Beszédes. The storage base, which can be dated to the time of emperor Valentinian I at the latest, was not built on the main defensive line of the limes, but slightly further in, and presumably served as a reserve base for the units protecting the limes.

To the west of the storage base lie seven buildings surrounded by an enclosure wall, resembling a 90 × 100 m large villa estate complex in its ground plan, which is clearly discernible in aerial photographs. The building, erected above earlier structures of the vicus, can be dated to the 4th century according to a small scale excavation of Márta Kelemen in 1979.

Neighboring it to the north and west is a Roman settlement established in the 1st century, which was investigated through rescue excavations after 1955, when the construction of three sedimentation pits, four waste rock piles and an inclined mother gate was begun on the site in connection with mining work. Rescue excavations unearthed eleven buildings from the vicus, dated between the 1st half of the 1st century until Late Roman times. Two buildings were replaced by pottery firing kilns in the 4th century. In the 5th century, the final period of the Roman province of Pannonia that was hallmarked by continuous wars, this fortified storage base must have provided refuge and its surroundings remained inhabited. In one of its pottery kilns gray ceramics with incised Early Christian cross, alpha and omega symbols were manufactured as late as in the second half of 5th century.

Research history:
♦ Excavations in the vicus by András Mócsy, Géza Szepessy, Géza Alföldy, Ilona Czeglédy, Sándor Soproni, Vera Lánya, 1955-1965
♦ Excavations in the storage base by András Mócsy, 1960-1966
♦ Survey in the vicus by István Horváth, Márta Kelemen and István Torma, 1970
♦ Survey of Zsolt Visy 1985
♦ Survey of the Univeristy of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011
♦ Excavation in the storage base by József Beszédes, 2016

The Medieval royal and archbishop’s castle and the Basilica built from 1822-1831 cover the entire site. During the course of excavations in Esztergom under the royal castle and its surroundings, the remains of Roman finds and structures were also discovered. The Roman remains excavated on the western section of Várhegy Hill can be dated from the 1st century to the beginning of the 5th century. Of the excavated sections, a horreum (granary) and other inner buildings from stone fort period (2nd-3rd centuries) have been
successfully identified. The stone period replaced an earlier timber period, which must have been erected as early as the middle of the 1st century on the basis of finds. Therefore, it can be presumed that the auxiliary fort of Solva stood on Castle Hill. The cohors Augusta I Ituraeorum, the cohors I Batavorum and the cohors III Brittonum stationed here in the Flavian period, replaced by the cohors I Ulia Pannoniorum milliaria equitata around 118/119 until the 270s. In the age of the Tetrarchs and in the Late Roman period the fort was used by the equites Mauri and the cuneus equitum scutariorum. 

Research history of the excavations, where Roman remains were documented:
♦ Excavation by Antal Lebold and Tibor Gerevich, 1934-1938
♦ Excavation by Emese Nagy and István Méri, 1961-1962
♦ Excavation by István Horváth, 1981-1999 (the Roman structures were documented by Sándor Soproni, Vera Lányi and Márta Kelemen)

This watchtower that was constructed in the Búbánat Valley to the east of Esztergom was excavated before the First World War. Its walls that extend upwards have survived to a height of 0.7 m. On the basis of its architectural design and of the coin of Constantius II found in the vicinity, it was constructed in the 4th century. 

Research history:
♦ Excavation by Albin Balogh, probably before the First World War
♦ Survey by Sándor Soproni, 1955

The irregular triangle-shaped hillfort on the top of the Hideglelős-kereszthill overlooking the Danube Bend is known from survey, traces of its walls and towers can be detected in the forest. Late Roman pottery and a stamped brick dates the structure in the 4th century, especially in the period of Valentinian I. The fort is not mentioned in the list of Valeria in the Notitia Dignitatum, maybe it was no more in use in the end of the 4th century. Sándor Soproni connected the building inscription standing on the Castle Hill of Esztergom to this fort. In the text Valentinian I and Valens ordered the building of a fort with walls and towers. This content would fit well to to this fortification, but the gate of the hillfort has been probably destroyed, so the archaeological context of the inscription is uncertain. The Roman road between the auxiliary forts Solva and Cirpi runs along the range of Hideglelős-kereszthill forming a terrace or a ledge. Leaving the watchtower Solva 8, it continues on, passing the Hideglelős-kereszthillfort and arrives again to the Danube at Solva 10 watchtower. Traces of its pavement are still visible, chronologically it was certainly in use when the hillfort and the watchtowers were built.

The stone watchtower was constructed during the time of Valentinian on the basis of the stamped bricks found by Flóris Rómer as early as in the 1860s. Its northern part has been washed away by the Danube, its southern wall is in good condition. 

Research history:
♦ Survey by Sándor Soproni, 1955, 1964
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010
♦ Survey by Flóris Rómer, before 1866

All three towers were excavated by Sándor Soproni between 1978 and 1980 and can be dated to the time of Valentinian I on the basis of coins and stamped bricks. Their northern parts have been washed away, its southern walls could be well documented during excavation. Their square shaped ditch with rounded corners could be documented in case of the towers Solva 11 and 13. The walls of Solva 11 tower were known by Flóris Rómer as early as in the 1860s, it is also depicted on an old map carried out in 1771. Below the Late Roman tower Solva 11 the traces of an earlier wooden tower with rounded ditch could be documented with finds from the 2nd half of the 1st century. After it was demolished, another wooden tower was built in the 2nd century, which was situated partly below the Late Roman stone tower.

Solva 14 watchtower has also a forerunner from the Early Imperial period, a wooden tower with double ditches, 2nd century samian ware and with a coin of emperor Nerva.

