ROMAN CITY OF SISCIA
Sisak
CROATIA
IRPP SAAH
Integrated Rehabilitation
Project Plan
Survey of the Architectural
and Archaeological Heritage

REGIONAL PROGRAMME
FOR CULTURAL AND NATURAL
HERITAGE IN SOUTH-EAST EUROPE

Preliminary
Technical
Assessment

ROMAN CITY OF SISCIA
Sisak
CROATIA
FOREWORD

In the framework of the European Commission/Council of Europe Joint Programme on the Integrated Rehabilitation Project Plan/Survey on the Architectural and Archaeological Heritage (IRPP/SAAH), the present Preliminary Technical Assessment (PTA) of the « Consolidated Project » for the “Ljubljana Process – Funding Heritage Rehabilitation in South-East Europe”, was prepared by local experts: Dr. Branko Mušič, Ms. Tatjana Lolić and Mr. Tomislav Petrinec, headed by Mr. Bruno Diklic, IRPP/SAAH Project Co-ordinator.

This assessment was finalised with the assistance of the PTA expert group: Leader Dr. John Bold (United Kingdom); Experts: Mr. Martin Cherry (United Kingdom), Mr. David Johnson (United Kingdom), Mr. Friedrich Lüth (Germany), Mr. Alkis Prepis (Greece).

The Preliminary Technical Assessment (PTA) was adopted on 28 August 2006 by the Ministry of Culture of Croatia and was revised in July 2008 in order to reflect the “Ljubljana Criteria”.

1. INTRODUCTORY PAGE

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<thead>
<tr>
<th>Country or Territory</th>
<th>Republic of Croatia</th>
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<tbody>
<tr>
<td>Name of organisation compiling the information</td>
<td>Ministry of Culture, Conservation Department in Zagreb</td>
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<tr>
<td>Contact name</td>
<td>Tomislav Petrinec, BAArch</td>
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<td>Email address</td>
<td><a href="mailto:tomislav.petrinec@min-kulture.hr">tomislav.petrinec@min-kulture.hr</a></td>
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<tr>
<td>Name and address of building or site</td>
<td>Siscia – Sisak, Sisacko Moslavacka County</td>
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<tr>
<td>Inventory reference number(s)</td>
<td>Z 2767 KZG</td>
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<tr>
<td>Building/Monument/Site type</td>
<td>Archaeological site – remains of Roman town</td>
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<td>Main dates</td>
<td>1 – 4 century</td>
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<tr>
<td>Current use(s)</td>
<td>In its greatest part the site has not been uncovered. The uncovered parts have been presented &quot;in situ&quot;, archaeological park</td>
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2. EXECUTIVE SUMMARY, THE MONUMENT AND ITS MANAGEMENT

The urban agglomeration of the Roman Siscia is located in the south-west part of the Pannonian plains, between the Sava, Kupa and Odra rivers, beneath the old centre of today’s town of Sisak.

Siscia is one of the four most important towns of the Roman province Pannonia, the capital of Pannonia Savia. Far back, in the first century, it became the strongest Roman military outpost within the province intended for conquering the East. It is an important junction of road and river transport between Pannonia, Dalmatia, Italy and the East, it had a river fleet and a harbour. In the third century, the royal mint was established and Siscia became the centre of the bishopric.

Roman Siscia covered 40 hectares within the city walls. To this day, owing to archaeological excavations, representative public architecture has been found (granary/horreum, bath/thermae, harbour, the north forum, long stretches of city walls); representative residential architecture (domus); more simple residential architecture (insulae); town infrastructure (streets and sewerage system). Five necropolises have been discovered outside the town walls.
Today, the site is preserved solely on its archaeological level which is completely covered by 18-19 century today's town of Sisak.

Within urban structure there are several larger vacant zones intended through conservation and planning documentation to be future zones of an archaeological park.

The intention of the authorised Conservation Department and the town of Sisak is to present parts of the Roman town and therefore connect parts of history with today's urban reality.

