

**Ministry of Culture of Ukraine
National Commission of Ukraine for UNESCO
Tauric Chersonese National Preserve
Institute of Monument Protection Research**

**Management Plan
for the Cultural Property**

**Ancient City of Tauric Chersonese and its Chora
(5th century BC – 14th century AD)**



Sevastopol – 2011

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1. INTRODUCTION

This Management Plan for the property 'Ancient city of Tauric Chersonese and its Chora' is a provisional document only. A more comprehensive document, the Territory Organization Plan for the Tauric Chersonese National Preserve, has been under development since 2010, as required by Article 33 of the Law of Ukraine on Cultural Heritage Protection. In accordance with the said article, historical and cultural preserves' territory organization plans are to contain projects related to research, protection, preservation, maintenance and exploitation of the cultural heritage managed by the administrations of these preserves.

Accordingly, the Territory Organization Plan for the Tauric Chersonese National Preserve will include a number of measures for legal and factual protection of the monuments and protected areas administered by the Preserve (some of such measures have already been approved and implemented), action programmes aimed at effective research, conservation, monitoring and display of the ancient structures of the city of Chersonese and its chora as well as functional zoning of the areas administered by the Preserve with appropriate account taken of the steadily growing number of visitors (both tourists and pilgrims) to the Preserve.

The Territory Organization Plan for the Tauric Chersonese National Preserve is expected to be finalized and adopted between 2012 and early 2013. All the relevant amendments will then be introduced into this Management Plan, which has been developed for the property 'Ancient city of Tauric Chersonese and its Chora' as a potential World Heritage site and covers only some of all the sites and monuments administered by the Tauric Chersonese National Preserve.

1.1. General description of the property

The ancient city of Tauric Chersonese and its chora lie on the Heracleian Peninsula (southwestern extremity of the Crimean Peninsula) within the boundaries of the present-day city of Sevastopol (Ukraine) (Fig. 1).

The property is basically the remains of the ancient complex of urban and agricultural structures which emerged in the 5th and 6th centuries BC as a result of ancient Greek colonization of the Northern Black Sea region and existed up till the 14th century AD. Since there was no development in the city of Chersonese and in most of its agricultural chora in later epochs, their ancient monuments covering a period from Hellenism to late Middle Ages show a high degree of preservation.

At the moment, the property consists of 7 component parts, totalling 267,4848 ha, with extant buildings and demarcation structures dated to the ancient and medieval periods, namely (Fig. 2):

- Component part № 001 of the city of Tauric Chersonese,
- Component part № 002 in the Yukharina Gully,
- Component part № 003 in Berman's Gully,
- Component part № 004 on the Bezymyannaya Height,
- Component part № 005 in the Streletskaya Gully,

- Component part № 006 on the isthmus of the Mayachny Peninsula,
- Component part № 007 on Cape Vinogradny.

All the areas listed above, together with the monuments lying within their boundaries, are managed centrally by the Tauric Chersonese National Preserve, which reports to the Ministry of Culture of Ukraine.

In the future, the property the Ancient City of Tauric Chersonese and its Chora is projected to be expanded by obtaining protected status for some other sites in the Chersonese chora and having them placed under the control of the National Preserve to be subsequently developed as an archaeological park, the first of its kind in Ukraine.

1.2. Sources and foundations

In 1996 the property the Ancient City of Tauric Chersonese and its Chora, then under the name of the 'Ruins of the Ancient City of Tauric Chersonese', was inscribed on the World Heritage Tentative List in accordance with Paragraph 62 of the 1972 UNESCO World Heritage Convention. However, as in the process of preparing the property nomination the Chersonese chora (agricultural hinterland of the ancient city) was rediscovered as a highly valuable subproperty, the nominated property was redefined.

The present management plan is appended to the nomination dossier for the property as its indispensable part. The plan has been developed in accordance with the requirements specified in the *Operational Guidelines for the Implementation of the World Heritage Convention* (Section II.F Protection and Management) substantiating the necessity for efficient management of all kinds of World Heritage properties and takes into account the principles set out in the *Management Guidelines for World Cultural Heritage Sites* by B. M. Feilden and J. Jokilehto published in 2008 by ICCROM on behalf of UNESCO and ICOMOS. The plan complies with the relevant Ukrainian legislative regulations as well as the principal provisions of all the national and international regulations regarding protection and exploitation of cultural heritage sites.

This management plan is based on an earlier document drawn up in 2006 by Prof. H. Cleere and T. Bushnell on the initiative of the Institute of Classical Archaeology at the University of Texas in Austin (USA) and a number of recommendations made by independent experts such as Prof. B. von Droste, Dr R. Schmidt, Dr A. Rabinovitz etc, who were really helpful in providing assistance in identifying challenges facing the property and suggesting appropriate solutions.

Currently, management of the cultural heritage at the Tauric Chersonese National Preserve is regulated by the following state and ministerial acts:

- Decree No. 587/94 of the President of Ukraine on National Cultural Institutions (dated 11 October 1994);
- Statutes of the Tauric Chersonese National Preserve (adopted by the Order No. 917/0/16-08 of the Ministry of Culture and Tourism of Ukraine of 18 August 2008);

- Comprehensive Programme for Archeological Investigation of the Complex National Archeological Heritage Property 'Ancient City of Tauric Chersonese' (adopted by Order No. 90/0/16-10 of the Ministry of Culture dated 26 February 2010);

- Comprehensive Programme for Conservation and Restoration at the Complex National Archeological Heritage Property 'Ancient City of Tauric Chersonese' (adopted by Order No. 90/0/16-10 of the Ministry of Culture dated 26 February 2010);

- Territory Organization Plan for the Tauric Chersonese National Preserve: Boundaries and Land Use Regimes of the National Archaeological Heritage Property 'Ancient City of Tauric Chersonese' (adopted by Order No. 220/0/16-11 of the Ministry of Culture dated 6 April 2011).

In addition to that, a number of projects, programmes and proposals have been developed and are currently under consideration for adoption by the Ministry of Culture of Ukraine. These include:

- Territory Organization Plan for the Tauric Chersonese National Preserve: Schemes of Zoning, Access Ways and Visitation Routes;

- Project of Boundaries and Land Use Regimes for the Buffer Zones of the Cultural Property 'Ancient City of Tauric Chersonese and its Chora';

- Concept State Development Programme for the Tauric Chersonese National Preserve until 2015;

- Comprehensive Programme for Archeological Investigation, Restoration and Conservation on the Chora Plots on the Heracleian Peninsula in Sevastopol;

- Concept for Creation of an Archaeological Park in the City of Sevastopol on the Sites Located within the Tauric Chersonese National Preserve Sites.

Final versions of all the sections of the Territory Organization Plan for the Tauric Chersonese National Preserve with detailed solutions to the challenges set out in this management plan should be developed in 2012 – 2013.

1.3. Goals and objectives of the management plan

Management and planning of a cultural heritage property should be valued. In other words, management is to ensure preservation and interpretation of those aspects of cultural heritage – archaeological, historic, architectural, cultural, aesthetic, patriotic etc – which make up its value and for which the property is protected and made accessible, both physically and intellectually, to national and foreign visitors.

In terms of practical management, the basic objectives of the management plan are (according to B.M. Feilden and J. Jokilehto):

- a. Ensuring *statutory protection* of the sites at national, regional and municipal levels as well as integration of their interests into state and municipal development programmes, tourism programmes etc;

- b. Creating and ensuring the operability of an overall integrated *management structure* from national down to individual site level;
- c. *Coordinating the activities* of all the stakeholders;
- d. Establishing an *advisory body* for further research, conservation and popularization of cultural heritage sites, using international expertise where appropriate;
- e. Making full use of the cultural heritage sites for *education and recreation*;
- f. Identifying sources and amounts of financing and establishing an accounting procedure;
- g. Ensuring monument protection and making provisions to resist and counteract any clandestine excavations, illicit construction, improper use of the sites etc;
- h. Regular review and updating of the management plan.

In addition to that, the objectives of the management plan include development of mechanisms for effective integration and coordination of the principal provisions and regulations of all the aforementioned state and ministerial acts concerning the protection and exploitation of the nominated property with maximum account taken of all the general and specific challenges facing the property.

To achieve the aforementioned objectives, the current state of the property is to be thoroughly analyzed, and all the risks, challenges and key factors relevant to strategic planning and subsequent monitoring are to be identified. The current state of the property, challenges related to its protection, management and exploitation as well as solutions proposed to overcome these challenges are described in the following sections of this management plan.

2. CURRENT STATE OF THE PROPERTY AND FACTORS AFFECTING ITS PRESERVATION AND ACCESSIBILITY

2.1. Current state of the property

The property the Ancient City of Tauric Chersonese and its Chora consists of 7 protected areas located on the Heracleian Peninsula in the present-day city of Sevastopol and totaling over 10 000 ha (Fig. 3). All these land plots contain remains of ancient structures and intact archeological landscape and are free of any modern construction. The plots are managed by the Tauric Chersonese National Preserve responsible for their physical protection and proper exploitation with due respect for their value as protected areas.

2.1.1. Component part № 001. Ancient city of Tauric Chersonese (Fig. 4)

The area lies on a cape between Quarantinnaya and Pesochneya Bays and is surrounded by modern urban constructions. The site measures around 42 ha.

The ancient city is basically the remains of the Tauric Chersonese, which existed uninterruptedly for over 2000 years – from the 5th century BC until the 14th century AD. After the decline and desolation of the city its area was for many

centuries out of use. It was only in the 19th and early 20th centuries that part of it was placed under the control of the military, who arranged a quarantine cemetery and several coastal artillery batteries on the outskirts and an Orthodox monastery in the central part of the ancient city, where St. Vladimir's Cathedral and some other monastic constructions were erected. Most of the Chersonese city area has however remained free of any development or economic activities, which has helped to preserve the integrity of the ruins of the ancient and medieval city.

Since the mid-19th century, systematic archaeological excavations have been in progress in the ancient city and an archaeological museum has been functioning. The latter has recently been transformed into a national archaeological preserve (Tauric Chersonese National Preserve). For more than 150 years of archaeological research, around 10 ha of the area has been explored, with numerous archaeological sites dating from the ancient and medieval periods excavated and interpreted for visitors and certain improvements made in some parts of the ancient city (mainly in the centre and in the east).

Still unexplored is an eminence overgrown with steppe grass in the coastal part of the ancient city. The ancient city is secured with full fencing and 24 hour guard.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, providing for archaeological investigation, restoration, conservation, interpretation and presentation of archaeological sites. Apart from that, the ancient city is home to some outside organizations such as the Ukrainian Orthodox Church, a city yacht club and a private household.

2.1.2. Component part № 002. Chora plot in the Yukharina Gully (Fig. 5)

The area lies in the bed and on the slopes of a deep gully and is surrounded by rural housing and summer cottages. The site measures around 150 ha.

The area is one of the Chersonese chora plots demarcated in the 4th century BC. It contains remains of 11 ancient chora land plots (5 presented entirely and 6 as fragments) with ruins of ancient and medieval farmsteads, division walls, vineyard planting walls as well as traces of ancient roads and burial grounds.

For 2000 years, between the 4th and 14th centuries AD (with small breaks) the area was intensively used for farming, after which it was abandoned. In the second half of the 20th century, the territory was placed under the control of the military, who used it as a training ground.

In the late 20th and early 21st centuries, the area was subject to local archaeological explorations with ruins of 4 ancient farmsteads as well as adjacent agrotechnical structures partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. It has several local forest plantations with remains of military earthwork structures as well as a high-voltage transmission line route.

Most of the area has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

2.1.3. Component part № 003. Chora plot in Berman's Gully (Fig. 6)

The area lies in the bed and on the slopes of a deep gully and is surrounded by rural housing and summer cottages. The site measures around 20 ha.

The area is one of the Chersonese chora plots demarcated in the 4th century BC. It contains remains of 2 ancient chora land plots with ruins of ancient and medieval farmsteads, division walls, vineyard planting walls as well as traces of ancient roads, burial grounds and a medieval cave complex.

For 2000 years, between the 4th and 14th centuries AD (with small breaks) the area was intensively used for farming, after which it was abandoned. In 19th and early 20th centuries, the eastern slope of the Gully featured a farmstead of a local landlord, who used the adjacent area as a pasture for cattle. The farmstead has not survived.

In the late 20th and early 21st centuries, the area was subject to local archaeological explorations with ruins of a fortified farmstead with massive defensive installations partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. It has a local forest plantation as well as aerial high-voltage transmission and water supply lines.