Research history:
♦ Survey by Flóris Rómer, before 1866
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<thead>
<tr>
<th>ID No</th>
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<th>History and Development</th>
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<tbody>
<tr>
<td>♦</td>
<td>Excavations by Sándor Soproni, 1978-1980</td>
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<td>♦</td>
<td>Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010</td>
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<td>55</td>
<td>Pilismarót Malom-patak – Solva 19. kiseröd</td>
<td>Sándor Soproni excavated this in 1959 about 260 meters to the north of the mouth of the Malom Stream. The square pillar found in the middle of the tower held up the floor of the upper story. On the eastern side there was a small courtyard containing a residential building with four rooms that has been partially washed away by the Danube, and on the northern side there were two kilns that were used for producing ceramics. On the other three sides a fence and ditch encircled the tower. Its entrance was on the southern side. This fortlet was constructed in the time of Valentinian on the basis of the stamped bricks and tiles. The pottery included smoothed pottery produced in the potters' kilns represents the time when the fortlet was destroyed and the pottery remained in the kiln, it could be in use in the end of 4th - first third of the 5th century. One of them contained a smoothed decoration of ABC letters which suggest literacy among the barbarian (?) inhabitants/soldiers of the fortlet.</td>
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<tr>
<td>Research history:</td>
<td>♦ Excavation by Sándor Soproni, 1959</td>
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<tr>
<td>♦</td>
<td>Survey by István Horváth, 1964</td>
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<tr>
<td>♦</td>
<td>Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010</td>
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<tr>
<td>56</td>
<td>Pilismarót Kis-hegy – Ad Herculem magaslati erőd</td>
<td>This Roman fort was investigated by Gábor Finály in 1906 after its identification with Castra Ad Herculem by Róbert Fröhlich who surveyed the site at first. U-shaped towers on the southern wall of the fort with irregular groundplan, a horreum and an apsidal building have been documented. One of the apsidal buildings has been reidentified during trial excavations of József Beszédes in 2016, the old excavation groundplan from 1906 can be redrawn more precisely, based on recent research. The date of the fort is questionable, it could be from the time of Diocletian on the basis of its name (Ad Herculem), or it could be from the time of Constantine on the basis of the earliest coins found here. It must have given horseshoe-shaped towers during the time of Valentinian I, stamped bricks and tiles from this time suggest remodeling or new constructions in that period. The fort was still in use in the first decades of the 5th century. The dating of the fort in the turn of the 3rd and 4th centuries can be corroborated by an altar found in the vicinity, dedicated to Mars by the equites Dalmatae, who used the fort.</td>
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<td>Research history:</td>
<td>♦ Excavation by Róbert Fröhlich, 1893</td>
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<td>♦</td>
<td>Excavation by Gábor Finály, 1906</td>
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<td>♦</td>
<td>Survey by Márta Kelemen, 2002</td>
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<td>♦</td>
<td>Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010</td>
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<tr>
<td>♦</td>
<td>Geophysical survey and excavation by József Beszédes and Róbert Lóki, 2016</td>
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<tr>
<td>57</td>
<td>Dömös – tégláégető kemencék</td>
<td>These kilns were completely excavated in 1987–88 by Márta H. Kelemen. The grates and the fire chambers of the two kilns have survived almost completely intact, only the grate and fire channel of kiln number I were damaged by a minor excavation in the modern era. On the basis of the finds that have come to light it is certain that the site can be identified as the military brick production site of the legio I adiutrix. On the basis of the finds at kiln number I it was used in the years between 140 and 170. The smaller kiln number II may have been constructed later than number I and its use can be placed during the reconstruction following the Marcomannic Wars. The brick firing kilns are important evidence of the large-scale construction activities directed by the Brigetio legion in the northern section of the ripa Pannonica. Their construction was significant from a logistical standpoint and was justified by one or more large-scale military projects in the well-fortified Danube Bend region in the 2nd century.</td>
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<tr>
<td>58</td>
<td>Visegrád Gizellamajor – kiseröd</td>
<td>Planned excavations of these ruins began in 1988 under the direction of Péter Gróf and Dániel Gróh, and a fortlet with a ground plan unique to this point in Hungary was uncovered until 1995, with additional research in 2000 and 2002.</td>
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<td>59</td>
<td>Visegrád Lepence – Solva 35. örtorony</td>
<td>The watchtower with four interior pillars was uncovered in the 1980s during road construction. The northeastern half of it, which remained accessible after the road construction, was excavated in 1995 by Péter Gróf and Dániel Gróh. On the basis of the construction inscription fragments found near its entrance the tower was built in 371. Its walls have survived to an average height of 2 m. An enclosure wall and ditch encircled the tower, which according to its ground plan belongs to the group of late Roman era watchtowers with four pillars (Leányfalu, Öcsény, Budakalász, Budapest, Nánási Str. 3.). Three statue heads were found alongside the construction inscription in the wall debris in front of the entrance. These were portraits of the emperors Valentinian, Valens and Gratian that were re-sculpted from earlier gravestones and grave sculptures. Research history:  ♦ Excavation by Dániel Gróh and Péter Gróf, 1991-1995, 1997, 1999</td>
</tr>
<tr>
<td>60</td>
<td>Visegrád Kőbánya – Solva 24. örtorony</td>
<td>This watchtower was completely excavated by Sándor Soproni in 1955-1957 and has been open to visitors since 1960. A hearth constructed of stone was built in the northeastern corner, and later a pillar was placed in the middle. According to its fragmentary construction inscription referring to the command of the emperors Valentinian, Valens and Gratianus it was constructed by the <em>legio I Martia victrix</em> in 372. Under the watchtower earlier traces of a Roman settlement have been detected from the 2nd-3rd century. Research history:  ♦ Excavation by Sándor Soproni, 1955-1957</td>
</tr>
<tr>
<td>61</td>
<td>Visegrád Sibrik-domb – magaslati erőd</td>
<td>This fort located on the top of a hill rising above the Danube was excavated by Sándor Soproni and his colleagues in the 1950s, 1971 and 1985, investigated again by trial excavations and geophysical survey in 2009-2010 and since 2013 by Gergely Buzás and Katalin Boruzs with the collaboration of Szabina Merva and Katalin Tolnai. The fort is triangular with U-shaped wall towers and fan-shaped corner towers. We know of two interior buildings constructed on the inner side of the walls. The entrance to the fort was around the middle of the Danube façade, where a horseshoe-shaped tower was found. In its second period a double gated entryway was constructed on the site of gate towers that had presumably been demolished. In its third period a tower with a round pillar holding up the floor of the upper story was built on this same site. The first building period can be dated in the reign of Constantine the Great. The second period of construction can be placed at the time of Constantine II or Valentinian I, while the third period was at the beginning of the 5th century, when the troop of the hillfort, the <em>auxilia Ursarensia</em> left the fort for Ad Statuas. During its final period soldiers were only garrisoned and lived in this third-period tower (Restkastell), while the dwelling pits of new inhabitants contained besides coins of Valentinian I handmade Roman pottery with burnished decoration. In the first third of the 5th century the Romans completely abandoned the fort, however its walls withstood time and were still in good enough shape that in the 9th century it could be inhabited again, and in the 10th-11th century the seat of a new county with an inner church with one nave and semicircular apsis was established here until 1241.</td>
</tr>
</tbody>
</table>
Research history:
♦ Excavation by Sándor Soproni, 1951-1952, 1985
♦ Excavation by Miklós Héjj, 1971
♦ Excavation by Gergely Büzás, Katalin Borúzs, Szabina Merva and Katalin Tolnai, since 2013

62 Visegrád Szentgyörgy-puszta – Solva 28. őrtorony
This watchtower was studied by Sándor Soproni in 1955 and by Péter Gróf in 2016. Only the southern part has been excavated with stone walls in good condition. On the basis of the coins of Valentinian I and the stamped bricks and tiles from the tower, it was built during the time of Valentinian I.

Research history:
♦ Excavation by Sándor Soproni, 1955
♦ Excavation by Péter Gróf, 2016

63 Verőce Dunamező-dűlő, Solva 38. kikötőerőd
István Paulovics excavated this fortified river port in 1934, and its exhibition as a historic monument also took place in the same year.

The central tower has two interior pillars, the flanking walls end in corner towers. The walls that ran down to the Danube have not survived because the river has washed them away, but the foundation piles for the southeastern corner tower were examined on the riverbank during the excavation. The stamped bricks and tiles that were found are mostly from the Valentinian era. Prior to the construction of the fortified river port an imperial period Germanic settlement (2nd-3rd centuries) was located on this site. In the area of the Roman ruins a coin hoard with 1114 coins from the 16th century was hidden and never found again.

Research history:
♦ Excavation by István Paulovics, 1934

64 Dunabogdány Váradok-dűlő – Cirpi segédcsapat tábor
Only the excavation of Ákos Szalay and István Paulovics has been performed on this fort between 1930 and 1932, documenting its eastern corner, but with the aid of the evidence on the surface and aerial photographs the full ground plan of the fort can be identified.

The first fort was a structure made of earth and wood (palisade fort), constructed in the year 80 during the time of the Pannonian proconsul Titus Atilius Rufus according to the fragments of a construction inscription found at the excavation contextualized by Endre Tóth. The castellum of the cohors XIX voluntariorum civium Romanorum was rebuilt as a stone fort around the middle of the 2nd century with interior corner towers, using the earlier ditch for the foundations of the walls. The fort was used after the Marcomannic wars by the cohors II Alpinorum (between 163 and 180), who built a temple for Iuppiter during the reign of emperor Commodus, probably in the surrounding vicus.

The fort was altered during the time of Constantine or Constantine II, when the horseshoe-shaped and fan-shaped corner towers were built onto it. At the end of the 4th century a 17 × 16.5 m trapezoidal tower-like fortlet was erected in the corner of the fort, similar Restkastells are known from the forts Odavius, Pone Navata and Lussonium, dated to the same time.

Research history:
♦ Excavation by Ákos Szalay and István Paulovics, 1930-1932
♦ Survey by Sándor Soproni, 1952
♦ Survey of Zsolt Visy 1985
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Łoki – Máté Szabó), 2008-2010

65 Leányfalu Benzinkút – Cirpi 2. őrtorony
In 1915 Bálint Kuzsinszky performed an excavation on the interior of the watchtower. In 1963 Sándor Soproni excavated it and clarified its ground plan. There presumably was a small settlement around the watchtower, which is suggested by the damaged ceramic finds, and in 2007 during Katalin Ottományi’s rescue excavation a grave was also found.

