Integrated Rehabilitation Project Plan
Survey of the Architectural and Archaeological Heritage (IRPP/SAAH)

Plan pour la mise en œuvre de projets de réhabilitation intégrée
Evaluation du patrimoine architectural et archéologique (IRPP/SAAH)

Feasibility Study

Regional Programme for Cultural and Natural Heritage in South East Europe
Programme régional pour le patrimoine culturel et naturel dans le Sud-Est de l'Europe

ROMAN TOWN OF SISCIA
Sisak
Croatia
Regional Programme
for Cultural and Natural Heritage
in South East Europe
2003 - 2008

FEASIBILITY STUDY

Document adopted by
the Ministry of Culture of Croatia
on 28 November 2006

ROMAN TOWN OF SISCIA
Sisak
Croatia
FOREWORD

In the framework of the European Commission/Council of Europe Joint Programme on the Integrated Rehabilitation Project Plan /Survey of the Architectural and Archaeological Heritage (IRPP/SAAH), the present Feasibility Study (FS) was prepared by the following local expert: Tatjana Lolic headed by Bruno Diklic, Project Co-ordinator, in co-operation with the Project Leader Dr. John Bold and expert Mr. David Johnson.

The Feasibility Study (FS) was adopted on 28 November 2006 by the Ministry of Culture of Croatia.
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I. INTRODUCTION

The Roman town of Siscia, situated beneath the old centre of today's town of Sisak, was one of the four most important towns of the province of Pannonia, with great military and strategic significance. Archaeological research has revealed the town walls and a considerable number of buildings. The presentation and, where possible, the display of these findings in archaeological parks would not only bring the past to life but would also demonstrate its connection with the existing town. Abandoned industrial buildings will be used for the cultural and scientific functions, including tourism, which will be developed as a fundamental component of the investigation, preservation and presentation of the Roman town. The approach to be adopted here may be regarded as an exemplary model, with the potential to be applied to other Roman sites in former Pannonia and thereby allowing the possibility of cross-border collaboration with Slovenia, Hungary, Austria and Serbia.

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II. SITE – Executive Summary & Proposal for the future

1. Executive summary

The urban agglomeration of Roman Siscia is located in the south-west of the Pannonia plains, between the Sava, Kupa and Odra rivers, beneath the old centre of today's town of Sisak. Considering Roman standards, an average municipal territory did not exceed a diameter of 50m. The territory of Siscia must have extended to the southwest of the territory of Andautonia, and to the east of Servitium. The southern border of the municipal territory might have been the southern boundary of Pannonia.

Siscia was founded after the conquest of Celtic Segestica, which was situated on the right bank of the river Kupa. However, the relationship between these two towns remains unclear.
Siscia was one of the four most important towns of the Roman province of Pannonia, the capital of Pannonia Savia. In the 1st century, it became the strongest Roman military outpost within the province intended for conquering the East. It is an important junction for road and river transport between Pannonia, Dalmatia, Italy and the East, and it had a river fleet and harbour. In the 3rd century, the royal mint was established and Siscia became the centre of the diocese.

Roman Siscia covered a surface of 40ha within the city walls.

Archaeological research has revealed the position of the city walls in several locations, defining the southern and northern, and partly western and eastern boarders of the civil area of Siscia, that is the very core of the town itself.

The remains of the city gate dominated by a triumphal arch have been discovered on the farthest northern position.

A large city bathing area from the 2nd-4th centuries has been discovered on the banks of the river Kupa, a complex consisting of two great halls of about 240m², with a caldarium, prefurnium and pool.

A monumental granary building from the 4th century, covering a surface area of about 800m² has been discovered on the southern outskirts of the town.

A small square from the 2nd-4th centuries has been discovered on the northern outskirts of Siscia, together with the remains of a sanctuary and a luxurious set of marble wall panels, moulded marble beams, parts of an altar.