Most of the area has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

2.1.4. Component part № 004. Chora plot on the Bezmyannaya Height (Fig. 7)

The area lies at the top and on the slopes of an eminence and is surrounded by farmsteads, summer cottages and extensive vineyard grounds. The site measures around 17 ha.

The area is one of the Chersonese chora plots demarcated in the 4th century BC. It contains remains of a massive defensive complex with adjacent ruins of a rural settlement as well as traces of division walls and vineyard planting walls.

For 2000 years, between the 4th and 14th centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned. In the mid-19th and the first half of the 20th centuries, the height was used as a defence point and a number of earthwork fortifications were constructed there.

In the early 21st century, the site was subject to local archaeological explorations, with ruins of a fortification with massive defensive installations partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. It has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

2.1.5. Component part № 005. Chora plot in the Streletskaya Gully (Fig. 8)

The area lies in the bed and on a slope of a gully and is surrounded by summer cottages and extensive forest plantations. The site measures over 15 ha.

The area is one of the Chersonese chora plots demarcated in the 4th century BC. It contains remains of 2 land plots with ruins of farmsteads, division walls, vineyard planting walls as well as traces of ancient roads.

For 2000 years, between the 4th and 14th centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned and stayed out of use.

In the early 21st century, the site was subject to minor archaeological surveys, which revealed a small fragment of an ancient system of vineyard planting walls. The ancient structures remain unconserved and uninterpreted for visitors. No improvements have been made on the site. Although explored less than the others, this protected site is one of the best in terms of the state of preservation of its ancient constructions still hidden in the earth but clearly visible on the surface as shaping a specific archaeological landscape of the Chersonese chora.

Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

2.1.6. Component part № 006. Chora plot on the isthmus of the Mayachny Peninsula (Fig. 9)

The area lies on the isthmus of a peninsula lying between Kazachya and Golubaya Bays and is surrounded by rural housing, summer cottages and a memorial complex commemorating the defenders of the 35th Coastal Battery. The site measures around 14 ha.

The area is one of the Chersonese chora plots demarcated in the 4th century BC and subsequently built up as a fortified settlement. The plot contains remains of some ancient defensive walls with towers and ruins of housing inside.

For 2000 years, between the 4th and 14th centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned.

In the late 19th century a paved road connecting the isolated farmsteads was laid across the area, and the plot itself was used as a pasture for cattle.

Between the 19th and early 21st centuries the site was subject to archaeological excavations with ruins of some fortifications and living quarters as well as traces of earlier ancient land demarcations partly unearthed and conserved.

Some interpretation of the ancient buildings and some improvements have been made, but only on a small area in the eastern part of the plot.

The plot is free of any modern constructions (except for a temporary boat repair shed on the shore of Kazachya Bay). It has a local forest plantation (on the inlet in Kazachya Bay). In addition to that, there is a modern highway dividing the area into sections and thereby breaking its integrity.

Most of the area remains unexplored and has intact landscape covered with steppe grass. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

2.1.7. Component part № 007. Chora plot on Cape Vinogradny (Fig. 10)

The area lies on a coastal terrace and cape on the western coast of the Heracleian Peninsula and is surrounded by rural housing and summer cottages. The site measures over 8 ha.

The area is one of the Chersonese chora plots demarcated in the 4th century BC and subsequently rather badly damaged by shore erosion. It contains some remains of ancient constructions (on the coastal terrace) and a large medieval cave monastic complex (carved in the coastal rock cliffs).

For 2000 years, between the 4th and 14th centuries AD (with small breaks), the area was intensively used for farming, after which it was abandoned.

In the 19th and early 20th centuries, part of the coastal terrace was used for cultivating orchard crops.

Between the 20th and early 21st centuries, the area was subject to archaeological excavations with ruins of a ground-based church as well as some premises of a cave monastery partly unearthed and conserved. The ancient structures remain uninterpreted for visitors. No improvements have been made on the site.

The plot is free of any modern constructions. There is a forest plantation on the coastal terrace and the area itself is basically a coastal Mediterranean landscape covered with trees and shrubs. Unfenced and unguarded, the territory is now freely open to the public.

Within the protected area, the Tauric Chersonese National Preserve is doing its administrative and economic activities, archaeological investigations as well as restoration and conservation works.

2.2. Factors affecting preservation of the property

At the moment, there are a number of natural and anthropogenic factors affecting, to a varying degree, the constituent parts of the property the Ancient City of Tauric Chersonese and its Chora.

2.2.1. Seismic threat

All the protected areas of the Tauric Chersonese and its chora lie in a high activity seismic zone, where rare earthquakes up to 8 on the Richter scale are possible. There is a hypothesis that the so-called 'antiram barriers' on the ancient defensive towers in the chora farmsteads were in fact antiseismic strengthening constructions (Fig. 11). A major earthquake (measuring 6 on the Richter scale) was registered last in 1926 (its epicentrum was on the shelf of the Black Sea near Yalta).

Although the past few decades have been characterized by decreasing seismic activity in the Black Sea shelf fracture zones, this factor still presents a threat to the monuments in the city of Chersonese and in its chora.

2.2.2. Shore erosion

Some of the protected areas in the city of Tauric Chersonese and in its chora are bordered by the Black Sea. An extremely damaging factor in these areas are the waves, which are rapidly eroding the coastline. According to researchers, over the past thousand years more than 25 m of the coastal strip have been washed away or submerged by the sea.

The problem is particularly severe in the city of Chersonese itself, whose northern coastline is being rapidly eroded by waves: over the past hundred years shore erosion has already partly destroyed valuable remains of several constructions, including Uvarov's Basilica, the Sixpillar Church etc (Fig. 12). The same factor also brings about the destruction of the coastal boundaries of the sites adjacent to the Black Sea bays (Quarantinnaya Bay in the city of Chersonese and Kazachya Bay in the so-called Strabo's Chersonese), though to a lesser extent.

2.2.3. Landslides

The protected area on Cape Vinogradny lies in an active landslide zone, which has led over the past few centuries to the loss of a number of cave constructions in the front part of the rock cliff (Fig. 13). Such landslides and collapses have been an aggregate result of precipitation, ground waters, daily and seasonal atmospheric temperature fluctuations as well as strong winds bringing about gradual chipping of large rock masses and their sliding down towards the sea. Under threat are not only the monuments located in the rock itself but also the ruins of ancient buildings lying along the upper edge of the rock cliff and on a terrace at its foot.

2.2.4. Rise of sea level

The already mentioned rise of sea level, which, according to specialists, has been going on for around one thousand years, has led to the submersion of vast sections of the ancient chora along the northern coastline of the Heracleian Peninsula. More specifically, it is known that under water are now a series of Chersonese city harbour installations (in Quarantinnaya Bay), the eastern edge of the fortified settlement on the isthmus of the Mayachny Peninsula (in Kazachya Bay) and a number of ancient farmsteads with adjacent division walls on the

Mayachny Peninsula, Cape Mongonari and Cape Peschany as well as in Streletskaya Bay and Kruglaya Bay. At the same time, the rise in the sea level has waterlogged some coastal parts of the city and its chora. In particular, subject to waterlogging are the foundations of the wall ruins in the port area and the citadel of the city as well as the ruins of the Byzantine island monastery in Kazachya Bay, which is part of the protected chora site on the isthmus of the Mayachny Peninsula (Fig. 14). As they are, the soaking foundations of the ancient masonry are posing a threat to the state of preservation of the structures themselves since through the joints in the masonry moisture is sucked into the upper sections of the walls, precipitating their decay.

2.2.5. Roots of shrubs and trees

A rather noticeable factor affecting the ancient ruins of Chersonese and its chora is the damage done to their ancient and medieval masonries by the roots of shrubs and trees. The problem is quite pressing both in the ancient city and in the Heracleian chora.

In the city of Chersonese, roots of shrubs and trees growing into the ancient masonries are particularly aggressive in the northern part, in the quarters between the Basilica within a Basilica and the 1935 Basilica, as well as in the southwestern part of the citadel (Fig. 15).

A similar situation can be seen on the protected Chersonese chora sites. Specifically, masonries of some ancient farmsteads and farming structures are being destroyed by isolated trees and shrubs in the Yukharina Gully, in Berman's Gully and on the isthmus of the Mayachny Peninsula and by clumps of shrubs and trees on the eastern slope of Yukharina Gully, in the bed of Berman's Gully, on the island in Kazachya Bay and on the coastal terrace of Cape Vinogradny.

2.2.6. Steppe fires

The problem with steppe fires, which break out quite regularly on the protected sites of the city of Chersonese and its chora, is also related to vegetation, particularly to grass that covers most of the unexplored area.

The problem in question has a purely seasonal character, with grass fires taking place predominantly in the driest period of the year, i.e. between July and September. Besides, this factor is not entirely a natural one. It has a lot to do with human activities, among the most common causes of fires being unauthorized bonfires, careless smoking and even intentional arsons (Fig. 16).

Although damage occasionally done by steppe fires to the ancient structures is negligible, it becomes quite perceptible when it comes to landscape formations, which is why a special fire control programme is needed.

2.2.7. Modern development and municipal communications

Falling within the boundaries of the city of Sevastopol, the protected areas of the ancient city of Chersonese and its chora are surrounded by modern housing, namely rather dense urban housing around the city of Chersonese and sparser suburban housing around the protected chora sites. The protected areas themselves

do not have any modern housing, except for a few buildings within the boundaries of the city. However, both urban and suburban development does present a serious threat to those chora sites that have not obtained protected status as yet. Specifically, municipal development plans envisage development of residential areas with varying housing density in some of the areas where the ancient planning system is still extant (on the Mayachny Peninsula, on Cape Mongonari and on Cape Peschany as well as in the Streletskaya and Berman's Gullies).

It should be noted that prior to 2011 modern development in the immediate vicinity of the protected areas was going on regardless of the landscape value of the Chersonese chora sites. As a result, a number of dissonant bulky structures sprang up in some places, e.g. on Devichya Hill near the ancient city and on the Mayachny Peninsula (Fig. 17).

Last but not least, some of the protected sites have municipal communications going through, such as a highway on the site on the isthmus of the Mayachny Peninsula, power transmission lines on the sites in the Yukharina Gully and Berman's Gully and a water pipeline on the site in Berman's Gully (Fig. 18). All those structures are discordant with the surrounding landscape. More than that, in the event of an emergency some of them, e.g. the water pipeline, will pose a threat to the preservation of certain ancient constructions.

2.2.8. Economic activities

No economic activities as such are being conducted in the protected areas in the city of Tauric Chersonese or its chora. However, some of the sites are being uncontrollably used by the locals for cattle grazing, causing some damage to the remains of the ancient structures in the Yukharina Gully, in Berman's Gully and on the Bezmyannaya Height (Fig. 19).

At the same time, some other sites of the Heracleian Peninsula with extant ancient layouts are now under intensive agriculture, such as cattle grazing, tillage and forestation. Any such activities, especially deep plowing, lead to the irretrievable loss of valuable archaeological monuments.

Apart from that, some protected areas on the Chersonese chora are being uncontrollably exploited by various industrial enterprises and developers for piling waste, as is the case with the sites in the Yukharina Gully, in the Streletskaya Gully, on the isthmus of the Mayachny Peninsula and on the Bezmyannaya Height (Fig. 20).

2.2.9. Property visitation

As of today, of all the sites of the Tauric Chersonese and its chora, regular visitation has been arranged only to the ancient city area.

The largest category of visitors to the property are organized tourist groups and individual tourists (over 350,000 people a year). A considerable percentage of visitors is constituted by pilgrims (around 50,000 people a year), with about as many visitors represented by the citizens of Sevastopol, who enjoy certain visitation privileges. Another 50,000 visitors are those getting into the ancient city during the free access hours (in the morning and in the evening) for recreation,

members and guests of the yacht club, parishioners visiting St. Vladimir's Cathedral, theatre goers as well as members of archaeological expeditions. This amounts to approximately 500,000 people a year.

The most popular visitor destinations within the ancient city are its central and northern parts. These have maximum tourism loads without any adverse effects (Fig. 21). Given that the most visited places constitute no more than 1/3 of the all expositional area of the city, it can be predicted that the carrying capacity of the property can be more than 1 million people a year. It should also be noted that most of the visitors (around 80 percent) come in summer (between June and August).

As for the protected chora sites, there is hardly any organized tourism there. This is largely due to the fact that the general public is unaware of the value of the sites. Besides, the sites themselves can hardly receive any tourists for lack of visitor facilities.