The watchtower had a square ground plan with a surrounding wall and four interior pillars held up the upper levels, on the western side of this a staircase led upwards. Traces of a wooden structure of unknown purpose were observed on the western and part of the northern walls.
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<td>Göd Bócsaújttelep – erőd</td>
<td>The watchtower was built during the time of Valentinian I’s rule (364–375), and it was abandoned in the first decades of the 5th century. It possibly burned down, which can be concluded on the basis of charred remains of grains. On the basis of its ground plan (enclosure wall, four internal pillars), this belongs to the group of towers the size of fortlets (Őcsény–Soványtelek, Budapest, Nánási Strett, Visegrád–Lepence, Budakalász–Luppa csárda). Research history: ♦ Excavation by Bálint Kuzsinszky, 1915 ♦ Excavation by Sándor Soproni, 1963 ♦ Excavation by Katalin Ottományi, 2007</td>
</tr>
<tr>
<td>67a-b</td>
<td>Szigetmonostor/Dunakeszi – Ulcisia 8-9. kikötőerődök</td>
<td>Ulcisia 8 watchtower: This fortified river port was excavated by Lajos Nagy in 1935, and Éva Maróti continued excavation here in 1995. The central tower and the corner towers could be documented and preserved in situ. The central tower was corroborated with two brick pillars in the middle, its walls were covered with stucco and fresco decoration. On the basis of the stamped bricks and tiles, the building is from the era of Valentinian I presumably to provide supplies and reinforcements for the planned fort at Göd, along with the Dunakeszi fortified river port across from it on the opposite bank of the Danube. Ulcisia 9 watchtower: Although these remains have been known of for a long time since the small-scale excavations of the central tower by Flóris Rómer and Lajos Nagy, they were completely built over after the middle of the 20th century. Zsolt Mráv’s investigations performed between 2002 and 2007 included the excavation of the fortified river port’s southeastern corner tower and the wall of its southern wing, as well as uncovering its ground plan on the basis of observations made in the neighboring lot. The fortified river port was constructed during the reign of Valentinian I on the basis of brick and tile stamps, presumably to provide supplies and reinforcements for the planned fort at Göd, along with the Szigetmonostor – Horány fortified river port across from it on the opposite bank of the Danube. 10–20 years after its construction the Romans abandoned the structure, and it no longer played any role in border defense Research history: ♦ Survey by Flóris Rómer, 1877 ♦ Excavation by Lajos Nagy, 1935 ♦ Excavation by Éva Maróti, 1995 ♦ Excavation by Zsolt Mráv, 2002, 2007</td>
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<td>68</td>
<td>Szentendre Ulcisia – segédcsapat tábor</td>
<td>Lajos Nagy and then Tibor Nagy performed excavations in 1934–35, and then in 1939–40 and 1942 on this archaeological site that was known of in the Middle Ages and the Modern era. After Sándor Soproni and Márta Kelemen’s rescue excavations,</td>
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the investigations into the fort resumed under the direction of Éva Maróti after 1996.

There was probably a period when the fort of the cohors I Thracum was constructed from palisades, and on the basis of the finds that have been discovered in 1993 this period may have been of Domitianic-Traianic date.

The first stone fort may have been built during the reigns of Trajan and Hadrian, and this was rebuilt after the Marcomannic Wars until the 270s, when the fort was destroyed. The *principia* was remodeled as late as during the time of Caracalla. During the Marcomannic Wars a new Syrian unit was organized with the name cohors I milliaria Aurelia Antonina Surorum sagittariorum who used the fort on the basis of their stamped bricks.

The horseshoe-shaped wall towers and fan-shaped corner towers of the Late Roman period may have been constructed during the time of Constantine, when the fort received a new name: Constantia. The gateways may have been walled off during the reign of Valentinian (364–375). The fort was probably still being used even in the 5th century.

Research history:
♦ Excavation by Lajos Nagy, 1930-42.
♦ Excavation by Tibor Nagy, 1939-1942
♦ Excavation by Márta Kelemen, 1968
♦ Excavation by Sarolta Tettamanti, 1977
♦ Excavation by Éva Maróti-Róbert Kalácska, 1993

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<td>69a-b</td>
<td>Budapest III. kerület – Aquincum municipium és Ulcisia 16. órtorony</td>
<td>The remains of the civilian town of Aquincum and its aqueducts have been known of since the Middle Ages. When the development of modern Óbuda began the remains were used as a quarry, but it was at this time that the desire to study and preserve them arose as well. The first finds were sent to the imperial court in Vienna, then to the Hungarian National Museum when it was established (1812), and finally, since 1894, they have been placed in the Aquincum Museum. The north-south oriented line of the aqueduct running via legionary fort (which was arranged until the reign of Traianus) along the Szentendrei street, divides the site into two parts: the western, mostly unexcavated part is known from recent geophysical survey, the eastern, mostly excavated part with conserved ruins belong to the archaeological park of the Aquincum Museum. The pit dwellings and timber houses of the <em>vicus</em> before Aquincum received the municipal rank can be dated in the last third of the 1st century. The street plan of the town was laid out already during the reign of Traian in the <em>vicus</em> period, conforting to the line of the aqueduct and the Limes Road. Aquincum received an urban character with the construction of the greatest public buildings really during the reign of the emperor Hadrian, when it earned the title of <em>Municipium Aelium Aquincum</em>. This was when the town walls and the amphitheater were constructed and the streets were paved and provided with sewage mains. The sewing system of the town connected to the aqueduct works functions even today, it drains the archaeological park after each major rain. Aquincum earned the rank of <em>colonia</em> in the time of Severus (<em>Colonia Aelia Septimia Aquincum</em> from 194), which represented a new golden era in the life of the city. The rearrrangement of the street plan with the new structure of the insulae was carried out in the Severian period. The current appearance of the archaeological park reflects the conditions of this period. There may have been 10.000-15.000 inhabitants in the civil town in in the 2nd-3rd centuries. In the course of the 4th century the territory of the civil town becomes largely abandoned, inhabitants probably moved into the former legionary fortress. The last mention of the municipal government dates to 307. The Ulcisia 16. <em>burgus</em> was built during the time of the emperor Valentinian I. Its dimensions and reconstructed groundplan resembles the tower type with four inner pillars (Őcsény, Leányfalu, Budakalász) attributed to the construction program of Valentinian. The structure was most likely destroyed by fire, prior to which it may have been vacated as late as in the beginning/first third of the 5th century on the basis of a coin of Theodosius in the destruction layer. The tower was excavated by Tibor Budai-Balogh, 2010-2012.</td>
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<td>70a-c</td>
<td>Budapest III. kerület – Aquincum legió tábor és canabae</td>
<td>The forts of Aquincum were lying hidden under the houses of Óbuda for a great deal of time. The Roman ruins were interpreted as the royal centre of the Hunic king Attila and the chieftain of the Hungarian conquest, Árpád in the Gesta Hungarorum of Anonymus, written in the beginning of the 13th century. The first archaeological excavation in Aquincum was carried out by István Schoenwisner in the thermae maiorium of the legionary fort in 1778, which became also the first protected and exhibited historical monument of Hungary under a protective structure. When the development of modern Óbuda began the remains were used as a quarry, but it was at this time that the desire to study and preserve them arose as well. The first finds were sent to the imperial court in Vienna. Many Roman finds from Aquincum were given to the Hungarian National Museum in the 19th century after 1812, until the foundation of the Aquincum Museum in 1894-1896 built among the excavated ruins of the civil town. Continuous excavation activity began in Aquincum in the last third of the 19th century until now by the archaeologists of the Aquincum Museum. The excavations and studies of small areas often did not make it possible to analyze the remains that were uncovered. It was only the urban development that began in the 1970s that brought remains to the surface that made identification of the exact extent and chronology of the military structures in Aquincum possible. The earliest military fort of an <em>ala</em> in Óbuda was built in the year 73 A.D. by the <em>ala I Tungrorum Frontianiana</em> on the basis of its fragmentary construction inscription. After its destruction during the sarmatian wars in 92-93, it was only in stone in the first half of the 2nd century. It must have been that time the fortification of the <em>equites singulares</em>. The fort was partially excavated between 1980 and 1990. The first earth and timber construction of the legionary fort was built in 89 A.D. by the <em>legio II adiutrix</em>, it was rebuilt in stone in the first half of the 2nd century possibly under the reign of Hadrian. The precise groundplan and chronology of the fort is known from the systematic rescue excavations of the Aquincum Museum carried out from the 1960s until 1990. Some parts of the fort (eastern gate, gate of the principia, military bath) were remodeled in the age of emperor Gallienus after 260 (the thermae maiorium in 268). The Late Roman legionary fort, the seat of the <em>dux Valeriae</em> was built in the age of Constantine the Great in the eastern part of the former legionary fort, extended to the east with U-shaped interval towers. The building complex of the former thermae maiorium became the palace of the dux, serving for government purposes. Until the end of the 4th century the Late Roman fortress was restricted to its southwestern part, to an area of 300 × 300 m. The 2nd-3rd century military town surrounded the legionary fort from each side. The mostly overbuilt area has been nominated as buffer zone except the Hercules villa and the military amphitheatre (70b-c). There may have been 35,000-40,000 inhabitants in the military town in in the 2nd-3rd centuries, its regular street-system and layout resembled regular Roman towns of municipal or colonial rank. After 194, when both military town and civil town received the rank of <em>colonia</em> from emperor Septimius Severus, luxurious public buildings and urban villas appeared on the site. In the Late Roman period the area of the <em>canabae</em> also shrunk. The inhabitants made efforts to move closer to the fort, and burials appeared in the abandoned northern and western sections of town. The governor’s palace on the Hajógyári Island surrounded by a wall included the residence of the imperial governor, official halls, agricultural structures and storehouses. The earliest building complex is from the beginning of the 2nd century, from the time of Hadrian’s governorship. The largest construction took place at the end of the 2nd century and the beginning of the 3rd century. Later, in the last third of the 3rd century, it was necessary to abandon the palace due to the rise in the level of the Danube.</td>
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The *villa urbana* of earlier 2nd century origin was rebuilt in the 2nd half of the 2nd century and slightly remodeled in the Severus period adding luxurious wall paintings famous floors with geometric decorations and figural mythological representations. The site in the northern part of the military town served in the 4th century already as cemetery area. The villa was excavated by István Wellner, 1958-1966.