3. ADMINISTRATIVE INFORMATION

3.1 Responsible Authorities

The Town of Sisak
Ministry of Culture, Agency for the protection of cultural heritage - Conservation Department in Zagreb

3.2 Building/Site, Name and Address

Siscia/Sisak, Sisačko – Moslavačka County

3.3 Map reference

N 45° 30″
E 16° 30″
Z 100 m

3.4 Type of monument

Archaeological site

3.5 Ownership

The state, town, church, private

3.6 Statutory Protection/Constraints

A registered archaeological zone. For any interventions inside the protected zone the Conservation Department within the Ministry of Culture should be consulted.

4. SUMMARY OF CONDITION

The Roman town of Siscia has been preserved only on the archaeological level. As contemporary Sisak developed directly on the remains of Siscia only the lower parts of Roman structures are preserved (2 metres above the foundation), as well as the Roman town infrastructure. The average relative depth of findings is 1 metre.
4.1 Summary of Physical Condition

- Poor
The preserved remains of Roman architecture are in good physical condition. Conservation of excavations during research is necessary to meet the needs of in situ presentation.

4.2 Condition Risk Assessment

Due to its specific position, the site is continuously and seriously under risk due to construction work for the current and future needs of a contemporary town.
H (preserved parts)
E (unexplored parts)

4.3 Priority for intervention

High

5. EXISTING INFORMATION

5.1 Documentary sources:

All the research of the already explored sites within the protected archaeological zone (1997-2005) is accompanied by standard archaeological – geodetic documentation: plans, geodetic records, plans of geophysical research, photographic documentation, video documentation, lists of stratigraphic units, and lists of movable findings

- Architectural measured drawing of the ground level of the historic urban centre of Sisak (Scale 1:500), 1982.

All the mentioned documentation can be found in the Conservation Department in Zagreb, Town of Sisak, and is available and at disposal for further usage.

5.2 Bibliography:

- L.F. Marsigli, Danubius Pannonico-Mysicus, Amstelodami, 1726;
- J. Brunšmid, Kameni spomenici Hrvatskog narodnog muzeja u Zagrebu, Zagreb, 1907; Maroević, Sisak, grad i graditeljstvo, Sisak, 1970;
- A. Faber, Graça za antičku topografijske Siska, Zagreb, 1972-73;
- J. Šašel, Siscia, RE, 1974; The Archaeology of Roman Panonia, University Press of Kentucky and Akademia KIado, Budapest 1980;
- M. Zaninović, Sisci u svojim natpisima, Zagreb, 1981;
- M. Zaninović, Classic Flavia Pannonica, Slavonski Brod, 1993;
- M. Hoti, Sisak u antičkim izvorima, Zagreb, 1993;
- D. Vuković, Siscia, vizija rimskog grada u Panonij, Sisak, 1994;
- M. Zaninović, Andautonija i Siscia u svjetlu Flavijevske politike, Zagreb, 1996;
- T. Lolić, Colonia Flavia Siscla, Ljubljana, 2003;
- Z. Wiewegh, Jugoistočna nekropola Siscije, Sisak 2003
5.3 Fieldwork already conducted:

Archaeological research:
1889 The first archaeological research was performed on the right bank of the Kupa River
1954 Town thermae were discovered on the left bank of the Kupa River
1985 Harbour installations were discovered on the river bed of Kupa on the location of the Mint
1990 A larger residential complex was discovered in A. i S. Radića Street /insulae/
1991 A larger stretch of east city walls was discovered in F. Lovrića Street
1997 The south stretch of the city walls with corner tower and a monumental building of the town granary were discovered on the location of St. Križ
1999 Wooden architecture from the period of foundation of Siscia was discovered in A. Starčevića Street
2003 The north forum was discovered on the location of St Kvirin
2004-7 The north town entrance with a section of the city wall was discovered on the location of St. Kvirin. The site is protected by a new enclosure.
2006 In the location of the primary school (“22 June”) part of the town quarters has been found. A large section of eastern city walls with a tower have been found in the I.K.Sakcinski street.
2008 A part of the town quarters and infrastructure have been found in the Starčević street. A part of Roman necropolis with sarcophagus and graves have been discovered. Part of Roman baths is discovered in the Roman street.