Some of the protected areas of the Chersonese chora, namely the ones in Berman's Gully, on the Bezmyannaya Height and on Cape Vinogradny, are now uncontrollably used by the local population as places for recreation (Fig. 22).

2.2.10. Vandalism and illegal excavations

An extremely dangerous factor threatening the integrity of the ancient structures of the city of Chersonese and its chora are various vandalic acts and illegal excavations on the protected sites. The acts of vandalism registered in the last few years on the ancient ruins were all of local and sporadic nature. Still, the very fact that they occurred within the boundaries of the ancient city is enough to understand that the existing security system is far from efficient (Fig. 23).

2.2.11. Depreciation of conserved archaeological sites

Among essential problems related to the preservation of the already unearthed and conserved archeological sites of the city of Chersonese and its chora is the depreciation of ancient structures due to various natural and anthropogenic factors, with unearthed ancient masonries lying exposed to weather and visitor pressures (Fig. 24).

Conservation measures were taken on such sites at different times and were based on different techniques, not always the best reasonable. In fact, even with the most up-to-date high quality conservation, gradual deformation of conservation mortars does occur, bringing about gradual deterioration of ancient masonry structures (Fig. 25).

It should also be noted that some of the ancient ruins unearthed in the city as well as in the chora (some monuments at the citadel and in the port area of Chersonese as well as some farmsteads on the chora sites in the Yukharina Gully, in Berman's Gully and on the isthmus of the Mayachny Peninsula) still remain unconserved (Fig. 26).

2.3. Factors affecting accessibility of the property

At the moment, accessibility of the property the Ancient City of Tauric Chersonese and its Chora to tourists is not without limitations. Only the city of Chersonese has some minimum infrastructure necessary for receiving tourists and delivering guided tours, but this, taking into consideration increasing visitor numbers, cannot be considered as adequate and reflecting modern standards. In this respect, the key factors that characterize the accessibility of the property and its constituent parts should be highlighted.

2.3.1. Access ways and parking areas

The hardest-to-reach are the protected areas in the Chersonese chora. The situation is less acute on the sites in Berman's Gully, on the Bezymyannaya Height, on the isthmus of the Mayachny Peninsula and on Cape Vinogradny, where city highways are either adjacent to or lie in close vicinity of the protected areas. This is not the case with the sites in the Yukharina and Streletskaya Gullies. For example, the protected area in the Yukharina Gully lies as far as about one kilometer away from the highway, connected to it with an unsurfaced poor quality road (Fig. 27).

The access ways to the city of Chersonese are also not quite sufficient, with frequent traffic congestions in the narrow streets connecting the protected area with the main city highways. Rather awkward are also the approaches to the site on Cape Vinogradny, where the protected area is adjacent from land to densely built summer cottages (Fig. 28).

The parking area near the central entrance to the city of Chersonese is extremely small and can accommodate only very few vehicles that bring visitors to the Preserve. As for the protected Chersonese chora areas, they do not have any equipped parking lots at all.

2.3.2. Visitor facilities

At the moment, the Chersonese chora areas do not have any visitor facilities.

As for the city of Chersonese itself, its two entrances have a few little constructions serving as ticket offices, a roofed structure and benches for tourists waiting for guided tours. Any information panels are absent. There are a number of cafés, souvenir stalls and toilet facilities, but all of them lie outside and are not controlled by the Preserve (Fig. 29).

Tourist infrastructure facilities (toilets, souvenir stalls and refreshment stands) within the boundaries of the ancient city are very few in number. To make things worse, they are scattered about the place in a chaotic way with no account taken of visitor needs, most of them looking rather out of place amid the archeological landscape. It should also be noted that there is only one public toilet in the city of Chersonese, located quite far from the main expositional parts of the site.

Last but not least, there are no visitor safety provisions in place on the coastal edges of the ancient city that are used as beaches.

2.3.3. Footpaths and rest facilities

At the moment, the Chersonese chora sites have neither surfaced footpaths nor rest facilities for visitors.

As for the city of Chersonese itself, it has some clinker and slabbed footpaths (Fig. 30), but those are only in the central part of the protected area whereas most of the ruins can be reached only through the cleared streets of the ancient city, unpaved, stony, potholed and therefore hardly accessible to aged and disabled visitors (Fig. 31).

The same is true for rest facilities, which are in place only in the central part of the protected area, where a green space with shady alleys and benches is located. The rest of the area has only a few benches scattered around in a chaotic way and unshaded (an obvious shortcoming in the hot climate of the place).

2.3.4. Information panels and principles of monument interpretation

At the moment, the Chersonese chora sites do not have any panels informing visitors about the monuments (save a makeshift panel in an excavated part of the fortified settlement on the isthmus of the Mayachny Peninsula).

There are some information panels in the city of Chersonese itself, but these are rather primitively designed, few in number and scattered around in a chaotic way. Most of them provide information in Russian only (save a few panels in the southern part of the city, on the sites explored by international expeditions).

Apart from that, the city has almost no signage that could guide visitors and facilitate their access to the most important sites at the Preserve.

Finally, there is a pressing need for signage on the approaches to the protected areas both within the city of Sevastopol and outside.

Equally important in terms of making the property more accessible is the introduction of the unified principles for interpretation of its archaeological structures. What should be noted in this respect is that only the suggestions made by the Ukrainian-American expedition and partially implemented on a small plot in the southwestern part of the main street of the ancient city can be regarded as scientifically grounded and therefore recommended for implementation in the city of Chersonese as a whole (Fig. 32). A uniform approach to interpretation and presentation is absolutely crucial for facilitating visitors' perception of the archeological monuments.

2.3.5. Site accessibility challenges

Quite an important challenge in the city of Chersonese is limited access to some of its key sites.

Specifically, the presence of the yacht club which controls the berths in Quarantinnaya Bay in the ancient city impedes access to the Preserve by sea and makes organization of any specialized sea and land tours quite complicated (Fig. 33).

Another challenge is an enclosed plot around St. Vladimir's Cathedral, which not only impairs visual perception of the agora of Chersonese but also blocks the passage through the main street of the ancient city (Fig. 34).

Inaccessible not only to the visitors but also to the explorers is the territory of the private estate in the southern part of the city of Chersonese.

There are no inaccessible sites among the protected chora areas, except for the island in Kazachya Bay the approaches to which are blocked by a military unit.

2.3.6. Archaeological research and conservation

Archaeological research and conservation works going on in the protected areas of the Tauric Chersonese National Preserve generate a need for new expository areas (Fig. 35). Along with carrying out their specific scientific tasks, most of the expeditions working in the city of Chersonese and on some of the chora sites over the past few years have been conducting their excavations and subsequent conservation with a view to further interpreting the ancient remains and thus making them accessible to visitors.

This gives rise to the problem of prioritizing research activities on various sites within the protected areas. A glaring example is the situation in the city of Chersonese itself, where excavations of the ancient quarters have been going on for as long as one and a half centuries. The result is a patchwork of explored and conserved sites scattered amidst the unexplored area. This suggests that explorations conducted in the ancient city need a more systematic approach.

More consistent have been archaeological excavations carried out in the last few decades on the protected chora sites. Specifically, the fortified settlements in Berman's Gully and on the isthmus of the Mayachny Peninsula are being explored as whole entities. At the same time, excavations on the site in the Yukharina Gully have been confined to farmsteads and some small fragments of adjoining ancient demarcation structures. As a result, a complete picture of the ancient land plot with all of its constituent parts (farmsteads, division walls, vineyard planting walls, surrounding roads etc) is missing.

Apart from that, some of the ancient ruins unearthed on many of the protected sites have never been subject to proper conservation. Among them are the remains of the quarters in the eastern part of the city, some individual farmsteads in the Yukharina Gully and Berman's Gully, vineyard planting walls on the isthmus of the Mayachny Peninsula as well as the remains of the fortification on the Bezmyannaya Height. All these remains are not only deteriorating but are also gradually getting covered with soil and overgrown with grass, which makes their visual perception by the visitors rather complicated (Fig. 36).

3. SUGGESTED SOLUTIONS TO THE CHALLENGES RELATED TO THE PROTECTION AND EXPLOTATION OF THE PROPERTY

3.1. Suggested solutions to reduce risk factors

Seismic threat is to be taken into consideration when developing any ancient ruin conservation projects as well as any contingency trainings for the support staff of the Tauric Chersonese National Preserve and the local emergency services.

What is also needed is a comprehensive seismic safety and security programme for the protected areas of the city of Sevastopol. This has to be developed at the earliest possible date.

Shore erosion means that comprehensive shore protection activities are to be done and antiwave barriers are to be installed all along the coastline of the protected areas in the ancient city of Chersonese, on the isthmus of the Mayachny Peninsula and on Cape Vinogradny as soon as possible, together with a long-term shore protection programme for the coastal zone of the Heracleean Peninsula as a whole. The latter is to be developed in partnership with the municipality to prevent any unexplored archaeological structures in the Chersonese chora from being destroyed.

In addition to that, there is a need for urgent implementation (by 2013) of the already developed shore protection project for the coastline of the ancient city of Chersonese, suspended for lack of purpose-based government funds.

Landslides is a factor requiring that a comprehensive project for generalized deviation of ground waters and runoff on the site on Cape Vinogradny be developed and implemented, retaining walls along the foot of the rock be erected and the local sections of the rock most likely to collapse be consolidated.

As of today, Ukraine lacks expertise for such large-scale activities, which means that international experts will have to be involved. Preparation and implementation of such a project will require quite a lot of time and finance, comparable to the cost of shore protection works themselves. Lack of purpose-based funding may considerably delay the implementation of the works.

In order to preserve the already explored ancient structures, it is therefore proposed to start with top priority measures such as consolidating the monuments and the surrounding sections of the rock as well as arranging runoff deviation on the edge of the rock cliff, which have to be taken at the first stage (between 2012 and 2013).

In the future, a local level project is to be implemented to consolidate the western steep of the Heracleean Peninsula at all the points of the Chersonese chora where landslides or collapses threaten to destroy the monuments. Since landslides pose a threat not only to the ancient ruins but also to the modern constructions on Cape Phiolent, such works are to be envisaged in the Master Plan for the City of Sevastopol.

The rise of sea level is to be combated not only by means of emergency dampproofing of the southeastern curtain foundations, as is envisaged by the Comprehensive Programme for Conservation and Restoration in the City of Tauric Chersonese, but also by conducting such works on the other monuments at the citadel, in the port area and on the island in Kazachya Bay. The cost of these works is not so high and can be covered by the National Preserve itself within the restoration spending plan 2012-2013.

At a later period, a series of works will also have to be done to dewater the waterlogged areas in the city of Chersonese and in its chora. Besides, the state of the ancient ruins submerged by the sea will have to be diagnosed and relevant measures will have to be taken to preserve these. Development and implementation of this project will require purpose-based government funds.

Aggressive vegetation is to be neutralized by way of urgent eradication of trees and shrubs growing into the ancient ruins.

It should however be noted that in order to find the best vegetation control solutions for trees and shrubs covering extensive areas of ruins on the protected sites in the city of Chersonese, in the Yukharina Gully, in Berman's Gully, on the island in Kazachya Bay and on the coastal terrace on Cape Vinogradny, professional botanists should be involved.

Steppe fires require a package of preventive measures.

What has to be done in the first place is preventing any unauthorized access to the protected areas by way of installing peripheral fencing and arranging 24-hour security posts.

In addition to that, sufficient security staff should be hired to patrol not only the perimeter but also the internal parts of the protected areas.

It should be noted that grass mowing on the vast unexplored areas will have little effect and, even more importantly, it will transfigure the visual features of the existing landscape.

Grass removal is however a must on the already explored and conserved sites since any grass fires in a confined space of ancient ruins tend to cause masonry burns.

Grass mowing and weeding being quite labour consuming procedures, the problem can be removed in a different way, namely by adding various humus-free soils and thus preventing any vegetation. In the future, this method should be given preference to as the one that can be harmonized with the principles of archaeological interpretation.

Urban development and engineering communications is a factor whose impact on the landscape features of the protected areas can be significantly reduced by enforcing the land use regimes currently developed for different protection zones of the monuments in the city of Chersonese and in its chora. The work on the said regimes is expected to be finalized by the end of 2011.

Another urgent matter is having certain dissonant structures (such as the yacht club, the private estate etc) removed from the territory of the ancient city.