The *canabae*’s amphitheatre and the adjacent Nemesis sanctuary was built by the engineering corps of the *legio II adiutrix* in the time of emperor Antoninus Pius. Its dimensions are 131.8 × 108.4 meters, its arena is larger than the arena of the Colosseum in Rome. During the Late Antiquity it could serve defensive purposes, in the end of the 5th century a treasure consisting of two golded silver cups, a pair of golded silver brooches with Germanic rune inscription (futhark row) and silver beads were hidden under a stone slab at its southern gate.

The remains of the amphitheatre were well known in the Middle Ages as the castle of Kurzan, one of the chieftains of the Hungarian Conquest in 895 in the *Gesta Hungarorum* of Anonymus (beginning of the 13th century) and in 14th-century charters. It was shown as castle ruin on maps of the 18th century, too. The area has been overbuilt later, the Roman structure has been restored and exhibited as Roman historic monument by the architect László Gerő in the beginning of the 1940s.

Research history:
♦ First excavation by István Schoenwisner in the legionary fort, 1778
♦ Continuous excavation activity of he Aquincum Museum since the last third of the 19th century

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**Budapest V. kerület Március 15. tér – Contra Aquincum ellenerőd**

The Roman fort found at Március 15. tér in the 5th District of Budapest was first identified by Lajos Nagy between the two world wars, although portions had turned up earlier.

The excavated stone fort was built according to the numismatic evidence of recent excavations of József Beszédes (2014-2015) during the time of the emperor Constantius II. Its published ground plan was 86 × 84 m, and it was built with fan shaped corner towers and two U-shaped towers on each side.

Earlier excavations supposed an earlier counter fortification from the 2nd half of the 2nd century on the basis of stamped bricks known from the site, but the exact extent and chronology of the earlier fort is uncertain, although it has been shown that the bath section supposedly from this earlier period was actually the Turkish era Pest bath.

The best finds from the fort, a limestone portrait of Marcus Aurelius in the eastern vicinity of the fort and a Late Roman parade helmet (from the river-bed of the Danube) are known from secondary contexts.

The exact name of the fort (Contra Aquincum? Contra Tantantum emended as Contra Teutanum?) is uncertain, like its identification with the fort contra Acinco (opposite of Aquincum) built in 294 A.D. Some of its walls could be used in the Middle Ages, when the Medieval predecessors of the downtown Paris church were built over its southeastern corner.

Research history:
♦ Excavation by Lajos Nagy, 1932, 1940, 1944
♦ Excavation by Tibor Nagy, 1970
♦ Excavation by Bertalan Vílmosné, 1944
♦ Excavation by Feuer Istvánné, 1959
♦ Excavation by Krisztina Szirmai, 1974

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**Budapest XI. kerület Albertfalva – segédszapat tábort**

This auxiliary infantry fort, which was already shown on a map published by Luigi Fernando Marsigl in 1726, was located in the suburb Albertfalva (Budapet, 11th district) across from Csepel Island between Hággyár utca and Hunyadi János utca was investigated by Tibor Nagy from the 1940s until the 1970s with minor interruptions. Three gates, the *principia*, the military hospital and a few sections of the barracks were excavated.

The first palisade fort built with a double defensive ditch in the Flavian period for an unidentified unit and for the *cohors VI Thracum veterana equitata*. After its destructions by the Sarmatians in 91/92 A.D., it was reconstructed in stone for another unidentified unit no later than the first half of the 2nd century. The defensive works of the auxiliary fort that were remodeled following the Marcomannic Wars stood no longer than up to the time of the attested barbarian
attacks around 260, which is why, due to the lack of Late Roman sources, its original name is not known. The last known unit of the fort was the *cohors milliaria Numidarum*. In 2008, the stone fort’s four external defensive ditches and the northern gate were documented during a verification excavation by József Beszédes. Research history:
♦ Excavation by Tibor Nagy from the 1940s until 1971 with interruptions

### Budapest XXII. kerület Nagytétény – Campona segédcsapat tabor és vicus

The fort located in the centre of the suburb called Nagytétény (Budapest, 22th district) has been known for a long time: during the Budapest-Pécs railway constructions along the Danube before 1883, many Roman finds, stone monuments and bronze fittings of a carriage have been unearthed. In the centre of the fort, at the presumed *principia* area at Zsák Street a large 4th century the military treasury with more than 10,000 coins was found and mostly brought into the Hungarian National Museum.


The fort may have been constructed in stone in the second half of the 2nd century, possibly after the Marcomannic wars for the *ala I Thracum veterana sagittariorum*, but an earlier palisade fort dated from the end of the 1st century to the beginning of the 2nd century of the *ala I Tungrorum Frontioniana* can also be hypothesized on the basis of the finds uncovered so far.

Excavations have been performed on the northern, southern and eastern gates and gate towers; the towers located at the corners that earlier had been internal towers then later, in the 3rd century they became semicircular projecting angle-towers. Amongst the internal structures, there have been excavations on the *principia* and the row of *tabernae* (shops) with a colonnade along the *via praetoria* that led to the Danube.

Following the destruction of the fort in 322/323 A.D. by the barbarian Rausimodus, fan shaped corner towers were erected, as well as the other square shaped towers that protruded from the wall surface by the thickness of their walls, equites Dalmatae used the fort that time. In the area of the eastern gate blocked by a U-shaped Late Roman construction, layers from the period of Valentinian I and from the Middle Ages show, that the Roman remains were used as late as in the 16th century.