Geophysical research:
1999 The south stretch of the city walls was discovered in V. Nazor Park
2003 The north district of Siscia with fractions of the main street /cardo maximus/ was discovered on the location of St. Kvirin

The St Križ site (city walls, horrereum) was explored, documented and presented in situ in the period from 1997 to 2001.

Conserving archaeological research is planned and carried out during each construction work within the protected zone. Apart from conserving research, programming research is also carried out.

5.4 Projects in progress

St. Kvirin site (the north part of Siscia) is planned for the presentation as an archaeological park. The total area of the future park is 1.5 hectares. The north forum, the north town gate and a part of cardo maximus were discovered on this location through archaeological research that started in 2003.

The project is carried out by the Conservation Department in Zagreb within the Ministry of Culture.

5.5 Projects already planned

Continuance of archaeological research of the whole territory of the future St. Kvirin Park is planned along with conservation and presentation of excavations in situ.

Geophysical research of the whole site of Roman Siscia is planned with the intention of getting insight into the inaccessible structures beneath the town streets and squares and a clearer picture of the Roman urban matrix.

The project is carried out by the Conservation Department in Zagreb, within the Ministry of Culture.

5.6 Financial estimates already made

Complete financial estimates for complete realisation of the archaeological park have not been made until now.
Financial estimates are made on a yearly basis and apply to planned archaeological research and conservation of excavations.

For the continuance of the project of St Kvirin archaeological park for the year 2008, an estimate of 60 000 euros has been made, and is intended for the continuance of the research, conservation and partial construction of designed system of drainage.

Geophysical research of vacant and accessible zones of approximately 50% of Siscia area, are estimated at 230 000 euros

6. SCOPE OF THE PTA

6.1 Extent/Nature of the assessment

The people involved in the project:
Tatjana Lolić, archaeologist, Conservation Department in Zagreb
Tomislav Petrinec, architect, Conservation Department in Zagreb
Dr. Branko Mušič, geologist, Faculty of Philosophy of Ljubljana University, Archaeology Department
Town of Sisak

Time spent on the project: 7 days

6.2 Limitations of the study

On the protected archaeological zone of Siscia parts of the site are inaccessible due to urban development; and access to some parts of the site is limited because it is private property.

7. THE PTA

7.1 Background: form, function and development

7.1.1 Description of the building (please, see plans in Appendix)

The urban agglomeration of Siscia is located on the left bank of the Kupa River on the area of 40 ha within the city walls. Outside the walls are necropolises located around the approaching roads. The orthogonal street plan deviates from the usual north-south direction. In the last 50 years research has proved the existence of representative public architecture: *horreum*, *thermae*, a harbour, north forum, long stretches of city walls; representative residential architecture - *domus*, more simple residential architecture - *insulae*; parts of urban infrastructure - streets and a city sewerage system.

7.1.2. Summary historic development

The *Colonia Flavia Siscia* was established after Octavian had occupied these parts of the Pannonian territory in 35 BC. Due to its strategic significance connected with the navigable Kupa and Sava rivers, Siscia became in the course of the first century the most important military outpost, a starting point for conquering the East. It gained the status of an autonomous city (colony) in the year 71 during the reign of Flavian. During the reign of Gallienus in 230 the royal mint was established. Diocletian reformed the province of Pannonia dividing it into four parts and giving Siscia the status of capital of the Pannonia Savia. It became a bishopric in the III century. Siscia's continuity in late antiquity in the V and VI centuries is confirmed by activities by imperial mint and the existence of a diocese.
7.2 Summary statement of significance/historical and heritage

7.2.1 Valorisation

Founded for strategic reasons, Siscia developed into a strong military, economic, political and spiritual centre of the Roman province Pannonia.