Part of a patrician urban villa complex from the 2nd-4th centuries has been discovered in the very centre of Siscia, with a representative room with apse-formed walls, fresco paintings with geometrical and vegetable motifs from the end of 2nd century, and parts of a floor mosaic. A more modest residence for many families, from the time of the Flavians, has been discovered in the A. and S. Radićeva street.

Between the two bridges in Sisak and in the actual riverbed, on the location called the “Mint”, a great area has been excavated, with hundreds of wooden piles covered with broken bricks and tiles and the remains of a sunken wooden launch. The wooden piles represent the remains of a Roman quayside built partly above the water, and partly above a flooded stretch of the river bank.

Even though the question of the military camp’s position still remains unanswered, a great quantity of military equipment was recovered from the Kupa River after dredging the riverbed. Outside the town walls (on the northern, eastern, southern and western side) there is an area of five necropolises.

Parts of the urban infrastructure have been discovered in several places; streets, drainage canals, parts of the water supply system, town sewage system and a great quantity of movable archaeological material. These are stored in the Archaeology Museum in Zagreb and the City Museum in Sisak (coin collection, stone, metal, ceramic, wood and leather findings).

The creation of the Roman town of Siscia was influenced by the existence of a military base and by the geographic features of the location. In the first decade of the 1st century parts of Siscia were built of wood. Construction with hard materials, brick and stone, became the rule in the second half of the 1st century. During the reign of the Flavians the basic town planning was completed.

The economy of Siscia was dependent on military needs and was based on production, crafts and trade. Metal working was the most important industry. Due to the iron mines in the Japra and Sana valley, the royal mint was established in 262 and was functional until 6th century.

Siscia became Christian in the middle and late 3rd century. The Bishop of Siscia, St. Quirinus, was the last of the Pannonia martyrs whose remains were transferred from Pannonia to Rome.
2. **Goal / Proposition for the future**

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

Using archaeological research, conservation, presentation of the findings and other kinds of research (aero-photography, geophysics), the goal is to discover and present, to the fullest extent, the urban planning and structure of Siscia (and Segestica). Furthermore, it is planned that the concept of archaeological parks in vacant zones will continue.

The idea is to revive prehistory-antiquity as an integral part of the contemporary urban reality, and enable insight into the first-class, fascinating archaeological site by reconstructing a segment of history, using the existing capacity of abandoned industrial architecture for the purpose of directing the town’s economy towards culture and scientific tourism, and transforming the existence of a site of such magnitude into an advantage.

Also, to open exchanges with towns and regions with similar problems and raise living conditions – the feeling of belonging and originating from a mutual middle European and Mediterranean ancient cultural history; to rise from the provincial setting of Sisačko-moslavačka County.

Also, there are plans to organise exchanges with towns and regions with similar problems and to raise living conditions. It is also hoped to create a feeling of belonging and common origins dating to middle European and ancient Mediterranean cultural history, and rising from the provincial setting of Sisačko-moslavačka County.

Moreover, management of the site for the purpose of quick interventions and maintenance of the existing archaeological parks will be established, and within the management plan, to set up an interpretation centre – for restoration workshops, to define a scientific framework on site specific and targeted research aspects, for lectures, a multimedia centre with information about the current stage and recent planning of the on-going project, and an editorial board for publications.

3. **Administrative information and legal status**

It is a registered archaeological zone. Methods and project implementation are determined by the Act on the Protection of Archaeological Heritage. Any intervention within the registered protected zone must be approved by the authorised Conservation Department in Zagreb, of the Ministry of Culture of Republic of Croatia. Admittance to the site is enabled thanks to the agreement with the owner of the plot, that is, of the zone where the findings have been discovered.

**Responsible Authorities:**
- the town of Sisak;
- the Ministry of Culture, the Agency for the Protection of Cultural Heritage, the Conservation Department in Zagreb.

**Building/site name and address:**
Siscia/Sisak, Sisačko, Moslavačka County.

**Map reference:**
N 45° 30”
E 16° 30”
Z 100m

**Type of monument:**
Archaeological site
Ownership:
The state, town, church and private

Statutory protection/constraints:
A registered archaeological zone. For any interventions inside the protected zone the Conservation Department in Zagreb, within the Ministry of Culture, should be consulted.