The element of nominated property encompasses the fort and all three of its ditches. To the west the buffer zone is bigger; this is where the *vicus* is presumed to have been, some of whose buildings actually came to light in the previous century, like a mithraeum to the north of the fort, pit houses from the 2nd century, stone buildings from the 3rd-4th century, inscription from a Iuppiter sanctuary and 3-4th century graves. Research history:
♦ collection of finds in the 19th century
♦ Excavation by István Paulovits, after 1935 (fort, *vicus*)
♦ Excavation by Ferenc Fülep, 1949-1957, 1960 (fort, *vicus*)
♦ Excavation by László Kocsis, 1995-2003 (fort)
♦ Excavation by József Beszédes, 2012

### Érd – limesút

Aerial photographs from 1940 and 1953 and the Hungarian Archaeological Inventory indicate a Roman *Limes Road* running north-south in the area of the Érd Plateau, which connected the auxiliary forts of Campona and Matrica. During the test excavation led by Máté Szabó a section of road that was about 4 meters wide (partially disturbed on its eastern side, so originally certainly wider) and paved in stone was successfully uncovered in a 13 meter wide trial trench about 5-10 centimeters below the current surface level, located about 200 meters north of the Stich-tanya section of Százhalombatta (in the area that still belonged to the outskirts of Érd, where previously Árpád Dormuth published a Roman milestone marker).

Along the central line of the foundations the traces of a V-shaped channel (furrow?) could also be observed. Roman *caliga* (military boot) studs were discovered in the infill of the obtuse V-shaped eastern ditch, whose largest width was 1.4 meters and its depth was 50 centimeters.
The Roman road between Campona and Matrica was in use in the middle ages, it was replaced with another road for post traffic only by 1730 because of its bad condition. The first depiction of the road is the work of Sáumé Mikuviény. The remodeling of the original Roman road occurred between 1814 and 1818 on the basis of the plan carried out by Benjámin Csapó, because of the bad condition of the 18th century road. The remaining traces of the 19th century pavement (for instance to the north of the nominated component section) were earlier erroneously dated to the Roman period.

Research history:
♦ Survey by Eva Maróti and István Torma in the 1970s
♦ Survey of Zsolt Visy 1985
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010
♦ Excavation of Máté Szabó, 2012

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| 75a-b | Százhalombatta-Dunafűred – Matrica segédcsapat tábor és vicus | The fort located to the south of the city part called Százhalombatta-Dunafűred, has been known for a long time. On the map of the first military survey the whole fort can be seen, still before the erection of the earthworks in 1809 against the invasion of Bonaparte Napoleon. Árpád Dormuth and András Mócsy performed excavations here in 1943 and 1953, and between 1993 and 1997 Péter Kovács investigated relevant parts of the fort. The first fort was established at the beginning of the 2nd century for the cohors I Lusitanorum (which was replaced in 118/119 by the cohors I Alpinorum until 180 a.D.) and constructed of earth and wood. Its rebuilding in stone probably occurred after the Marcomannic Wars sometime around the turn of the 3rd century, when the fort was used by the cohors milliaria Maurorum. Later, semicircular corner towers were constructed on its walls. The northwestern fan-shaped corner tower was constructed during the course of the 4th century (the era of Constantine), and this is when they filled in the previous ditch and dug the new one further from the walls. The walls of the principia were remodeled as a mud-brick walled house. During the reign of Valentinian the towers were renovated. Not much later, the Romans abandoned the fort, since in the first half of the 5th century a girl was buried within the territory of southern angle-tower. From the territory of the vicus around the fort (buffer zone of the nominated components 75a-b), six conserved rooms with hypocaustum heating system of an earlier excavated stone building have been nominated. Other parts of the building-complex have been unearthed by rescue excavations during the constructions of a dam, which is the border of the nominated area to the north. The six bath rooms belonged to the eastern part of the building, where Judit Topál excavated 16 rooms, datable between the 2nd half of the 2nd century until the middle of the 4th century according to the excavation reports. The earlier interpretation of the conserved bath as part of the military bath of the auxiliary troops has been replaced by Péter Kovács after the revision of the excavation documentations. The nominated structure could be part of a large mansion serving for accommodation for travelers at the northern edge of the civil settlement. Research history:
♦ Excavation by Árpád Dormuth, 1943
♦ Excavation by András Mócsy, 1953
♦ Excavation by Péter Kovács, 1993-1997
♦ Excavation by Judit Topál, 1972, 1975 |
| 76   | Ercsi – limesút | The Limes Road that runs straight for 18 km from the oil refinery in Százhalombatta to the southern border of Ercsi has been built upon by today, but to the south of Ercsi it runs unhindered for a 4 km section and its path is preserved by a road through the fields that is still used today. This section running from the auxiliary fort Matrica via Vetus Salina is known from an aerial photo taken in 1940, but its line can be followed on recent photographs and on field walkings as well. Research history:
♦ Survey of Jenő Fitz before 1970
♦ Survey of Zsolt Visy 1985
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010 |
77  Rácalmás Szesszió II. – Vetus Salina 8. őrtorony és limesút

This is a tower to the south of Rácalmás and to the east of Route 6, discovered from an aerial photograph in 1994 taken by Otto Braasch. The tower is surrounded by a square double ditch, the dimensions of the inner being 35 m and the outer 60 m. The dark spot appearing in the middle of the image suggests that the tower was made of wood. On the basis of a Crispus coin collected from the surface and of its specific ground plan with square double ditch, the tower can be dated to the 4th century.

On the western edge of Rácalmás to the east of the Vetus Salina – 8 watchtower, a section of the Limes Road running from the auxiliary fort Vetus Salina via Intercisa can be identified from photographs and on the ground.

Research history:
♦ Survey of Zsolt Visy after 1994
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Löki – Máté Szabó), 2008-2010

78a-d  Dunaújváros Öreghegy – Intercisa segédcsapat tábor és vicus

The vineyards of the Öreg-hegy offered a vast amount of Roman settlement and grave finds, stone structures, stone slabs of funerary monuments wine growers, amateur excavators and grave robbers in the end of 19 th century, many precious Roman artefacts have been sold for the Hungarian National Museum and other museums in Germany as well.

Illegal archaeological activity could be repressed by regular excavations of the Hungarian National Museum from 1906. After 1954 and 1957, the publication of the two volumes of the Intercisa monograph, the Intercisa Museum continued the excavations in the auxiliary fort, vicus and cemeteries, connected to modern construction works with the leading of Eszter Vágó and István Bóna in the 1960s and of Zsolt Visy since 1968, with the collaboration of Judit Topá, Jolán Horváth, Barnabás Lőrincz and Klára Szabó.

The excavations could be continued in the 1980-s and 1990-s by Attila Zarnóczki and Zsuzsánna Újlaki-Pongrácz, and in the 21th century by Andrea Buza and Tamás Keszi. The western sector of the fort was investigated again by a trial excavation of Zsolt Visy and through geomagnetic survey in 2016. According to excavation results, the V-shaped ditch of the earliest palisade fort of the Flavian period, the fort of the ala Asturum II was found to the south of the later fort, below the area of the Late Roman southern cemetery of the vicus. The auxiliary vicus belonging to this fort was in the area of Papsziget, to the north.

The first extant palisade fort, which is below the stone fort, was constructed in the time of Trajan, when the ala I Augusta Ituraeorum and the ala I Britannica civium Romanorum used the fort. These troops were replaced by the ala I Tungrorum Frontoniana and the ala I Thracum veterana sagittaria until 176.

The stone fort was constructed at the end of the Marcomannic Wars and afterward, when the new auxiliary unit, the cohortis miliiaria Hemesenorum came here from the syrian town Hemesa in 176. The stone fort’s southern gate had earlier been set on four wooden columns, and then a double stone gate tower completed during the remodeling at the time of Commodus, based on building inscription fragments dated to 185 by Zsolt Mráv, with an interpolation in the text during the reign of Caracalla. The construction of the internal corner towers, of which the two on the eastern corners have been successfully revealed, can also be placed at the beginning of the 3rd century. In the basilica of the fully unearthed principia three bases of emperor statues stood in situ, with bronze fragments of the portrait of Septimius Severus or Caracalla.

The fort was remodelled as late as in the middle of the 4th century with fan-shaped corner towers, U-shaped towers and a new surrounding ditch. In the 4th century the fort was used by the equites sagittarii, the cuneus equium Dalmatarum and from the end of the 4th century the cuneus equium Constantianorum, but row of houses was erected along the inner side of the walls, attesting civil presence.

The final period of construction can be placed during the times of Gratian and Theodosius. The fort was still in use – in part by the immigrating foederati – in the first centuries of the 5th century, but after this it was abandoned, finds from the Hunnic period attested newcomers in the site.