The material remnants of building structure and urban matrix of Siscia, as well as the status and importance of the town in the Roman period, are of extreme importance for national and European experts.

The archaeological importance of the site lies in the specific situation of a town beneath a town which preserved the structure of a complete Roman town on the archaeological level and made its study and presentation possible.

Movable findings are extremely rich and significant and constitute a bigger part of the archaeological collection of the archaeological museum in Zagreb. The collection consists of epigraphic monuments, stone and bronze sculptures, metal objects for everyday use, pottery, weapons, military equipment and a coin collection.

The strength of the urban matrix of Siscia reflected itself in the rectangular feature of a classicist town of Sisak planned at the beginning of the 19th century. In this way, the idea of spatial organisation was transferred from the ancient times to the modern world. Except for transferring the matrix, the phenomenon of complete overlapping of dimensions of two towns built in two historically distant periods is present.

Therefore, in today's local community the awareness of the historical importance of Siscia is present so the local community cares about the preservation of its material remains.

7.2.2 Category

International

7.3 Vulnerability/Risk assessment.

In the past, the major reason for the degradation of Siscia was the decline of the Roman town and the end of ancient civilization which caused its gradual turning into ruins. Another form of degradation was caused by the appearance of the contemporary town directly on the Roman remains. Current risks to the site could emerge in case of uncontrolled construction work within the protected archaeological zone.

Exposure of the presented archaeological structure to the process of degradation due to climate influence natural threats also represents a risk. This risk is reduced by continual maintenance of the site and using contemporary conservation methods.

Natural Threats:
The undiscovered archaeological structure of Siscia could partly be exposed to the impact of underground waters due to the vicinity of three rivers. However, due to the fact that the majority of the structure is situated below ground level, it is not exposed to the impact of frost.

The discovered and presented structures are exposed to the impact of weather conditions, especially humidity and frost.

Development – demographic growth:
The discovered and presented structures are exposed to the impact of air pollution, situated in the urban surrounding with a lot of industry (refinery and ironworks)

The undiscovered structures can partly be exposed to the impact of underground filtered polluted waters.
Tourism:
The presented sites are exposed to vandalism manifested in occasional destroying of the urban equipment of the site, leaving rubbish and broken glass.

In the future we can expect an increased number of visits to the presented sites.

Until now, the system of sign-posts and routing of the archaeological zone of Siscia has not been made.

Looting:
On the territory of the protected archaeological zone of Siscia, illegal amateur excavations occur, aiming at finding movable archaeological material for collection purposes or illegal trade.

Archaeological excavation as a damaging factor:
Has not shown up in the last 20 years. A system of protective measures of archaeological heritage was made and is implemented within the archaeological zone of Siscia.

Lack of administration and legislation:
Awareness and sensibility of the community towards the archaeological heritage could be ranked as developed. Co-operation with the local authority is extremely good.

Occasional devastation of the archaeological structure is possible, caused by illegal and uncontrolled construction work on the ground floors and cellars of the existing buildings as well as yards of parcels which are mainly private property.

Structural destabilisation:
It is possible in case of a lack of proper conservation of findings or steadiness during deeper excavations.

Resources:
There is a lack of experts for the performance of conservation of the archaeological structures especially on occasions of extensive investigation. A problem could emerge when organising protective archaeological investigation and conservation of findings, if several larger interventions happen at the same time within the archaeological zone due to a lack of expert teams.

7.4 Technical condition

Insight into the technical condition of the archaeological structure is achieved during archaeological research. According to the insights we have into the technical condition at the moment of excavation, the structure is in a relatively good technical condition except in case of destabilised condition caused by recent penetration of other structures (infrastructure, graves from 17-19 C), Taking into account the density of construction and the urban character of the territory, we can estimate that up to 50% of the archaeological structure is destabilised. Every explored (found) structure should be immediately conserved. This should be done along with exploration because with a change in conditions, under the influence of weathering factors the connective material of walls and bricks ruins easily. Beside conservation, certain locations are planned to be partly reconstructed for the purpose of technical stabilisation of structure and recognition of the excavation. If delicate structures are found (frescoes, mosaics and similar) they are physically and technically protected using the method of in situ closing.