The same applies to the dissonant communications (power transmission and water supply lines) on the sites in the Yukharina Gully and in Berman's Gully, which should urgently be moved away from the protected territory.

As for the highway, which compromises the integrity of the protected area on the isthmus of the Mayachny Peninsula, it is proposed to erect a low enclosed overpass that would keep the traffic away from the protected site.

Unauthorized economic activities in the protected areas should be stopped in the nearest future by way of peripheral fencing and arranging 24-hour security on each of the protected sites.

A solution to the problem is also envisaged in the land use regimes for different site protection zones (including the buffer zones), which ban any deep plowing and other agricultural works on some of the areas. As for the areas with protected status, any agricultural activities there are strictly prohibited.

Growing visitor numbers should be taken into consideration in any research and projects related to the protection and exploitation of the Tauric Chersonese cultural heritage.

Adverse effects of visitor pressures on the property can be eliminated by arranging additional entrances and redistribution of visitor flows, creating alternative visitation routes and introducing a management model providing for equal distribution of visitors throughout the year rather than only during the high tourist summer season as well as by installing additional security posts, recruiting additional security guards and wardens and, last but not least, introducing a video system to monitor all the protected areas.

Such issues as development of additional visitation routes for the city of Chersonese as well as redistribution of visitor flows to the property are to be tackled in a special section of the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

Besides, the tourist infrastructure system should be improved, particularly as far as toilets and waste management facilities are concerned, which should stop the visitors from leaving litter in the protected area.

Vandalism and illegal excavations is a risk factor that requires a package of relevant measures, including recruitment of additional security guards and wardens with each observation post responsible for a particular local sector of the protected area, implementation of a video monitoring system etc.

The top priorities for the protected areas in the chora are fencing and 24-hour security posts, especially considering the fact that the chora sites are particularly vulnerable to clandestine excavations with their irreparable damage to the integrity of archaeological layers.

Ongoing vandalism and illegal excavations should also prompt to continue working on improvement of the national archaeological heritage protection

legislation, whose current regulations are not strict enough, particularly as far as private collecting of archaeological items is concerned.

Depreciation of conserved archaeological structures requires introduction of a single system to monitor the state of the conserved remains both in the city of Chersonese and in the protected chora areas. Such a system could be based on a pilot GIS monitoring system model designed by the Institute of Classical Archaeology at the University of Texas in Austin. The system takes account of various factors related to the condition of the Chersonese city sites, including the state of conservation of the ancient masonries.

Regrettably, the system has not been put to use for lack of target funds. Such monitoring should therefore be introduced and financed as a special kind of activity at the Tauric Chersonese National Preserve to be introduced in the city of Chersonese and on the protected chora sites in 2012 and 2014, respectively.

3.2. Suggested solutions to overcome accessibility related challenges

According to the Law of Ukraine on Cultural Heritage Protection, any solutions to property accessibility related challenges are to be put forward in the territory organization plan of a historical and cultural preserve. Such a plan is currently being developed for the Tauric Chersonese National Preserve with some sections of the plan (the ones concerning the protection zones of the ancient city of Chersonese as well as archaeological investigation and conservation programmes) already prepared and adopted.

Already finalized is the functional zoning project for the city of Chersonese. The project defines zones reserved for different purposes– expository areas, recreational areas, visitor service areas etc, thereby determining the future development prospects of the site (Fig. 37). Similar projects shall also be developed for all the protected areas in the Chersonese chora.

Access ways and parking areas as they are among the most pressing challenges on almost all of the protected areas of the property.

Reorganization of these is envisaged by the Master Development Plan for the City of Sevastopol until 2025 and by the correspondent section of the Territory Organization Plan for the Tauric Chersonese National Preserve and can be effectuated in the next few years by joint efforts of the stakeholders – the Preserve and the municipality (Fig. 38).

In order to arrange access ways and parking lots in the protected chora areas, the issue is to be tackled in the correspondent section of the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012). It should be noted that any parking lots can be arranged only in the areas adjacent to the protected sites, in their buffer zones, and only with the consent of the Sevastopol City Council.

The problem with access ways is particularly severe in the protected chora area in the Yukharina Gully, where an access route from Phiolent Highway is proposed to be arranged in the nearest future with sponsor support.

Visitor facilities. It is proposed that most of the protected chora sites should have small visit centres that could serve one tourist bus at a time. Every such centre should have a ticket office, a souvenir stall, public facilities (toilets and rest rooms) as well as premises for security and support staff.

The city of Chersonese and the protected chora site in the Yukharina Gully need larger visit centres with additional space for information stands, conference rooms and little cafés.

Proposals as to the locations of any such visit centres should be developed within respective protected area zoning projects and reflected in the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

In addition to that, several toilet facilities are to be constructed in the city of Chersonese and any dissonant retail outlets are to be removed either outside the boundaries of the protected area or inside the Preserve administration building.

Footpaths and rest facilities. Arranging footpaths and rest facilities is part of improvement activities on the protected sites and should be performed within special projects based on recommendations set out in the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

Any improvement projects should proceed from existing or visitation routes, along which the main footpaths should be laid. What is also essential is that the footpaths have a surface suitable for all age groups as well as disabled people, which means that special ramps and railings are to be provided. At the same time, care must be taken to ensure that such surfaces do not strike a discordant note among the exposed ancient structures.

It is recommended that footpaths be covered with different kinds of crushed stones or pebbles compatible with the materials applied at the ancient structures for interpretation purposes.

Rest facilities should be envisaged along the whole length of the visitation routes. They should be provided with weather and sun shades and fit with the ancient ruins around.

Information panels and principles of monument interpretation. Information panels in the protected areas of the city of Chersonese and its chora should present the most interesting and important archaeological sites in an exhaustive way. They should be made of durable materials, arranged at a height suitable for visitors of all ages and fit into the surroundings.

It is recommended that such panels have the same design all over the Preserve and provide information in more than one language (as a minimum in Ukrainian, Russian and English). Similarly designed should be various orientation signs, which are to be installed throughout the site within seeing distances from each other so that the visitor could move about more confidently.

In addition to that, more off-site signs have to be installed both in and along the main access routes to Sevastopol. Such signs should have a distinctive colour or logo to stand out among the rest of the traffic signs.

According to the Ukrainian legislation, any information panels and billboards can be installed on cultural heritage sites only on the basis of specially designed project documents that have been approved by the Ministry of Culture of Ukraine. Subject to unification and approval are also the principles of on-site archeological interpretation in the Tauric Chersonese. Experience of the joint Ukrainian-American expedition, which explored and interpreted the southern quarters of the city of Chersonese, has shown that interpretation of different kinds of premises can be done through differently coloured pebbles or stones.

In general, the described problem can be addressed in a special section of the Territory Organization Plan for the Tauric Chersonese National Preserve (scheduled for 2012).

Site accessibility challenges present in some parts of the protected areas of the Tauric Chersonese are to be removed as soon as possible.

Specifically, the approved section of the Territory Organization Plan for the Tauric Chersonese National Preserve regarding the boundaries and land use regimes for the core and buffer zones of the city of Chersonese envisages that the existing private estate and yacht club buildings should be removed from the protected territory. The yacht club can be moved away after the expiration of the land lease contract in 2012 whereas the private estate will have to be bought out from the owner by the state of Ukraine, which would require special purpose funding.

As for the church services and the Preserve administration building, they can be transplanted onto the site near the central entrance to the Preserve only after relocation of its current occupant – the military unit. Preliminary negotiations are already under way between the Preserve, the municipality and the military.

Another essential thing is to dismantle the enclosure around St. Vladimir's Cathedral, thereby opening the way for new visitation routes along the main street of the ancient and medieval city. The project could be implemented after negotiations with the church community leaders and relevant changes in the monument protection contract.

Similar negotiations should be held with the commanders of the military unit stationed on the shore of Kazachya Bay so that free access could be opened to the islet containing remains of ancient chora structures and the medieval monastery.

Archaeological research and conservation. In order to make any unearthed and conserved parts of the city of Chersonese and its chora as accessible as possible, comprehensive programmes for archeological investigation, conservation and restoration works are to be fully implemented in the protected areas.

Such programmes, aiming to ensure a systematic approach to and consistency in any excavations and conservation works that are to be conducted on the Chersonese city sites, have already been developed and adopted as sections of

the Territory Organization Plan for the Tauric Chersonese National Preserve (Fig. 39).

Inter alia, the programmes envisage prioritizing works that are to be conducted on various sites, which in the long run will help to considerably expand and, even more importantly, unite the expositional areas of the ancient city into meaningful entities. Some of the areas are proposed to be reserved for future generations of archaeologists, which means that any archaeological excavations in those areas will be banned (Fig. 40).

Similar programmes should be developed and implemented in the rest of the protected area and reflected in the site zoning schemes as part of the Territory Organization Plan for the Tauric Chersonese National Preserve.

4. GURANTEES OF LEGAL PROTECTION AND INTEGRATION OF THE PROPERTY INTO STATE AND MUNICIPAL DEVELOPMENT PROGRAMMES

4.1. Existing legal protection

4.1.1. Legislative protection

Cultural heritage sites and monuments – remains of ancient buildings and demarcation structures in the city of Chersonese and its chora – are on the state register and protected by the state in accordance with the *Law of Ukraine on Cultural Heritage Protection* (No. 1805-III of 8 June 2000, with amendments as per the Law of Ukraine No. 2518-VI of 9 September 2010) and the *Law of Ukraine on Archaeological Heritage Protection* (No. 1626-IV of 18 March 2004). These sites and monuments are all an integral part of the areas whose protected status is provided for by Articles 33, 33-1, 33-2 and 33-3 of the Law of Ukraine on Cultural Heritage Protection.

Movable cultural heritage – archaeological artefacts found in the protected areas – are kept in museum collections of the Tauric Chersonese National Preserve and protected by the state in accordance with the *Law of Ukraine on Museums and Museum Activities* (No. 250/95-BP of 29 June 1995).

In addition to that, the protected status of the sites and monuments of the city of Chersonese and its chora is ensured by some international acts ratified by Ukraine such as:

- *1992 European Convention on the Protection of the Archaeological Heritage* (revised);
- *2001 Convention on the Protection of the Underwater Cultural Heritage.*

4.1.2. By-laws

According to the *Resolution of the Cabinet of Minister of Ukraine on the State Register of Immovable Monuments of Ukraine* (No. 928 of 3 September

2009), the complex of ancient structures in the city of Chersonese is included into the State Register and enjoys national monument status.

As for the sites lying within the boundaries of the Chersonese chora, they have local archaeological monument status and are protected by the relevant *resolutions of the Executive Committee of the Sevastopol City Council* (No. 856 of 20 December 1975, No. 6/199 of 28 March 197, No. 19/876 of 17 November 1987 and No. 3/185 of 29 January 1991).

Under the *Resolution of the Cabinet of Ministers of Ukraine on Adoption of Provisions on the Museum Resource of Ukraine* (No. 1147 of 20 July 2000), the museum collections of the Tauric Chersonese National Preserve are part of the state Museum Resource of Ukraine and therefore enjoy the highest degree of legal protection.

4.1.3. Ministerial acts

Project documents defining the boundaries and land use regimes of the city of Chersonese were adopted by Order No. 220/0/16-11 issued by the Ministry of Culture and Tourism of Ukraine on 6 April 2011 and have been submitted to the municipal cultural heritage protection bodies, which are responsible for introducing relevant changes in the local city planning documents.

In addition to that, under consideration for adoption is now the *Project of Boundaries and Land Use Regimes for the Buffer Protected Areas of the Tauric Chersonese National Preserve on the Heracleean Peninsula in Sevastopol*.

Conservation and restoration on the sites administered by the Tauric Chersonese National Preserve are conducted according to the requirements of the *State Building Standards of Ukraine: Reconstruction, Renovation and Restoration of Nonproduction Sites. Restoration, Conservation, and Renovation Works on Cultural Heritage Monuments* (DBN V.3.2-1-2004), which were adopted in 2004.

The *Comprehensive Programme for Conservation and Restoration on the Chersonese City Sites* developed on the basis of the DBN V.3.2-1-2004 Standards was adopted by Order No. 90/0/16-10 issued by the Ministry of Culture and Tourism of Ukraine on 26 February 2010. A similar conservation and restoration programme has been developed for the Chersonese chora and is now under consideration for adoption.