III. STRATEGIC ASSUMPTIONS: Legal, financial, cultural, political sustainability

The strategy implicates finding institutions that are willing to participate as professional, financial, developmental and economic-political support in a complex and long-term plan to achieve the goals.

1. Legal constrains, regulations

- The Act on the Protection and Preservation of Cultural Heritage of Republic Of Croatia, 1999;
- Regulations on Archaeological Research, 2005;
- The Act on Museums, 1998;
- Regulations concerning the Means and Yardsticks for Joining the System of Museums of the Republic of Croatia, 2002;

Physical planning documentation:
- General town plan of Sisak, 2001;

2. Assumptions/Significance

The archaeological site is of international importance (antiquity, the capital of a Roman province, harbour, military base, Episcopal See, royal mint). It developed next to Segestica, one of the most dominant prehistoric Celtic towns.

3. Context

Today, the site is preserved solely on an archaeological level which is completely covered by today's town of Sisak. The archaeological zone of Siscia is a completely urbanised and partly built area. Within the urban structure of the town of Sisak there are vacant areas that could be used for presentation in situ.

4. Condition

Insight into the technical condition of the archaeological structure was achieved through 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 the case of destabilisation caused by the recent penetration of other structures (infrastructure, graves from 17th-19th centuries). 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.

Preliminary protective archaeological research and excavations within a narrow zone are carried out for any ground construction interventions. The research results constitute part of the project documentation and affect the planning approach in this area.

All construction works are subject to the procedure regulated by law (conditions, expert opinions, agreements, etc.) which include ground work.

Presentation possibilities are predicted (or are already done) at the following locations:
- the length of the promenade along the Kupa river (beginning of research);
- the area of the archaeological park of St Quirinus (beginning of research and conservation process);
- the area of the archaeological park of The Holy Cross (already exposed site with the possibility of extension).

5. Risk

The permanent endangered condition of the site is caused by its position beneath the contemporary town, erected on the remains of Roman Siscia. Two towns, one beneath the other, from the historically distant periods. Danger from contemporary construction and renovation of infrastructure.

6. Financial sustainability

At the moment, the possibility of financial sustainability exists due to regular financing from the budget of the Republic of Croatia or the town of Sisak. However, in that case, the duration of the project’s realisation is estimated on a long-term basis.

7. Cultural context

Sisak is an industrial town. The way of living of the urban population is compatible with a developed cultural awareness. Social environment with the world-famous surf band “Bambi Molesters” and the European renowned Croatian amateur theatre ensemble “Daska” (Edinburgh and Avignon festivals).

8. Political sustainability

Compatible with the prevailing attitude and aims of the state’s cultural policy and political system.

IV. DETAILED PROJECT COMPONENTS

1. Gathering and uniting of the existing documentation and bibliography

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

- Architectural picture 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, it is available for further use.

Basis: Cadastre 1:1000, Croatian state map 1:5000, aero-photography, ortho-photo areas of Sisak.

2. Plan for research (archaeology)

Plans for archaeological research according to the existing information (resources, past research).

All plans implicate determining zones of research, estimates of research duration and of research expenses:

- plan for archaeological research of Siscia refers to the vacant area in Sisak – research zones of the town of Siscia, necropolis, access roads, territory of Siscia;
- plan for research of the entire registered zone of the archaeological site by means of protection regulations for built zones, zones of future building interventions that imply protective research;
- plan for archaeological research of Segestica – that is, vacant areas of the Pogorelec site. The plan requires research zones to be determined (duration and expenses) and risk estimates of excavating the archaeological site of Segestica, taking into account the fact that the findings concern a wooden structure of a lakeside-dwelling settlement from the 6th century BC;
- plan for research of the Kupa river, topography of the site from the Odra and Kupa confluence to the Kupa and Sava confluence. Protection of the Kupa riverbed as an underwater site;
- hypothetical definition of the site’s zone according to ancient sources: Forum, Mint, military base, Tiberius trench, Christian basilica, Episcopal See, Siscia workshop and archaeologists.