1. Broader Region / Environment
Description
The archaeological zone of Siscia is a completely urbanised and partially built area. Within the urban structure of the town of Sisak there are vacant zones which could be used for in situ presentation. The larger part of the town is a plain intersected by a dense network of rivers (the edge of Pannonia plain, Sava, Kupa, Odra). Apart from minor deviations of rivers, the historical topography is visible today. In the vicinity nature park of Lonjsko polje can be found. In the wider vicinity the traditional building from wood has been preserved. The site is exposed to dangers due to urbanisation, traffic and infrastructural corridors, weather conditions and pollution.
Reparis/interventions:
Planning and regulation of the area with the aim of preserving the archaeological heritage. Archaeological research, geophysical research, protection by burying, conservation, partial presentation.

2. Site
Description
A legal status of protection within the borders of archaeological zone has been established. Individual sites have been fenced and have organised admittance. Within the zone of protection until now 5% of the area has been explored (The remaining area which has not been dug contains the main part of the urban structure of Siscia. Structural damage due to construction work, weather conditions and pollution is present.

Reparis/interventions:
Archaeological research, geophysical research, protection by burying, conservation, partial presentation, constant maintenance of presented excavations and planned integration of archaeological structures in the urban unity, improvement of preserving conditions.

3. Monuments
Description
The remains of buildings of the Roman Siscia; within the urban structure residential and public buildings are present, city walls, mercantile buildings, town roads, infrastructure. Remains of wooden architecture from the 1st Century have been found. However, the majority of the preserved structure consists of buildings made of brick and stone. Stone was most often used for the construction of the foundation, and the brick for the superstructure. The roofs were covered by tiles. On areas of bad foundation ground, wooden piles were laid down as a foundation. Town roads and public places were laid in stone. Fragments of mortar with frescoes and mosaic parts have been found. Structural damage due to construction work, weather conditions and pollution is present.

Reparis/interventions:
Archaeological research, geophysical research, protection by burying, conservation, partial presentation, constant maintenance of presented excavations and planned integration of archaeological structures in the urban unity, improvement of preserving conditions.

4. Public Facilities / Site Presentation
Description
The presented areas are situated in the very centre of the town of Sisak in public areas (square, park) so pedestrian access is available. Public parking places can be used for parking. The equipment connected with the presentation of the site is periodically damaged due to weather conditions and vandalism.

Reparis/interventions:
Guarding, maintaining

7.5 Outline summary of required repairs
Periodical maintenance of archaeological structure and urban equipment should be performed. All the explored parts of structure should be consolidated, conserved and partially presented. Protected archaeological research as well as protection and conservation of excavations that are carried out during construction work, are performed successively for each individual case. Planned research is carried out phase by phase on designed sites in this order: research, documentation, conservation, presentation.
7.6 Conservation policy and proposals

7.6.1. Summary of the vision for the monument and its sustainability

Due to the importance of the Siscia site, the need to protect and present all the segments of the archaeological structure wherever it is physically possible was imposed. It is expected that the majority of sites in public places will be presented. The town manages the sites with the supervision of the Conservancy Department in Zagreb. Specialist expertise of the Sisak Town Museum is expected. Wider interest is expected, along with the corresponding tourist and economic effects.

7.6.2 Conservation philosophy

The aim and intention are to present the Siscia site to the wider and expert public as part of the town's identity and a dominant factor of the cultural heritage of Sisak. Exceptional scientific and historical importance of the site and the phenomenon of two urban structures on top of each other justifies the intention of presenting the authentic material remnants of a Roman town, the capital of a Roman province, to the public. Original material found during research is mostly used for the conservation of excavations that are to be presented.