The vicus surrounded the fort at its northern and southern side. In the 2nd century the houses were built of beaten earth and timber, but from the turn of the 3rd century more and more buildings were erected of stone or on adobe bricks on stone ground. Pottery kilns, furnaces for glass production and bronze working attest
diverse economic activities. The remains of the military baths to the north of the fort conserved under a protective building were unearthed by Zsuzsána Újlaki-Pongrácz between 1992 and 1994. The bath was erected in the end of the 2nd, and became demolished in the end of the 3rd century.

The stone slabs of earlier gravestones, funerary monuments with mythological representations, cultic images used in seconary postitions in the Late Roman graves of the cemeteries around the vicus are of extraordinary significance, inscribed spolia speak for diverse sanctuaries in the vicus or in its vicinity, like mithraea or a Jewish synagogue.

At the western border of the vicus, in the vicinity of the Late Roman western cemetery an apsidal building with clay floor has been unearthed, the level of the floor of the apsis was higher. Its windows were covered with glass on the basis of the glass fragments found during excavation. Late Roman pottery shards dated the building in the 4th century A.D. The earlier interpretation of the structure as Early Christian church is not impossible, but lacks architectural proofs. It was excavated by Zsolt Visy in 1972-1973.

The conserved semi-detached house consists of two equal parts with 3-3 rooms with clay floor, terrazzo floor, with fresco and stucco decorations on the walls. It was erected after the Marcomannian wars and was used in the 1st half of the third century. It was excavated by zsolt Visy in 1972.

The functional parts of the pottery kiln in the southwestern part of the vicus, the stokehold with adobe brick vault, the firing pit and the firing chamber could be documented and preserved in good condition in the depth of 510 cm. The vaulted stokehold could be reached from the firing pit through stairs cut into the earth. The type of the kiln resembles oriental origin, connected to the cultural identity of the Syrian troops and their families dwelling on the site in the 3rd century. The kiln was excavated by Zsolt Visy in 1970.

Research history:
♦ Continuous excavations of the Hungarian National Museum, 1906-1952 (fort, vicus and cemeteries)
♦ Excavation by Eszter Vágó and István Bóna until 1969 (fort, vicus, cemeteries)
♦ Excavation by Zsolt Visy, 1971-1975 (fort)
♦ Excavation by Zsolt Visy, Judit Topál, 1968-1974 (vicus, cemeteries)
♦ Excavation by Zsolt Visy, Barnabás Lőrinz and Klára Szabó, 1975-1977 (fort, vicus)
♦ Excavation by Attila Zarnóczki, 1985 (vicus)
♦ Excavation by Zsuzsána Újlaki-Pongrácz, 1992, 1994, 1998 (fort)
♦ Excavation by Zsuzsána Újlaki-Pongrácz, 1992-1994 (vicus)
♦ Excavation by Zsolt Visy, 2016 (fort)

The three watchtowers make up separate elements of nominated property, which has been bound together in the nomination document by a long section of the Limes Road. The Limes Road, which was shown on an old map published by Luigi Fernando Marsigli in 1726 and excavated in 2005 cutting through its layers during construction works in 2005, was nominated only as buffer zone, since it is covered by present day Route 6.

The Intercisa – 5 watchtower located directly beside the gas station built in 1993 on the west side of Route 6, was investigated after earlier survey and analysis of aerial photos by a trial excavation of Zsolt Visy in 2016. The watchtower was shown on an old map published by Luigi Fernando Marsigli in 1726 and excavated in 2005 cutting through its layers during construction works in 2005, was nominated only as buffer zone, since it is covered by present day Route 6.

The Intercisa – 6 watchtower lying to the northeast of the Dunaújváros airport on the western side of Route 6 that was excavated in 1979. It was surrounded by a double ditch, and on the eastern side the ditches were closer to one another.

The watchtower was shown on an old map published by Luigi Fernando Marsigli in 1726, therefore it became well known in Roman limes research. According to survey
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<td>and excavation evidence, the tower type surrounded by a double ditch with a square shape can be dated to the 4th century A.D.</td>
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<td>The Intercisa – 10 watchtower surrounded by a rhombus-shaped ditch was shown on an old map published by Luigi Fernando Marsigli in 1726, therefore it became well known in Roman limes research, but its thorough excavation took place in 1979. On the basis of the finds from the fill in the ditch (glazed pottery) it can be dated to the 4th century. This watchtower type was dated by Zsolt Visy to the end of the 3rd century or the beginning of the 4th century, because the tower does not belong to the line of watchtower 5 and 6, but it must have been stood next to another path of the Limes Road which was used earlier.</td>
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<td>80</td>
<td>Baracs – Annamátia segédcsapat tábor és vicus</td>
<td>The site was already known by the 18th century maps of Luigi Fernando Marsigli (1726), Samuel Mikoviny (1736) and Michael Karpe (1775) and by an aerial photo taken in 1940, showing the ground plan of the auxiliary fort erected on the loess bank rising above the Danube on the border of the village of Baracs-Templomos. More precise knowledge about the Roman fort was made possible by the excavations of Péter Kovács between 1999 and 2011. The first palisade fort was built in the middle of the 1st century for an unknown cohors, which has been replaced by the cohors I Thracum civium Romanorum pia fidelis between 106 and 118/119 A.D. The fort’s length on the north-south axis was 165 m. Its eastern section has been washed away by the Danube. The investigations identified the northern gate of the palisade fort, the two ditches encircling the fort, as well as the postholes of the principia of the palisade fort standing until as late as the 1st half of 3rd century. The stone fort that followed this was erected in the middle of the 2nd century, with two “V” shaped ditches and 4.4 m recessed trapezoidal towers on the corners. The fort was used by the cohors I Thracum Germanica equitata between 131/132 and 260. The fort of the equites Dalmatae was remodeled in the 4th century with horseshoe shaped towers, the earlier ditches were filled in and the porta decumana was closed off with a “U” shaped tower. On the basis of the coins found in the fill in the ditches the remodeling was performed in the middle of the 4th century. The porta principalis sinistra was constructed with recessed gate towers, of the internal buildings only the length of the principia is known, which was 24 m. Several finds belonging to women (like a golden earring) attest the present of the civilian inhabitants in the fort that time. Excavations have not taken place on the site of the vicus, but large amount of Roman find material is known from surveys and its buildings and settlement structure (streets, ditches, wooden and stone houses) can be clearly seen in aerial photographs.</td>
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<td>Research history:</td>
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<td>♦ Survey by Jenő Fitz, before 1955</td>
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<td>♦ Excavation of Zsolt Visy, 1979</td>
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<td>♦ Survey of Zsolt Visy 1985</td>
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<td>♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010</td>
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<td>♦ Excavation of Zsolt Visy, 2016</td>
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<td>81a-c</td>
<td>Dunaföldvár – limesút</td>
<td>The line of the Limes Road to the west of Dunaföldvár was already known by Zsigmond Szelle, whose description was published by Mór Wosinsky in 1896. The road has been discernible on numerous aerial photographs since 1940. This road that proceeds in an approximately southerly direction has been constructed over as it continues, but in the gardens in the southern part of Dunaföldvár the gravel bed of the road is clearly discernible. On the basis of evidence from aerial photographs, the Limes Road can be identified all the way to Bölcske in three long sections, except for some breaks (81a-c). Survey carried out between 2009 and 2011 corroborated the evidence shown by aerial photographs.</td>
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<td>Research history:</td>
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<td>♦ Surveys of Zsolt Visy, 1970s</td>
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<td>♦ Survey of Zsolt Visy 1985</td>
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<td>♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2010</td>
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The excavation of Géza Szabó in 2006 was able to document the structure of the Roman road to the north of the nominated component part 81a: the foundation of the road under the gravel layer consisted of stone- and tegula debris. On the basis of the lowest black compressed humus layer with clay under the debris, the Roman road was built upon an earlier dirt road.

Research history:
♦ Survey of Zsolt Visy 1985
♦ Excavation by Géza Szabó, 2006
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

The Roman road to the north of the nominated component part 81a: the foundation of the road under the gravel layer consisted of stone- and tegula debris. On the basis of the lowest black compressed humus layer with clay under the debris, the Roman road was built upon an earlier dirt road.