3. Plan for research (geophysics)

- Estimates of the entire area where it is possible to carry out geophysical research.
- Estimates of the appropriate methods according to the situation on the location. (Geophysicists).

4. Conservation-restoration documentation

- Estimates of the condition of the archaeological-architectural structure.
- Prescriptions for bonding mortars based on the previously completed chemical analysis of the material – composition and quality, porosity, resistance to brick, stone and plaster freezing, etc.
- Estimates of the structure’s viability in the open air (decide whether to permanently cover the archaeological structures or not).
- Determining types of restoration experts required based on the conservation documentation (brick, stone, fresco, mosaics, metal, wood). Conservators-archaeologists and architects.
- Determining the presentation zone in situ.

5. Projects (engineers)

- Structural repair project for particular multi-layered parts of the architecture of wider altitude range.
- Geotechnical research.
- Drainage system that solves underground and precipitation water. Must adjust itself to the results, considering the well-known problem of underground water owing to the close vicinity of the Kupa river, with its water level being at the same time the reading of site’s underground water level (monitoring of the water level has been carried out for 50 years). Civil engineers, developers.

6. Planner’s documentation

- Estimates of possibility of the site functioning within the contemporary town system.
- Traffic solutions for the exposed sites.
- Find a solution for admitting visitors and tourists (buses, toilets, info posts, etc.).
- Elaborate the possibility of using the existing capacities: architects, town planners.
- Unification of the urban equipment.

7. Management plan

- Site management plan.
- Consideration of uniform site markings: directions, according to EU regulations.
- Printing material: popular, but based on precise data. Site management.

8. Plan for site maintenance

- Drafting a site maintenance plan with precise distribution of maintenance jobs and contracts for firms and experts for the annual care of the site (damage repairs, cleaning etc.). Site management.

9. Plan for connecting Roman pannonian sites: Slovenia-Croatia-Hungary-Austria-Serbia

- Interrelating Siscia, Andautonia, Poetovio, Sirmium and Carnuntum.
- Possibility of travelling via approximate routes of Roman main roads, e.g. Via Flavia.
- Tourist connection with the tourist board of the Roman area of Pannonia.

10. Plan for establishing an interpretation centre

- Determine a location for an institution of such character.
- Estimate the possibility of using the existing capacities of abandoned industrial architecture sites.
- Plan interior of the centre (display of movable archaeological material, workshops, lecture-rooms, and gallery).
- Determine equipment for the Museum’s documentation centre.

11. Analysis of the impact on the town’s economy

- Predict profit from investors (indirect profit).

V. PARTNERS – different levels (professional, political, etc.)
- Ministry of Culture;
- Ministry of the Sea, Tourism, Transport and Development;
- Ministry of Science;
- Town of Sisak, expert facilities and political leadership;
- Department of Archaeology at Faculty of Arts;
- Faculty of Architecture, University of Zagreb;
- Academy of Fine Arts, Department of Restoration;
- Croatian Conservation Institute, Department of Underwater Archaeology;
- Museum Documentation Centre