7.6.3. Level of intervention

Reinforcement, conservation and presentation of the surviving structures is to be carried out, along with the construction of necessary elements of physical and technical protection of the site and excavations as well as implementation of the necessary urban equipment.

Reconstruction has not been planned.

7.6.4. Preliminary proposals for adequate use

Implementation of a network of presented sites with an educative, cultural, scientific and tourist purpose.

7.6.5. Opportunities for social uses and sustainable development

Through this project the town will be enriched with attractive cultural, scientific and tourist significance. The total value of the town area will be increased as well as the culture and pleasure of living in the town of Sisak.

This concept anticipates the creation of a mechanism for governing, maintaining and popularising of cultural values through employing experts from the local area.

7.6.6 Broad assessment of priorities

Realisation of the project of St. Kvirin archaeological park. Research in phases and successive conservation and presentation of excavations are anticipated through this project.

7.6.7 Public access

The project enables complete access to the public.

7.6.8 Other benefits

A wide audience could be involved in this project through different additional activities, such as educative activities, cultural and artistic programmes.
7.7 Finance

7.7.1. Broad assessment of budgetary needs and phasing

According to the expenses of the realised presentation of the archaeological site St. Križ, it is estimated that the final realisation of the archaeological park St. Kirin covering the territory of 1.5 hectares would be 1.5 million euros.

7.7.2. Assessment of possibilities for attracting investments

No such estimate has been made.

7.7.3. Assessment of possibilities for recovering investments

No such estimate has been made.

7.7.4. Have you already tried to raise funds for this site or monument?

Funding of the protected research and realisation of the archaeological park on the areas of St. Križ and St. Kvirin has been requested from the Town of Sisak and the Ministry of Culture of the Republic of Croatia.

7.7.5 Funds received for structural repair so far

The Sveti Križ site was explored, documented and presented in situ in the period from 1997 to 2001. It was funded by the Ministry of Culture and the Town of Sisak.

In the period of 2003-2008, the town of Sisak and the Ministry of Culture provided 500 000 euros for protected research of the Sv. Kvirin site, and the beginning of the realisation of the archaeological park.

7.8 Management

The Ministry of Culture is responsible for the protection of the site. Representatives of the authorised conservation department and the Town of Sisak created a coordination committee for the realisation of the archaeological park at the location of St. Kvirin.

Short term activities refer to annual cycles or phases which form the research-documentation, conservation of excavations and making analysis and projects. For the realisation and endurance of the project the following experts are needed: archaeologists, architects, restorers, geologists, geodesists, geometricians, hydrologists, museologists and management experts.

Due to the importance and scope of the archaeological heritage, high level of protection and local awareness, a significant strengthening of the archaeological segment of the Sisak Town Museum is necessary or the founding of a local archaeological museum that could take over the management of the presented sites. The role of the town of Sisak, Sisačko – Moslavačka Province, Sisak Town Museum, Tourist association, local cultural institutions and associations are also important.

8. DOCUMENTATION

See Appendix

01 – the location of Siscia on today's plan of Sisak
02 – research of the Roman harbour, 1985
03 – St. Križ site, presenting the city walls with the tower and horreum, 1997-2001
04 – St. Kvirin site, plan of geophysical and archaeological research, 2003
9. FEASIBILITY STUDIES

Suggested elements for feasibility study:
- unification and analysis of the existing documentation (the emphasis is on plans);
- geophysical research (St. Križ and St. Kvirin sites - completed);
- assessment of the present condition of the whole site;
- archaeological assessment and conservation programme of the whole site – unique, planned system of protection;
- assessment of technical solutions and equipment for restoring the basic foundation (St. Kvirin site - completed);
- choice of locations and projects for in situ presentation;
- proposal of treatment and presentation of movable material;
- assessment of integration of sites into urban plans;
- assessment of expenses and defining the role of sites in economy, education and cultural awareness of a community;
- use and management (Town of Sisak).

PTA Report carried out by

Tatjana Lolić, archaeologist
Tomislav Petrinec, architect

Date: 14 October 2005, revised in 2008