4.1.4. Local city planning documents

The protected status of the Chersonese city and its chora on the Heracleean Peninsula is recognized in the Master Development Plan for the City of Sevastopol until 2025 adopted by Resolution No. 4114 of the Sevastopol City Council (dated 31 December 2005). Now that new boundaries and buffer zones have been approved by the Ministry of Culture of Ukraine for the Tauric Chersonese National Preserve sites (since 2011), correspondent alterations are to be introduced in the relevant local city planning documents.

Furthermore, correspondent *resolutions of the Sevastopol City Council and regulations of the Sevastopol City State Administration* have transferred a number

of protected areas for permanent use to the Tauric Chersonese National Preserve, who is now responsible for systematic measures for the preservation and exploitation of the cultural heritage sites. These include:

- the ancient city of Chersonese – Regulation No. 55-p of the Sevastopol City State Administration of 13 January 1999;
- the chora site in the Yukharina Gully – Resolutions No. 475 and No. 10804 of the Sevastopol City Council of 5 July 2006 and 13 July 2010, respectively;
- the chora site in Berman's Gully – Resolution No. 4126 of the Sevastopol City Council of 8 April 2008;
- the chora site on the Bezymyannaya Height – Regulation No. 55-p of the Sevastopol City State Administration of 13 January 1999;
- the chora site in the Streletskaya Gully – Resolution No. 4127 of the Sevastopol City Council of 8 April 2008;
- the chora site on the isthmus of the Mayachny Peninsula – Resolution No. 7982 of the Sevastopol City Council of 8 September 2009; and
- the chora site on Cape Vinogradny – Resolution No. 4802 of the Sevastopol City Council of 8 July 2008.

Apart from the aforementioned areas, the Tauric Chersonese National Preserve has at its disposal another 5 protected sites on the Heracleian Peninsula, namely on Cape Peschany, near Omega Bay, in the upper part of the Yukharina Gully, in the upper part of the Quarantinnaya Gully and in the Khomutovaya Gully, with all the necessary resolutions already passed and correspondent deeds already issued by the Sevastopol City Council. In the nearest future (until the end of 2011) the Preserve expects to receive another 5 sites on the Heracleian Peninsula.

4.2. Suggested solutions and future prospects for legal protection of the property

In 1988 Ukraine ratified the *Convention Concerning the Protection of the World Cultural and Natural Heritage* adopted by UNESCO in 1972. According to the Convention, the state party is to apply its provisions to any and all sites and areas nominated for inscription on the World Heritage List. If the property the Ancient City of Tauric Chersonese and its Chora is inscribed, additional protection and control measures shall be applied to it in accordance with the said document.

In this connection, certain state acts will have to be adopted to supplement the Law of Ukraine on Cultural Heritage Protection, particularly as far as world heritage protection and alignment of Ukrainian cultural heritage protection legal definitions with those set by international law are concerned. Relevant amendments to the Law are already being prepared by the authorized bodies of the Ministry of Culture of Ukraine. Among them are extending the existing list of site types (newly discovered, local and national ones) by adding a 'world heritage site' category, definitions of world heritage buffer zones in the context of the existing monument protection zoning etc.

In addition to that, some bylaws and ministerial acts will have to be passed to have the archaeological heritage sites lying within the boundaries of the protected Tauric Chersonese National Preserve areas included into the State Register of Immovable Monuments of Ukraine. The Preserve is now preparing all the necessary documents that will become a basis for the relevant acts to be issued by the Cabinet of Ministers and the Ministry of Culture of Ukraine.

Of crucial importance for conducting monument protection activities at the property is purpose-based government funding. To have it secured as soon as possible, a target governmental programme for the development of the Tauric Chersonese National Preserve for the next 10 years is to be adopted. The concept of such a programme with estimates of additional funds needed for the protection of the sites, creation of the archaeological park (the first one in Ukraine) and their integration into governmental programmes for local and international tourism development has already been prepared by the State Service for National Cultural Heritage Protection and is currently under consideration by the Cabinet of Ministers of Ukraine.

Furthermore, the Heracleian Peninsula has some rather large undeveloped chora land plots with extant ancient structures that need to be granted protected status and subsequently transferred for use to the Tauric Chersonese National Preserve. Relevant research and project documents are now under preparation and will be submitted for adoption to the Ministry of Culture of Ukraine and the local self-governance bodies in 2011 and 2012. It should be noted that if such areas obtain protected status, they could contribute to considerable expansion of the nominated property and thereby ensure security, protection and preservation of the Chersonese chora on an area considerably larger than the one it has at the moment.

In addition to that, in order to secure their legal status as protected areas, in the nearest future (2012 – 2013) all the relevant Chersonese chora sites and monuments will be provided with passports and included in the State Register of Immovable Monuments of Ukraine.

The final output of the said projects will be the changes introduced in the local city planning documentation, notably the Master Development Plan for the City of Sevastopol until 2025, which should set the boundaries and land use regimes for the cultural heritage sites and their buffer zones as defined by the mentioned projects. This was initiated in 2011 and is expected to be finalized by June 2013.

5. PROPERTY MANAGEMENT STRUCTURE

5.1. General information

The ancient city of Tauric Chersonese and its chora is a complex of archaeological monuments and is, according to the Ukrainian legislation, the property of the state of Ukraine.

General management of the property is the responsibility of the Ministry of Culture of Ukraine, the central national executive power body in the field of cultural heritage protection.

As per the Statutes adopted by the Ministry of Culture and Tourism of Ukraine (Order No. 917/0/16-08 of 18 August 2008), responsibility for day-to-day management of the property lies with the Tauric Chersonese National Preserve.

Apart from the city of Chersonese and the protected chora areas, the Preserve is also responsible for the ruins of two fortresses located in the area under the jurisdiction of the Sevastopol City Council: the Kalamita Fortress in the settlement of Inkerman and the Cembalo Fortress in the town of Balaclava.

5.2. Existing property management structure

5.2.1. Executive structure

The executive structure of the Preserve administration is based on the staff list approved by the Ministry of Culture of Ukraine. In effect now is the staff list adopted on 27 May 2011, according to which the Preserve administration consists of 196 staff positions, of which 138 are paid from the state budget and 58 are paid from the special fund. These staff positions make up the following executive structure of the Preserve administration (Fig. 41):

At the head of the Preserve administration is the Director General, who is assisted by 7 Vice Directors and an Academic Secretary. These are responsible for the following fields of activity:

- research,
- education and outreach,
- archaeological research expeditions,
- protection of explored monuments,
- restoration,
- international contacts, and
- investment activities.

The Vice Directors are in charge of their respective Departments and Sections, as well as Support Services:

- Accounting Department,
- Personnel Department,
- Ancient History Department,
- Medieval History Department,
- Scientific Archive Department,
- Scientific Collections Department,
- Architecture and Archaeology Department,
- Scientific Conservation Department,
- Interpretation and Site Protection Department,
- Research Department,
- Security Department,

- Department of Scientific and Technical Methods of Monument Research,
- Maintenance Department,
- General Affairs Department,
- Conservation and Restoration Section,
- Education and Outreach Section,
- Scientific Methodology Section,
- Archeological Monument Passportization Section,
- Monuments Protection and Research Section,
- Archaeological Station for Archaeological Research Expeditions,
- Branch – Cembalo Fortress, and
- Branch – Archaeological Park.

The Preserve comprises two Branches, fourteen Departments, five Sections and an Archaeological Station. Their activities are based on the annual action plans subject to approval by the Ministry of Culture of Ukraine.

The divisions of the Preserve listed above are all headed by senior specialists, who manage scientific, technical and auxiliary staff. At the moment, the administration of the Preserve includes the following staff categories:

- administrative staff – 39;
- scientific staff – 44,
- technical staff – 37,
- auxiliary workers – 76.

5.2.2. Advisory structure

In order to improve coordination between the structural divisions of the Preserve administration, address day-to-day multisectoral challenges, deal with emergency works and provide for collective decision making, the management structure of the Preserve has been supplemented with some advisory bodies. These include such standing bodies as the Academic Council, the Scientific Methodological Council, the Restoration Council as well as temporary Working Groups.

The *Academic Council* consists of reputable scientists, both working in the Preserve and representing relevant external research organizations, and acts as an advisory body to the Director General of the Preserve. The Academic Council performs the following functions:

- reviews scientific and research projects to be implemented in the Preserve and recommends them for approval;
- approves new research methodologies;
- does strategic planning of the scientific activities of the structural divisions of the Preserve;
- approves scientific work plans of the Preserve staff members;
- reviews and approves the Preserve's exhibit plans;

- reviews the Preserve's publishing plans and approves its publications for publishing;
- decides on arranging scientific and practical conferences, workshops etc;
- approves documents endorsed by the Scientific Methodological and Restoration Councils; and
- addresses any other research related issues.

The membership and duties of the Academic Council are subject to approval by the Director General of the Preserve. The Council meetings are called when necessary.

The ***Scientific Methodological Council*** consists of the leading museum specialists of the Preserve and acts as an advisory body to the Director General of the Preserve. The Scientific Methodological Council performs the following functions:

- reviews the texts of thematic guided tours submitted by scientific staff and guides of the Preserve and makes necessary recommendations as to their approval;
- reviews and approves methodological concepts of guided tours for museum and open-air exhibits;
- studies positive display and collection related practices of the Preserve departments and assists their ongoing progress;
- reviews and approves projects for the artistic design of the Preserve's exhibits;
- organizes and takes an active role in the preparation of conferences on the practicalities of museum activities.

The membership and duties of the Scientific Methodological Council are subject to approval by the Director General of the Preserve. The Council meetings are called when necessary.

The ***Restoration Council*** consists of the leading specialists of the Preserve dealing with conservation and restoration of immovable heritage and museum items and acts as an advisory body to the Director General of the Preserve. The Restoration Council performs the following functions

- reviews and recommends for approval heritage conservation and restoration programmes and projects of the Preserve;
- plans restoration and conservation works on the sites of the Preserve;
- introduces up-to-date practices of restoration and conservation of immovable heritage and museum items;
- assesses the qualifications of the Preserve restoration specialists.

The membership and duties of the Restoration Council are subject to approval by the Director General of the Preserve. The Council meetings are called when necessary.

Temporary working groups comprised of representatives of different divisions of the Preserve are set up by order of the Director General to coordinate their efforts and perform activities which require involvement of different specialists. Memberships, tasks and timeframes for any such groups are set by the Director General of the Preserve with the advice and consent of the heads of all the divisions involved.

5.2.3. External structures

General management of the Preserve administration, its property and its areas is the responsibility of the Ministry of Culture of Ukraine and, in exceptional cases, the Cabinet of Ministers of Ukraine. In order to practically perform such management, the said institutions have created two advisory bodies: the Cultural Heritage Protection Scientific Methodological Council under the Ministry of Culture of Ukraine and the Supervisory Board of Trustees of the Tauric Chersonese National Preserve.

The *Cultural Heritage Protection Scientific Methodological Council* under the Ministry of Culture of Ukraine has been created by order of the Ministry and is composed of leading specialists from relevant research and design institutions of Ukraine. The Council performs its functions as an expert body giving opinions and recommendations as to the approval of any projects related to the protection and exploitation of the cultural heritage of Ukraine, including the heritage administered by the Tauric Chersonese National Preserve. The said projects can only be approved by correspondent orders of the Ministry of Culture and Tourism of Ukraine on the basis of correspondent resolutions of the Council.

The *Supervisory Board of Trustees* of the Tauric Chersonese National Preserve has been created by order of the Cabinet of Ministers of Ukraine and is composed of distinguished scientists and public figures, representatives of non-governmental organizations and local self-governance bodies, the membership of the Council being subject to approval by the Cabinet of Ministers of Ukraine. The Council is to give advice and supervise the Preserve administration. The resolutions of the Council serve as recommendations for the governing bodies helping them to promptly respond to any arising problems related to the activities of the Preserve administration, preservation of its cultural heritage and any other issues pertaining to the Preserve.

5.3. Suggested solutions to develop the property management structure

The *executive structure* of the Preserve needs radical transformation while the staff size of the Preserve administration should be kept as it is or even increased.

It is evident that the existing structure of the Preserve administration is much too cumbersome and not quite reasonable. At the moment, there is a lot of overlapping in the functions of different divisions. At the same time, different Vice Directors are responsible for supervising the activities of interrelated divisions. What's more, there is no such position as the Senior Collections Manager, which is, however, vital for ensuring the integrity of the Preserve's museum collections.

Consequently, there is a need for well thought out reorganization of whole the chain of command in the Preserve, which will, in turn, help to improve its cultural heritage management.