VI. PLAN OF ACTIVITIES: executors, duration, budget

<table>
<thead>
<tr>
<th>Description of activity</th>
<th>Executing Entity</th>
<th>Experts/Participants</th>
<th>Duration of Activity</th>
<th>Budget (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathering and uniting existing documentation and bibliography (plans, textual explanations on the plans)</td>
<td>Ministry of Culture – Conservation Department, Zagreb</td>
<td>Archaeologists, Architects</td>
<td>1 month</td>
<td>1 000</td>
</tr>
<tr>
<td>Research Plan (archaeology)</td>
<td>Ministry of Culture – Conservation Department, Zagreb; Faculty of Arts; Croatian Restoration Institute.</td>
<td>Archaeologists</td>
<td>2 months</td>
<td>1 000</td>
</tr>
<tr>
<td>Research Plan (geophysics)</td>
<td>Faculty of Philosophy, Ljubljana University; Archaeology Department</td>
<td>Geologists, Archaeologists</td>
<td>2 months</td>
<td>2 000</td>
</tr>
<tr>
<td>Conservation-restoration documentation</td>
<td>Ministry of Culture – Conservation Department, Zagreb; Laboratory for material analysis; Academy of Fine Arts.</td>
<td>Conservators, Restorers, Chemists, Surveyors.</td>
<td>3 months</td>
<td>5 000</td>
</tr>
<tr>
<td>Projects (engineer’s)</td>
<td>Competition</td>
<td>Civil engineers</td>
<td>3 months</td>
<td>20 000</td>
</tr>
<tr>
<td>Planner’s documentation</td>
<td>Faculty for Architecture; Department for Urban Planning.</td>
<td>Architects</td>
<td>3 months</td>
<td>15 000</td>
</tr>
<tr>
<td>Management Plan</td>
<td>Ministry of Culture, Directorate for Cultural Heritage</td>
<td>Conservators</td>
<td>2 months</td>
<td>-</td>
</tr>
<tr>
<td>Site Maintenance Plan</td>
<td>Ministry of Culture, Directorate for Cultural Heritage; Municipality of Sisak.</td>
<td>Conservators, Municipal expert services, Curators.</td>
<td>2 months</td>
<td>-</td>
</tr>
<tr>
<td>Plan to connect Roman Pannonia sites: Siscia, Andautonia, Poetovio, Sirmium, Carnuntum (Slovenia-Croatia-Hungary-Austria-Serbia)</td>
<td>Ministry of Culture – Conservation Department, Zagreb; Tourist agencies.</td>
<td>Archaeologists, Tourist experts.</td>
<td>2 months</td>
<td>1 000</td>
</tr>
<tr>
<td>Plan to establish interpretation centre</td>
<td>Ministry of Culture</td>
<td>Economists</td>
<td>3 months</td>
<td>-</td>
</tr>
<tr>
<td>Plan on influence on town</td>
<td>Development agency</td>
<td>Economists</td>
<td>3 months</td>
<td>2 000</td>
</tr>
</tbody>
</table>
VII. REQUIRED PERSONNEL & EQUIPMENT (need for specialised training)

1. Personnel
Various experts within the government and local administration and conservation departments:
- Architects-planners, town planners;
- Restorers for fresco, mosaic, metal, ceramics etc.;
- Conservators for brick, stone, wood and wet wood;
- Geologists;
- Civil engineers, geo-mechanists;
- Economists and managers.

2. Equipment
- Supply interpretation centre with equipment (laboratory, restoration workshops).
- Tourist information equipment for exposed sites
- Equipment required for training conservation experts.

VIII. POSSIBLE PROBLEMS
Location of contemporary Sisak on the remains of the Roman Siscia. This does not leave room for planning the presentation of the Roman architectural structure in broader stretches, with the exception of the vacant outskirts of the town.

The Act on the Protection of Archaeological Heritage does not define the presentation of the site in situ. This is an issue of conservation, to be decided by a selected commission, as well as a matter of state financing.

The majority of the Feasibility Study will be based on the assumptions gathered from a small sample of the data received from the discovered structures (explored structures – 5%: unexplored, 95%)

Croatia is unfamiliar with an institution such as an interpretation centre – it needs to be formally defined

IX. ALTERNATIVE PLAN
Should the implementation of the plan be cancelled due to any kind of difficulties, regulations for registered archaeological heritage from the Act on the Protection of Archaeological Heritage should be applied?

This Feasibility Study has been carried out in consultation with the local administration of the town of Sisak.

Compiled by: Tatjana Lolic, conservator
A joint initiative of the European Commission and the Council of Europe

Une initiative conjugée de la Commission européenne et du Conseil de l'Europe

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