Research history:
♦ Survey of Zsolt Visy 1985
♦ Excavation by Géza Szabó, 2006
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

The Roman road to the north of the nominated component part 81a: the foundation of the road under the gravel layer consisted of stone- and tegula debris. On the basis of the lowest black compressed humus layer with clay under the debris, the Roman road was built upon an earlier dirt road.

Research history:
♦ Survey of Zsolt Visy 1985
♦ Excavation by Géza Szabó, 2006
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

The late Roman structure containing earlier spolia were dated to the 3rd quarter of the fourth century on the basis of small finds and stamped bricks, the fort could be perhaps a fortified river port belonging chronologically to the large construction project of emperor Valentinian I on the ripa frontier in Valeria. Most spolia are carved and inscribed stones unearthed from the Late Roman structure. The unearthed 39 altar stones are of exceptional scientific value, before all the group altars dedicated to Jupiter Optimus Maximus Teutanus of celtic origin by the civitas Eraviscorum, taken to the Bölcske fort from Aquincum. All of them were set up on the same day, 11 June, in different years from the Late Antonine period until the age of the Tetrarchy. 11 June must have been a common feast for the inhabitants of Aquincum and Carnuntum, because the altars dedicated to Jupiter Optimus Maximus Carnuntinus on the Pfaffenberg sanctuary of Carnuntum were set up on the same day. Most unearthed stones are exhibited for display to public in the so called Soproni Sándor lapidarium, which is situated in the village Bölcske.

Research history:
♦ Underwater survey of divers, 1937
♦ Underwater survey with radar, 1983
♦ Underwater survey of Attila János Tóth with sonar, 2009-2010

The site was already known by 18th century maps (first military survey, map of Ferenc Vertics) and Mór Wosinsky, who wrote the history of County Tolna with own survey and archaeological results in 1896. The tower with a rhombus-shaped ditch is clearly discernable in aerial photographs on a hill rising to the west of the inn in the Leányvári Valley. On the basis of recent survey and earlier research on the excavated Intercisa – 10 watchtower that has a similar rhombus-shaped ground plan, these watchtowers were dated by Zsolt Visy to the end of the 3rd century or the beginning of the 4th century. During the survey of the University of Pécs, 4th century coins were collected from the site.

Research history:
♦ Survey of Zsolt Visy 1985
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó, Pattantyús Ábrahám Miklós), 2008-2011

The ditches of the Annamatia 8 watchtower can be observed in several aerial photographs of a cultivated field on the western side of Route 6 at the 98th kilometer marker. The tower’s location is marked by a darker spot and was enclosed by a double ditch with a square shape, whose side edge was parallel to the Limes Road. The tower can be dated to the 4th century on the basis of the analogies of its shape and 4th century coins collected from the site.

In 1876 a mile stone dedicated to emperor Macrinus (217-218 A.D.) were found in the vicinity, showing that the site is 66 miles away from Aquincum.

Research history:
The site was already known by Mór Wosinsky, who wrote the history of County Tolna with own survey and archaeological results in 1896. The ground plan of a Roman watchtower can be seen on a hill rising to the south of the valley of the Gyűrűs Stream on archival images and aerial photographs taken in 1940 and in 1995 taken by Otto Braasch. The tower can be dated to the 4th century on the basis of the analogies of its shape.

The Roman road, which was also depicted on the map of Ferenc Vertics from 1794, is clearly visible in an archive image from 1962, as well as more recent aerial photographs. The Limes Road and the Annamatia 9 watchtower are discernable to the south of the stream valley in photographs from the 1990s as well as satellite images.

Research history:
♦ Survey by Zsolt Visy, 1989
♦ Excavation by József Beszédes, 1998-1999
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011
♦ Geophysical survey by Máté Stibrányi, 2015

This fort lies in the southern part of Dunakőmeld on Sánc Hill, which rises from the western side of the present-day Route 6. It was already known by Mór Wosinsky, who wrote the history of County Tolna with own survey and archaeological results in 1896, but the Roman remains were well known in 1705, too, when the earthworks of the Hungarian independence war against the Austrian army were erected at this good strategical point. The extent and date of the fort have been successfully revealed by regular archaeological research that has been continuing since 1987. According to this, the earliest fortification was a palisade fort constructed in the middle of the 1st century for the cohors I Alpinorum peditata with a length of 260 m, and on the basis of observations during excavation its decline can be dated to the first half of the 2nd century.

The length of the late Roman stone fort with a double ditch constructed on its site was 250 m on the north-south axis. During the course of excavations, the relationship between the defensive ditches, the fort walls and the gate towers on the north and south sides was established, and barracks with wooden porticus were discovered on each side. The stone fort served the cuneus equitum Constantiniarum, part of the legio II adiutrix from the age of the Tetrarchs until the end of the 4th century. A fragment of a foot from a larger than life size bronze statue of an emperor from the Antonine or Severus dynasty was discovered on the site of the fort, which was prepared to be reused by a Late Roman workshop dealing with bronzes.

At the turn of the 5th century a 10 × 10 m tower-like, perhaps three storied fortlet was constructed on the via principalis, behind the southern gate, when the cuneus equitum Constantiniarum left the fort for Intercisa. Two graves with barbarizing grave-goods from the first third of 5th century were found near the tower.

The auxiliary fort was surrounded in the north and in the south by the Roman buildings and structures of the auxiliary vicus, known from small-scale excavations. On the basis of a military diploma found in situ, the house of the veteran Monnus, son of Tessimarus (who served in Annamatia until 157 A.D.) was in the vicus, to the north of the northern gate.

Research history:
♦ Excavation of the University of Pécs, Department of Archaeology (Zsolt Visy, Friderika Horváth, Andrea Vaday, Ferenc Fazekas, Antal Szabó, Zsuzsanna Péterfi) in the fort and in the vicus, since 1987
♦ Excavation by József Beszédes in the vicus, 1999-2015
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<td>88</td>
<td>Dunaszentgyörgy 6-os út 119 kmsz. – Lussonium 12. őrtorony</td>
<td>A Roman watchtower once stood on the hillock to the north of Dunaszentgyörgy, whose ditches are discernable in aerial photographs as well as on the ground. Parts of the western portion of the double ditch (2 meter deep, 3-4 meter wide) surrounding the tower were discovered during the remodelling of Route 6 at the excavation of Géza Szabó in 2006. The largest extent of the tower’s ditches – as compiled from the evidence – was 55 × 55 m. Géza Szabó could documented the gravel foundation layer of the Limes Road next to the tower, and the eastern ditch running along the Roman road, which was situated in fact almost directly below the present day Route 6. Research history: ♦ Excavation of Zsolt Visy, 1989 ♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011</td>
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<td>89</td>
<td>Fadd Bodzás-dűlő – Lussonium 9. őrtorony és limesút</td>
<td>The Lussonium – 9 watchtower with a square ground plan on the top of a hill to the north of Fadd is known from aerial photographs, but the southwestern line of its ditch can be distinguished on the surface as well. 4th century coinage found during field walks date the tower. The Roman road continues in a southerly direction with minor bends. It can be clearly discerned from aerial photographs and its gravel bed can be seen in places. Research history: ♦ Survey by Gábor Csizmadia, 1989 ♦ Excavation of Géza Szabó, 2006, 2011 ♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011</td>
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<td>90</td>
<td>Szekszárd/Tolna Mözsi-dűlő – Alta Ripa 2. őrtorony</td>
<td>This square shaped watchtower incircled by a rhombus-shaped double ditch with 42 meter long sides was able to be identified from a Google satellite image. The 4th century surface finds verified its existence. In 2010 the Institute of Archaeological Sciences of the Eötvös Loránd University (András Bódócs) performed geophysical investigations and excavations on the site, during which it was possible to investigate the rhombus-shaped ditch that was 2,5 meter deep, 4-4,5 meter wide, and another ditch that was 1 meter wide and deep. In a shallow object connected to the ditch Late Roman period ceramics were found. Research history: ♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011 ♦ Excavation and geophysical survey of the Eötvös Loránd University, Budapest, 2010 (excavation: András Bódócs) ♦ Survey by Krisztián Oross, 2015</td>
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<td>91a-e</td>
<td>Ócsény/Szekszárd Ördögvetettés – limesút</td>
<td>The causeway leading to the fort of Alisca has been known of for a long time. The northwestern end has been destroyed by the spread of the nearby town of Szekszárd. The remaining sections are clearly visible for about 2,200 m. The site was already known by Mór Wosinsky, who wrote the history of County Tolna with own survey and archaeological results in 1896. Its whole line can be followed on non-destructive archaeological prospection methods (aerial photos and survey). In 2010 Attila Czövek excavated the road (Limes Road section Ördögvetettés A, component part 91e) in one section and documented the 17 meter wide loess, sandy clay road embankment and the ditch with a V-shaped cross section stretching to the south of this. Features containing Hun period finds were dug into the surface of the road.</td>
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92 Őcsény Gábor-tanya – Alisca segédcsapat tábor és vicus
The Alisca auxiliary fort to the north-northeast of Őcsény is a Roman fort identified in an unusual location, on a ridge extending into the marshy floodplain of the Danube, but according to recent geographical evidence, it must have been situated at the bank of the Danube in Roman times. In Roman times the fort could be reached by a causeway (the Limes Road). The site was already known by Mór Wosinsky, who wrote the history of County Tolna with own survey and archaeological results in 1896.
No excavations have been performed on this auxiliary fort since then, its ground plan was only determined by the geophysical survey performed within the context of the project in preparation for the nomination. According to this, and to the finds documented during surveys, the fort, which certainly had already been erected in the end of the 1st century for the cohors I Vindelicorum milliaria c. R. pia fidelis. It was constructed with a double ditch and recessed towers and the stone fort period of the 2nd century was the garrison of the cohors I Noricorum equitata (we know of bricks with the stamps of the cohors VII Breucorum and the exercitus pannoniae inferiors from earlier survey). The fort was remodeled in Late Roman times, when a vexillatio of the legio II adiutrix used the fortification. The corner towers were reconstructed in a horseshoe shape in the 4th century and after the ditch closest to the wall was filled in, a new ditch was dug further from the wall. The traces of the vicus associated with the fort can be identified to the north and to the south of the castellum with a rich Roman find material on the surface.
Research history:
♦ Survey of Zsolt Visy, 2001
♦ Survey of Gergely Kovaliczky, 2005
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