In need of reorganization is also the staff structure of the Preserve administration, presently showing lack of balance between administrative staff, which is excessive, and scientific and technical staff, which is deficient, i.e. there is a problem of administrative overstaffing and scientific/technical understaffing.

In order to remedy the situation, an urgent audit of the executive and staff structures of the Preserve administration is needed, and the result of such an audit should become a basis for introducing relevant changes to the staff list.

The *advisory structure* does not need any radical change, the functioning of the advisory bodies being fully justified and contributing to effective performance of the tasks faced by the Preserve administration.

Still, in the future it would make sense to define the functions of each of the aforementioned advisory bodies more clearly and make their activity schedules more precise. Furthermore, the Restoration and Scientific Methodological Councils of the Preserve should be subordinate to the Academic Council and coordinate their actions accordingly. The proposed changes should be reflected in the correspondent provisions regulating the duties of these bodies, and the meetings of the Councils should be held at least 4 times a year.

As for the Academic Council of the Preserve as a body involving not only internal but also external specialists, it can go on to function at two levels: day-to-day issues could be addressed at internal meetings of the Academic Council, held, whenever necessary, jointly with the Restoration and Scientific Methodological Councils whereas more complicated and larger scale problems could be tackled at enlarged meetings of the Academic Council involving its external members. Such enlarged meetings should be held at least 1 to 2 times a year.

The *external structures* of the Preserve are also in no need or reorganization, being well established implementation mechanisms for the state cultural heritage protection policies.

What is however recommended is to make up a work schedule for the Supervisory Board of Trustees in order to improve coordination as far as participation of its members from other cities and countries, organization of its meetings, decision making and informing the Ministry of Culture and the Cabinet of Ministers of Ukraine of its decisions are concerned. It is advisable to hold meetings of the Supervisory Board of Trustees at least 1 to 2 times a year.

6. PROPERTY SECURITY

6.1. Protection against vandalism

All the protected areas managed by the Tauric Chersonese National Preserve should be fenced and have 24-hour access control security.

General rules should be formulated and posted at the entrances to the protected areas to safeguard their archaeological remains. These should specify that digging or any other form of damage (including removal of stone, brick, plaster etc) to any structures in the Preserve is strictly forbidden. Stress will be laid on the legal ban on the removal of any form of archaeological material from protected sites and the penalties for transgression.

Sensitive elements such as mosaic floors should be protected by barriers preventing visitors from damaging them, whether intentionally or unintentionally. At points such as these there should be discreet notices requesting visitors not to cross the barriers. Also forbidden should be climbing on ancient masonries, with correspondent warning signs installed.

The security staff (guards or wardens) will be responsible for ensuring that these rules are observed by visitors during the opening times of the Preserve.

6.2. Visitor safety provisions

In order to ensure security and personal safety of the visitors to the Preserve, more guards should be hired to patrol the protected areas while the sites are open to the public. Guards and wardens will be responsible for ensuring that visitors do not put themselves or other visitors at risk by their actions. These individuals should be easily recognizable and for this purpose it is desirable for them to wear some kind of uniform. Such uniform should not be in police or military style, but it should be easily recognizable from a distance.

The viability of CCTV (closed-circuit television) should be investigated as a means to monitor those areas of the Preserve that cannot be physically patrolled in a continuous manner.

6.3. Site security at night

At night, when the sites are closed to visitors, guards will be responsible for ensuring that there are no unauthorized people within their boundaries. They will be charged in particular with preventing any illicit excavation and ensuring that the museum and its collections are not violated. It is recommended that nighttime security on the sites be provided in close collaboration with the local law enforcement services (police).

Unlike the guards operating during the periods when the sites are open to visitors, the guards responsible for security at night could wear more formal uniforms.

7. MONITORING OF CULTURAL HERITAGE AT THE TAURIC CHERSONESE NATIONAL PRESERVE

7.1. General principles

The traditional approach to conservation at the Preserve is based on reaction to deterioration events, i.e. an object is conserved only when it is discovered to be actively deteriorating. This *reactive* culture of conservation is good enough to only partially restore deteriorating structures and, in the long run, it results in a gradual loss of authenticity of ancient historic and archaeological buildings and structures, remains of ancient constructions and archaeological finds across the Preserve.

Therefore, in the future the reactive culture of conservation should be replaced with the one focusing on *preventive* conservation measures, wherein potential deterioration and its underlying root causes are identified and addressed before they start causing any irreversible damage that would require invasive remedial action.

Introduction of the preventive conservation approach at the Preserve requires development and implementation of a monitoring system based on repeatable overall condition assessment surveys, along with targeted condition assessments. These would provide a baseline dataset from which annual long-term and short-term monitoring action plans should be developed.

In addition to the aforementioned formal condition assessment programme, a less highly structured continuous public monitoring programme is proposed to be introduced which would encourage all stakeholders regularly accessing the areas, museums and historic buildings of the Preserve to highlight actual and perceived conservation problems to those responsible for conservation at the Preserve.

7.2. GIS monitoring of immovable heritage

In 2003, the Conservation and Restoration Section of the Tauric Chersonese National Preserve, together with the Institute of Classical Archaeology at the University of Texas, developed an experimental site conservation condition survey and recording system based on a Geographic Information System (GIS). The survey system has been tried out on some of the pilot sites and monuments in the ancient city and, having delivered successful results, should now be extended to cover all the areas, sites, historic buildings and structures that comprise the Preserve (Fig. 42). The GIS will allow for overall comparative analysis of the condition of the cultural heritage across the Preserve as a whole, making it possible

to identify the objects that are in most urgent need of conservation, irrespective of their location within a specific area of the Preserve.

7.3. Monitoring of museum collections

Since 2004 the artefacts, archive, and library collections of the Preserve have been systematically examined to establish their overall condition and identify types and prevalence of the destructive factors to which the material is exposed. The survey has also focused on the suitability of packaging materials and display constructions to determine the level of protection these afford to the collections. Besides, the condition and material makeup of the buildings and the overall environment parameters to which the items are exposed have been analyzed.

As a result of these undertakings, a number of projects focused on improving storage conditions through introduction of improved packaging methods, upgrading of existing storage facilities and construction of a new supplementary storage facility have been implemented. The dataset produced as a result of the survey should form a baseline of information, to which data collected in the future repeats of the collection condition survey will be compared.

By adopting a structured monitoring programme of the collections through continuous environmental monitoring and repeat condition surveys, optimum storage conditions will be created and a culture of preventive rather than reactive conservation will be achieved for the collections.

In addition to that, there is a pressing need for establishment of a programme for continuous biological (mycological) control of items on display in the galleries and located in the stores. This programme should be integrated with a programme of continuous monitoring of humidity and temperature in the stores and exhibition galleries of the Preserve using modern sensors and computer management.

7.4. Frequency of monitoring

7.4.1. Immovable cultural heritage

A programme of extending the practice of the surveys undertaken in 2003 and 2004 to cover all the areas of the Preserve is to be initiated in the nearest future.

Condition surveys will be carried out at regular intervals. Repetition of the 2004 survey should be undertaken in 2012, after the Preserve acquires the necessary software, and, depending on the result when compared with the 2004 data, the frequency of such monitoring will be increased or decreased as required.

Organized monitoring of the sites will initially be carried out by monthly or bimonthly site visits by the relevant Preserve staff. In the future, as the needs of specific sites are clarified, this frequency can be increased or decreased.

A system to allow the Preserve staff and stakeholders to participate in the informal monitoring of the sites will be established at the earliest date possible.

7.4.2. Movable cultural heritage (archaeological collections and archival material)

The survey undertaken in 2004 will be repeated in the near future, at which point the frequency of future surveys will be established.

Monitoring and examination of the collections is at present undertaken in a traditional way. This will continue, with the procedure becoming more structured and data produced digitized and added to the conservation database.

A structured approach will also be used for updating storage and packaging methodologies.

8. CONSERVATION AND RESTORATION OF THE PROPERTY

8.1. General considerations

Archaeological investigations have been conducted in the protected areas of the Tauric Chersonese National Preserve for nearly two centuries. Excavation of a monument and its eventual display require measures to ensure its conservation and preservation. Moreover, it is important to remember that the character, age and state of preservation of monuments can be very different from one to the next. In addition, the approaches which were used over a period of many decades were not systematic; they changed progressively, and in many ways do not conform to today's monument preservation requirements.

Over the last few years a great deal of survey work has been undertaken in order to establish the extent and condition of both movable and immovable heritage for which the Preserve is responsible, with the aim of determining the extent and priorities of conservation work. Because the volume of the material is so vast, any conservation efforts required to ensure its survival into the future need to be carefully planned, coordinated and undertaken on the basis of a well designed conservation plan built on the most up-to-date methodologies of conservation and management.

The volume and diversity of the material present and the complexity of the required work dictate that such a conservation plan should be organized into prioritized stages of conservation and restoration works and made up of a number of smaller distinct plans developed to address the needs of specific collections, archaeological complexes and individual monuments.

In order to ensure the necessary level of quality and effectiveness of work on the monuments simultaneously and in a coordinated manner, it is necessary to develop a *Programme for Conservation and Restoration Research and Works at the Tauric Chersonese National Preserve*, which will ensure a systematic approach to monument preservation at the Preserve and affirm the conceptual approaches to conservation. Leading specialists from various fields of monument preservation should be invited to develop the programme. The programme should be approved by the Academic Council of the Preserve and adopted by the Ministry of Culture of Ukraine.

The programme in question is planned to include the following sections:

1. Conservation of archaeological complexes;
2. Conservation of architectural complexes and historic structures;
3. Conservation of archaeological artefacts;
4. Preservation of library and archival material;
5. Preservation of digital data; and
6. Preservation of museum records.

In addition to the sections listed above, some other aspects of monument preservation should be considered when developing any conservation projects within the framework of the programme:

- i Implementation of a preventive conservation philosophy;
- ii Implementation of a risk-preparedness culture;
- iii Creation of a disaster plan;
- iv Development and monitoring of stable and suitable museum display and storage environments;
- v Introduction of up-to-date storage methodologies and materials;
- vi Introduction of such strategies of site and monument conservation, historic reconstruction and preparation of areas adjacent to sites and monuments that will aid presentation, interpretation and visitor management.

8.2. Major focus areas of conservation and restoration

8.2.1. Preservation and conservation of exposed archaeological complexes

The Preserve is currently conducting intensive scientific investigations in the conservation of archaeological complexes and selection of conservation materials and methodologies. On the basis of these investigations, general systematic approaches will be developed for the preservation and display of archaeological sites and monuments. These methodologies will form the basis of the general concept of archaeological monument preservation of the Preserve, thereby ensuring the quality of individual approaches to each monument, taking into account its idiosyncrasies, character, and historical and cultural values, according to the requirements of international standards and national regulations of Ukraine for the conservation and preservation of monuments.

In 2009 the Institute of Monument Protection Research developed a Comprehensive Programme for Conservation and Restoration at the Complex National Archeological Heritage Property 'Ancient City of Tauric Chersonese' envisaging step-by-step conservation activities in the ancient city of Chersonese (adopted by Order No. 90/0/16-10 of the Ministry of Culture dated 26 February 2010). A similar programme is now being developed for the chora. Specifically, the programme requires that:

- any conservation projects at the Preserve should be developed in accordance with the current national and international standards and regulations;

- any work on any monument should begin with comprehensive research on that monument, whose results should then form the basis for further project decisions;

- the research results should form the basis for a draft monument conservation project, which should include all the aspects of preservation, organization, and necessary financing for the works;

- the draft project is a document that should receive all necessary approvals; and so it must go through all the stages of discussion, approval, necessary expertise and adoption by the Ministry of Culture of Ukraine. In addition, the Academic and Restoration Councils have an opportunity to review and introduce relevant changes to the project documentation so that it conforms with the general principles, the approved concept for preservation and systematic approaches to preservation of the monuments of the Preserve. These steps are designed to prevent any undesirable results, loss of harmony and integrity of the ensembles and complexes etc.

It is also required that the Preserve staff should be competent and experienced in organization, implementation and management of large-scale restoration and conservation projects. The Preserve shall secure all the necessary legal licences authorizing it to undertake any of its conservation and restoration projects. Only those organizations that have special licences allowing them to project and conduct conservation and restoration works on national monuments can be accepted as conservation and restoration project developers and implementers for the Preserve. Such specialized licensed organizations will be involved where complicated work and comprehensive scientific investigations in conservation are necessary. Any such work will however still be performed under continuous supervision of the appropriate Preserve employees and under the control of the relevant state monument preservation services.

8.2.2. Preservation and conservation of architectural complexes and historic buildings

In addition to archaeological monuments, the Preserve has a number of historic buildings. These are the remnants of the architectural ensemble of the monastery and the buildings dating from the Crimean War and World War II periods. They are currently being researched, classified and officially recorded (provided with passports).

To protect these historical and architectural monuments it is essential to take a comprehensive approach to research and a systematic approach to the preservation of these monuments and their territories (as these are elements of the architectural and archaeological complexes).

The principle of minimum intervention and maximum reversibility should be basic principles guiding conservation decisions for these monuments. The system of monument research and preservation will be updated and modernized regularly.

More attention will therefore be paid to the comprehensive research of the monuments and their architectural elements, their building materials and technologies. Any interventions will be minimal and carried out applying materials similar to those used in their original construction. If, having passed their natural

life, roofs, windows, floors and fittings are in need of renovation and only when this is impossible will they be replaced with materials that exactly match the original quality, materials and design. New elements will not have any negative impact on authentic elements.

As with the conservation of archaeological structures, renovation and maintenance of historic buildings will be controlled and managed by the Preserve.

Historic buildings will only be used for the purposes they were originally intended for (St. Vladimir's Cathedral and the Church of Seven Martyrs of Cherson) or as administrative, storage or display premises of the Preserve. However, any such adaptive reuse with its modern pressures should not have any negative impact on their authentic elements, but should make a positive contribution to their preservation. Any additions or modifications should be temporary in nature and reversible so that the buildings may, if required, revert to their original form without evidence of reuse being visible.

In order to establish the framework for such conservation and restoration works, an inventory of all the historic complexes and buildings in the ancient city and in the chora should be compiled and maintained.

8.2.3. Preservation and conservation of archaeological artefacts

Conservation of archaeological material at the Preserve will be based on the best practice principles, as determined by the international conservation community. It will be considered as part of the archaeological process and a requirement for obtaining excavation permits. Those responsible for excavations undertaken by non-Preserve-based archaeological institutions or any other bodies will be required to present their material to the Preserve in a condition and packaged in a way that will assure its survival.

Over the past few years advances in both conservation methodologies and archival packaging have been made by the Scientific Conservation Department of the Preserve. This work is to be developed into a conservation guidebook or manual, which should be adopted as a list of requirements for depositing material in the museum.

Visiting archaeological expeditions that elect to undertake conservation of their own material will be vetted by the Preserve's Scientific Conservation Department in order to ensure that those undertaking the work are competent, qualified and experienced in the disciplines required. Archaeological expeditions that rely on the Preserve's Conservation Department to undertake the required conservation of recovered archaeological material will have to cover the cost of this service.

Conservation of material recovered from any joint archaeological excavations undertaken by the Preserve in partnership any other organizations will be funded jointly by both parties or by one of the parties, if mutually agreed.

8.2.4. Preservation and conservation of library and archival material

The Preserve houses a large quantity of library and archival material and these collections are continually increasing. Conservation of this material is considered as important as that of the museum collections.

Like the archaeological material, new material deposited in the library and the archive will be required to arrive in a form determined by the Library, the Archive and the Conservation Department. These requirements should be legitimized by a correspondent regulatory act and form part of the conditions for obtaining excavation and research permits. The requirements will specify form, size, packaging, labelling and material makeup of the substrate and be based on the principles of best practice as determined by the international conservation community.

8.2.5. Preservation and conservation of digital data and museum records

The Preserve is now producing and accruing a large amount of digital data which require proper housing, preservation and substrate. The Preserve's Restoration, Library, and Archive Departments should give high priority to becoming familiar with this discipline so as to be able to implement a plan for the storage of this material based on the best practice principles as determined by the international conservation community.

Apart from that, all departments of the Museum keep records of their activities and specific responsibilities. In the future, a provision should be made for incorporating these records in the historical record. In this case these records will be governed by the same criteria of material makeup, form and preservation needs as the library and archival material. A plan of systems for collation of this material and its future preservation is to be prepared and implemented.

8.3. Basic principles of restoration and conservation

8.3.1. Implementation of a preventive conservation philosophy

As has already been mentioned, at present the vast majority of conservation in all disciplines and across all areas is reactive. The Preserve will change this operational practice through the use of condition surveys and by providing equipment, materials, improved storage facilities, working practices and staff education to allow for a culture of preventive conservation to become established.

8.3.2. Implementation of a risk-preparedness culture and creation of a disaster plan

All museum collections, archaeological sites and ancient buildings are at risk from negative natural and manmade factors. Whilst the impact of such factors can be reduced, they can never be eliminated. It is therefore necessary for the Preserve to quantify the level of risk to the cultural heritage it is responsible for across all aspects of its sites and buildings and disseminate this information.

The staff should be made aware of possible problems and frameworks of reporting thereon. A survey will be undertaken and working practices modified if required. A risk assessment survey will be undertaken at the earliest possible date

and is to be repeated on a regular basis. Working practices, prioritization of maintenance and financial budgeting should all be influenced by the necessity to reduce the possibility of damage or loss of the cultural heritage the Preserve exists to protect.

Natural and anthropogenic disasters are a potential threat that is beyond man's control. Whilst most events of this kind cannot be predicted or prevented, experience has shown that by planning the reaction to the disaster and by training and practising how the staff should react to a disaster can considerably reduce the long-term impact of the event. The Preserve will therefore give the highest priority to obtaining the skills required to create and implement a comprehensive disaster plan as soon as possible. The plan should cover not only the Preserve and its staff, but also the emergency services, police and local government officials. These organizations are to be contacted on this matter and included in the development of the disaster plan from its initial conception.

8.3.3. Development and monitoring of stable suitable museum display and storage environments

Preventive conservation is based on the principle of mitigation of the destructive forces working on an object, as opposed to manipulation of the material makeup of an object to render it stable in the range of conditions that it is to be stored or displayed in.

Preventive conservation has two main advantages. First of all, the object can remain in its original condition as excavated and therefore available for analysis in its original unmodified state. Second, treatment of the object can take place whenever required and not as an immediate response to excavation. This eliminates pressure on the Conservation and Restoration Section and frees up conservators' time to undertake work on a backlog of material in the collection.

A preventive conservation approach is now the norm worldwide, and this approach will be adopted by the Preserve in order to protect its collections and handle the vast amount of new material it is constantly acquiring.

The basis of preventive conservation is the creation of storage and display environments that actively protect the material contained therein. The Preserve staff will acquire the skills required to design systems and develop working practices that will allow them to undertake the work required in order to successfully upgrade the present storage and display environments to levels that meet international standards for storage and display.

8.3.4. Introduction of up-to-date storage methodologies and materials

Along with correct storage and display environments, packaging and storage methodologies assist in the preventive conservation of museum items. The Preserve staff will obtain the skills required to implement and upgrade their storage and packaging methodologies by undertaking a programme of testing materials for their suitability for use in the museum context. Local manufacturers and suppliers will be located and the onward supply of the correct materials sourced.

As has been mentioned above, the success of any preventive conservation methods can only be determined by repeated survey of the condition of the material in the collections assessing the level and rate of deterioration as well as by monitoring of the levels and fluctuation of the destructive elements of the storage and display environments. A programme of environmental monitoring for the galleries and storage facilities is therefore to be initiated as soon as possible to produce a baseline dataset from which a plan for the future improvement of facilities could be developed.

8.3.5. Introduction of site and monument conservation, restoration and reconstruction strategies that aid interpretation and visitor management

At present the Preserve is viewed as a set of individual sites, monuments, structures and buildings with conservation treatments being designed and implemented as “one off” projects on “one off” sites. This approach is recognized as directly leading to confusion and to accentuating the perception of the components of the Preserve as distinctly separate entities. Such an approach will be reversed, recognizing the essential fact that the strength of the Preserve territories lies in the fact that they are all linked.

To accentuate these links, conservation treatments and restoration will be standardized across all the sites, irrespective of their geographical location within the Preserve territories. The practice of reconstructing of missing elements of structures will be replaced by a policy whereby reconstruction is only undertaken when not to do so is judged to be likely to result in the loss of further original material, and then only as a last option and in accordance with the requirements set out in the international conventions and international restoration recommendations.

9. PROPERTY RESEARCH

9.1. Archaeological surveys and excavations, geophysical, aerial and underwater surveys

Only some of the excavations that have been carried out over the past 150 years in the ancient city of Chersonese and in its chora have been conceived as parts of specific research programmes. Most of the excavations have however been opportunistic or concentrated on a single site or monument to the exclusion of its surroundings or context. The same considerations applied to a considerable extent to many other aspects of research – archival, architectural, artefactual research, landscape analysis etc. It is difficult to understand the overall research policy when research is concentrated on elucidating specific problems. This kind of practice does not conform with currently accepted scientific methods and wholly contradicts all the accepted principles of heritage preservation.

There is therefore an urgent need to establish an overall problem-orientated research policy for Chersonese and its hinterland. This should be given the highest priority by the Academic Council of the Preserve when making any decisions. The

policy should be subject to a triennial evaluation and revision, but revisions will be possible annually should urgent grounds for doing so (e.g. new discoveries, changes in funding) be recognized.

Professionals who plan to conduct archaeological investigations on the Tauric Chersonese National Preserve territories must annually seek approval of their research plans from the Academic Council of the Preserve. Research plans of archaeological investigations must include, in addition to a rationale for the necessity of such work, the location of planned work, a detailed description of objectives and methods of research and conservation work, a list of estimated costs, sources of funding, services required from the Preserve and a precise timetable for publication of results.

It is necessary to introduce a practice according to which archaeologists will not be granted permission to conduct archaeological investigations or excavations in the Preserve from the central executive body in the field of cultural heritage protection unless their research plans are approved by the Preserve administration.

Grounds for rejection of archaeological research plans by the Preserve administration can include the incompatibility of planned work with the general research strategy of the Preserve, inappropriate methods of research and/or conservation standards and also the failure to produce research reports or publications on past work.

Data collected from archaeological investigations in the Preserve should be detailed in an extensive research report and submitted to the Preserve archive; archaeological finds should be appropriately processed and submitted to the Preserve's Collections Department according to the current collection requirements.

Researchers retain exclusive publication rights for the scientific information acquired by them in the process of work, as established by Section 1, Articles 15 and 28 in the Law of Ukraine on Copyright and Contiguous Rights. Data from excavations, surveys and other projects that are not published within five years of such excavations, surveys etc shall be considered to be in the public domain and available for other scholars and researchers.

These conditions apply equally to the staff of the Preserve, whose research project proposals (with the exception of emergency interventions) must also be submitted for approval to the Academic Council.

The requirements set out as relating to the submission of research proposals apply fully to excavation projects. Additionally, all estimates of excavation projects must include provision for obligatory post-excavation conservation of important archaeological remains and the disposal of spoil. No finds may be removed from the Preserve without special permission from the Preserve's administration, and all drawings, photographs and other graphic materials must be lodged in the Preserve's archives. Records must be prepared in the form laid down by the Preserve for integration into its database.

Applications similar to the ones submitted for archaeological excavations must be made for obtaining permission to carry out any forms of survey projects, including geophysical, aerial and underwater, in or around the areas of the

Preserve. Survey data must be submitted to the Preserve's archives so as to be made available for inclusion in the common database in a compatible format. Priority will be given to projects that conform to the overall research policy of the Preserve.

A geophysical map of the Heracleon Peninsula within the demarcated ancient chora of Tauric Chersonese and the unexcavated areas of the ancient city should also be created. Such a map will be an essential foundation for developing an effective programme for future archaeological investigations. This project is particularly important in the rescue excavation context, given the rapid pace of urbanization in and around Sevastopol. It is obvious that rescue archaeological investigations and excavations in the area should be carried out as soon as possible, before any construction works start.

Last but not least, in order to be able to conduct underwater surveys in the Black Sea and the bays adjacent to the Heracleon Peninsula, a special research division should be created within the structure of the Preserve administration with specialists qualified in relevant fields.

9.2. Archival and bibliographic research and publications

There will be facilities for archival and historical research for Ukrainian and overseas scholars at the Preserve. The collection in the Library is an exceptional one and should be widely publicized both nationally and internationally. Facilities provided for study should be of a quality considerably higher than that currently available. This should be the subject of a comprehensive review and reform.

All the archives (manuscripts, reports, plans, maps, photographs etc) in the Archive of the Preserve and all the artefactual material in the Museum and the stores are available for consultation and study by scientists and students provided that these materials are not subject to researcher copyright. For access to any copyright reports prior consent of the authors must be obtained.