93 Őcsény Soványtelek – Alisca 3. örtorony
This watchtower located on the eastern side of Route 56 was partially excavated between 1992 and 1994. It was an 7,6 × 7,6 m tower with 2.2–2.3 m thick walls and four large (2 × 2 m) pillars in its interior. In 2007 a 12-15 meter wide section of the enclosing ditch was also discovered by excavation. On the basis of the watchtowers of the same size with similar ground plans (Budakalász, Leányfalu, Visegrád – Lepence) it also had an enclosing wall that has not yet been discovered. Its construction can be dated to the 4th century, most probably to the reign of emperor Valentinian I on the basis of its finds and well dated analogies with the same construction and layout. Its fired destruction layer proves its abandonment after a fire as late as in the beginning or first third of the 5th century.
Research history:
♦ Excavation of Zsuzsanna Péterfi, 1992-1994
♦ Excavation of Géza Szabó, 2007
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert Lóki – Máté Szabó), 2008-2011

94 Bátaszék Kaniza-dűlő – útállomás
This road station was constructed on a rise next to the Lajvér Stream and was bounded by a 7–8 m wide surrounding draining ditch. The area enclosed by the ditch is 42 × 43 meters in size and the Roman building with the dimensions of 34 × 19 meter is located in the northern half of this area. The building divided into rooms by interior partition walls had terrazzo or packed clay floors, and one of them could be identified as a nearly 15 m² bathing room equipped with a hypocaust heating system. A significant portion of the coins and the terra sigillata discovered during the excavation can be dated to the end of the 2nd and first half of the 3rd centuries, and on the basis of this the heyday of the building can be placed in this period.
Research history:
♦ Survey of Zsolt Visy 1985
♦ Excavation by Ákos Gelencsér, Vera Majerik and Nicreklas Larsson, 2008-2009
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| 95    | Báta – Ad Statuas 2-3. örtornyok és limesút | The Ad Statuas – 2 watchtower is known from an aerial photo taken in 1950. In the spring of 2010 a more recent picture was taken of the tower. The identification of this tower surrounded by a double ditch (measuring about 50 × 47 m) is made certain by the Late Roman coin finds discovered here. The Ad Statuas – 3 watchtower surrounded by a ditch of about 32 × 32 m was first observed in the same aerial photograph made in 1950, like Ad Statuas 2 watchtower. A new image of it was taken in 2010. Coin finds from the 4th century have been found on the surface of the tower and in its surroundings.<br>
Limes Road: the present day Route 56 turns in a westerly direction to the north of Dunaszekcső near the county border. The Limes Road, which up until that point ran along the same path as the modern road from the auxiliary fort Ad Statuas via auxiliary fort Lugio continues on straight in a nearly northerly direction to the western part of the border of the town of Báta. The path of the road can be clearly distinguished and in several places its gravel surface can be seen. In the spring of 2010 a gas main being installed cut through the Limes Road, so its clay foundation and ditch could be seen in cross-section and its Roman origin could be proven. |
| 96    | Dunafalva – Contra Florentiam Lugio 1. kikötőerőd | The remains of the fortified river port have been visited and surveyed several times. After the small-scale excavations, visitations and survey of Antal Horváth, Mór Wosinsky, József Halász, András Mócsy and Mihály Köhegyi in the 19th and 20th centuries, the first extensive excavation on the site took place in 2008 by Zsolt Mráv. He could identify the structure of the central tower and some impressions of posts serving as foundations. The side walls and the corner towers were 3.5 m thick, and the remains of the wall of the southeastern corner tower survive, as well as a small section of wall of the northwestern corner tower. According to the finds, especially stamped bricks, the Roman structure was built during the reign of the emperor Valentinian (364–375). The *equites sagittarii* were replaced from Altinum to this fortification in the end of 4th century, it must have been used until the 430’s, when Pannonia was finally abandoned. The ruins were used In the middle ages again, according to a local legend, the church of the angels was situated on the site. |
| 97    | Dunaszekcső Halena – tégláégető kemence | According to survey evidence, Roman finds can be observed in a 50 × 50 m area in the cultivated fields to the west of Route 56. The surface finds – stamped bricks, tiles and ceramics – suggested for earlier research, that the site should have been a Roman watchtower, but the trial excavations of Olivér Gábor in 2012 have shown, that the Roman structure is a military brick firing kiln used by the Cohors VII Breucorum, whose military station was the auxiliary fort of Lugio. |
| 98    | Kölked Hajlok-part – Altinum segédcsapat tábor | After the less significant amateur digging carried out by bishop György Klimó in the 18th century, we have information about the precise location and structure of the auxiliary fort from the results of two minor archaeological investigations in the 1970s and 1980s, which have not been published (Ferenc Fülep and Zsuzsa Katona Győr). According to the excavation records and small finds collected from the site, a palisade fort was built in the last third of the 1st century AD, when the cohors / Lusitonomus was stationed there. Later the walls of the fort were reconstructed in stone. Sections have been cut into these walls several times during rescue excavations, and during the course of the project aimed at preparing the World Heritage nomination field... |
walking and geophysical survey using a magnetometer was performed on the fort.
In the area of about 6.5 ha surveyed, the image of a Late Roman fort built with oval,
U-shaped towers and fan-shaped corner towers took shape. During the Late Roman
period the fort was used by different auxiliary troops, such as the *equites sagittarii*
and the *cuneus equitum Fortensium*.
Research history:
♦ Collecting of archaeological finds in the 18th-19th centuries
♦ Excavation by Ferenc Fülep, 1975
♦ Excavation by Zsuzsa Katona Győr, 1986-1989
♦ Survey by Zsolt Visy, 1988
♦ Survey of the University of Pécs, Department of Archaeology (Zsolt Visy – Róbert
Lóki – Máté Szabó), 2008-2011
♦ Geophysical survey more times since 2009, Vera Szabó, Gábor Bertók
♦ Survey by Máté Szabó, 2017
Porta Praetoria of the legionary fortress in Regensburg