For access to the stores it is necessary for applicants to submit a written request from their institution substantiating the research necessity for obtaining access to the material and attesting to the identity and suitability of the applicant. Appointments should be made by letter, telephone, electronic mail etc with the Preserve managers.

According to current legislation, grounds for denial of access to archival materials or collections can only include the potential risk of damage to the materials in question during work owing to their fragile state or limitations accorded by authors' rights. The Preserve or the authors retain copyright over the archival materials and collections. Permission must be sought in writing for its reproduction in any form for publication. Reproduction and publication of these materials by persons other than the author requires special permission from the Preserve administration.

In the future, a study could be carried out on the possibilities for the use of the Preserve's archives by commercial organizations on a fee-paying basis. This will include an assessment of the implications in terms of staffing and finance.

At present the vast majority of written interpretive materials available to the visitor are in Russian. These include scholarly studies, guidebooks, brochures, pamphlets, postcards etc. They are available for purchase at souvenir stalls at the entrance to the Preserve and in both museum galleries. High-quality colour pamphlets about the museum's Byzantine steatite icons translated into Ukrainian, German and English are available for purchase in the museum galleries.

It is important that the Preserve should initiate a comprehensive publication programme. A more diversified selection of publications ranging in price, language and age-level is essential in making information about Chersonese more accessible to all visitors. The following are the main categories of publication that are needed:

- A series of general publications on the overall history and archaeology of Chersonese and specific aspects of the site aimed at a more general scientific readership will be prepared by Preserve staff or specialist scholars.
- A series of Chersonese monographs (in addition to the existing periodical, Chersonese Collections) should be initiated, published either independently or in association with other institutions. The copyright of all these publications will wherever possible be assigned to the Preserve.
- Guidebooks for general visitors (in Ukrainian initially, but extended to other languages – English, Russian, French, Japanese, German) should be prepared.
- Introductory workbooks and worksheets for schoolchildren covering different aspects of Chersonese and written by schoolteachers or educationalists in collaboration with Preserve staff are necessary.

In addition to these more formal publications, consideration will be given to the preparation of some form of souvenir entrance ticket with a plan of the site and brief details of any temporary exhibits and public events currently held or prepared by the Preserve.

10. INTERPRETATION AND PRESENTATION OF CULTURAL HERITAGE

10.1. General principles of cultural heritage interpretation

A plan of monument interpretation to be developed by the Preserve will build on the ICOMOS Ename Charter provisions. Any plan for the interpretation and presentation of Chersonese must be based on knowledge about the visitors who come to learn about the site.

Specifically, distinctions should be made between foreign and local visitors and their needs, small children, students and adults, those coming for a few hours and those wanting to spend the entire day at the Preserve. In order to provide quality experiences for all kinds of visitors, it is important to create an interpretation programme tailored to all visitors and catering for their individual intellectual, cultural and physical needs: these pertain to language, age, physical limitations and education level. All interpretation methods mentioned below

(printed material, guided and other types of tours etc) need to be available in more than one language, and preferably in Ukrainian, Russian, English and other languages.

In order to form an effective interpretation programme and provide high quality visitor services tailored to different kinds of visitors, a thorough visitor survey (through questionnaires and interviews) should be conducted by the Preserve; these data will demonstrate who in fact comes to Chersonese and why. Once a complete visitor profile and visitor expectations have been elucidated, decisions can be made about the type and amount of information that need to be provided.

Data collected from visitor surveys will help mould ideas for temporary exhibits in the museum galleries so that more dynamic displays will address the themes that interest visitors the most. Temporary exhibits, a regular schedule of thematic talks given by staff specialists as well as presentations of the latest finds and excavations will encourage repeat visits to the museum by those visitors who have seen the permanent exhibition.

10.2. Museum exhibits

At present, the Preserve has a permanent exhibit highlighting the medieval history of Chersonese. This was established in 1982 and needs upgrading. In addition to that, an ancient exhibit is due to open in 2012. While its design is still under discussion, the display premises are already being renovated and necessary facilities are being purchased with financial and advisory support of the A. G. Leventis Foundation (Cyprus).

Planning for new exhibits should take into account contemporary museum approaches to display and presentation. Provisions should be made for consistency between the museum halls in their information panels (with a uniform approach to printed layout, font, amount and intellectual level of information) and diversity of interpretive materials (printed guidebooks, audio guides, activity panels for children). There should also be compatibility in presentation with the information panels on the exposed sites.

The hologram exhibit currently on display at the Preserve does not meet today's standards and should therefore be either replaced or redesigned.

10.3. Immovable property conservation and interpretation challenges

Interpretation and education are related to conservation approaches and vice versa. Reconstruction of architectural elements in archaeological structures, building up walls to an arbitrary height and filling out a floor plan by adding elements are some of the conservation practices that were in the past employed at Chersonese to make archaeological sites more readily understood by the non-specialist visitor. As in situ reconstructions and even additions to the original fabric are forbidden except in specific circumstances by the international restoration

conventions and charters that have been ratified by Ukraine, alternatives to reconstruction must be found.

Insofar as interpretation is concerned, there are several methods to make indecipherable archaeological structures more comprehensible to the non-specialist – for example, through schematic reconstructions on panels, in guidebooks, or by means of facsimiles built off the site (and duly marked as such).

A major visitor attraction in this respect will be the exhibits at the Archaeological Park in the protected Chersonese chora areas, whose potential will be strengthened through thematic displays related to particular characteristics of individual sites, demonstrations of achievements in experimental archaeology, palaeobotany and palaeozoology, educational activities as well as models of ancient farmsteads and vineyard planting wall systems.

10.4. On-site signage

As has already been mentioned, at the present time the panels affixed to the more prominent archaeological features in the ancient city of Chersonese usually contain identifying information, a plan of the structure, its approximate date and, at best, schematic reconstructions. A handful of these signs provide a short description of the function of the structure.

Orientation signs are limited to location names in Russian (e.g. Theatre, Galleries, Toilets) and corresponding arrows painted on asphalt-covered surfaces. They are rarely prominent and are often obscured by parked cars or worn away.

A large outdoor panel with a schematic plan of the ancient city has recently been replaced by one depicting a mix of reconstructed buildings dating to various periods of the city's existence (ancient through modern). More modern signage has, however, been installed on a recently excavated area in the ancient city which provides information about the institution conducting the excavations, plans and a short description of the history of the site and what kind of structures it contains.

There is thus an urgent need to prepare and implement a coordinated policy for signage in the ancient city.

Much worse is the situation on the chora sites, where there is no signage at all.

It goes without saying that the format and information provision for all signage (including information panels and orientation signs), both outside and within the museum galleries and other visitor accessible buildings, should be wholly compatible in all parts of the Preserve. All signage should be consistent in colour scheme, overall layout, font, symbols etc, so that it is readily understood by visitors.

Direct links should be made between excavated finds on display in the galleries and the location in the ancient city where those finds were made; these mental connections can easily be made through consistency in signage and a written guide (by means of symbols and colours). This will impress upon the visitor that the significance of the artefacts is not primarily intrinsic, but lies within the context in which they were discovered. This emphasis on their archaeological

and historical significance will better explain archaeological methodology and will add more than what is at present an art-historical appreciation of most objects that are on display. It will demonstrate to the visitor that the aim of archaeology lies not in searching for objects, but in learning about past cultures.

Any signage should be helpful to visitors and visible enough to follow, but not so intrusive as to have an adverse impact on the overall appearance of the site.

10.5. Facilities for specialized groups

The Preserve already provides many visitor services such as guided tours of the ancient city and museum galleries, theatre presentations, temporary exhibits created for themed festivals at the Preserve, specialized activities for primary school students (which include visits to the museum collection stores, conservation laboratories, library, archives) and off-site services such as educational visits to area schools.

Existing services should be supplemented by self-guided tours for the independent-minded visitor (equipped with a specially designed brochure that leads the visitor around the site along a specified and well marked route, or with an audio wand in the museum galleries); short question-and-answer sessions given by archaeologists and/or conservators at particular sites where demo excavations are just about to start; temporary exhibits on special themes such as ancient wine production, daily life, warfare etc which are advertised at the Preserve entrance. More diverse offerings will encourage repeat visits by those people, especially local Sevastopolians.

Facilitated access for disabled, elderly and infirm visitors to the museum galleries and ancient city should also be introduced. The physically impaired are a highly marginalized group in Ukraine in general, and even a limited amount of modifications to paths and entrance ways at the Preserve will open up opportunities to this type of visitor. Chersonese should become the first archaeological site in Ukraine which is accessible to the physically impaired. The following measures should be considered in making this happen:

- a wheelchair ramp to the ancient hall of the museum;
- more benches throughout the ancient city located where they would not detract from the appearance of the site; and
- better surfaced access paths devoid of stones and other obstacles in, for example, the eastern region of the ancient city along the ancient main street.

These are just some examples of easily made modifications which would open the door to the physically impaired. The facilitated access feature should be included in advertisements about Chersonese to attract this group's attendance.

10.6. Other visitor management challenges

Visitor numbers have climbed steadily since 2000 after an abrupt decline following Ukrainian independence in 1991 (Fig. 43). If this phenomenon

continues, the exponential increase of visitors will have a direct impact on the sustainability of visitor services, conserved archaeological structures and the natural environment.

Furthermore, the Master Development Plan for the City of Sevastopol focuses on the growth of its tourism infrastructure as the backbone of its economy, a dramatic switch from its former identity as one of the key players of the Soviet military-industrial complex.

It is imperative for the management team of the Preserve to consider these concomitant changes and plan for contingencies. The study of visitor use patterns combined with the monitoring of visitor numbers against the site's carrying capacity are essential in planning a policy which will provide a quality visitor experience without impinging on the significance of the site.

10.6.1. Challenges related to presentation of conserved heritage

The interpretation programme for Chersonese should be implemented in conjunction with the overall conservation policy outlined elsewhere in this plan, for example, in the issue of site accessibility and preservation efforts. Information about the hazards of climbing on walls both to the ancient structures and to visitors themselves, a pervasive problem throughout the Preserve, and reminders to treat the site with respect should be made available in a number of ways:

- through signage at the entrance and other areas,
- by guides, and
- in printed material designed for self-guided tours.

Up-to-date information about conservation efforts should be both posted on signage and described in guided tours to relay to visitors the need for heritage preservation, how it is done practically, how the visitor can help and also, and no less important, to demonstrate to visitors that the management team is taking care of the site. It has been shown at other heritage sites that visitors show better care at places that are well kept and looked after.

Well sited and more frequent orientation signs installed throughout the site will encourage visitors to use certain paths over others and discourage them from entering fragile areas which cannot support large numbers of people. Sign locations could periodically change to help regenerate worn circulation routes.

10.6.2. On-site infrastructure

Information. Better orientation methods will be introduced at the Preserve entrance to provide information in several languages regarding suggested visitation routes, including those for the physically impaired, and the location of services, such as refreshment stands, toilet facilities, first-aid stations, souvenir stalls etc. It is advisable that this information take the form of a large orientation panel and a printed map on the entrance ticket itself.

A well marked visitor information desk/kiosk with trained and friendly personnel will be installed at a highly visible point at or near the entrance.

Toilet facilities. The extremely limited number and poor quality of toilet facilities available for the visiting public and the museum staff do not reflect

modern standards. Even with the recently built toilets located in the central part of the ancient city of Chersonese, the existing number of toilets is still inadequate to serve the needs of the hundreds of visitors who are present at the Preserve at any given day during the medium- and high-season periods. Until new toilet facilities are constructed in the Preserve, the option of portable toilets should be investigated from the financial point of view, at least for use during the peak season.

Souvenirs. In addition to guidebooks, visitors to heritage sites greatly appreciate the possibility to purchase souvenirs of their visit. It is important that the quality of the souvenirs available at the Preserve (both in the ancient city and in the archaeological park) should be high and compatible with the importance of ancient Chersonese. Most major European museums and certain heritage institutions have established high standards for the souvenirs that they sell (from copies of sculptures and ceramics to pencils and badges for schoolchildren).

A central installation for the sale of souvenirs and books will therefore be established in the ancient city and in the archaeological park. It would be preferable for this to be an integral part of the Preserve structure.

If, however, it is decided to grant a franchise, there should be strict control over the quality of the merchandise on sale. A working group will be set up consisting of senior Preserve staff and selected experts to supervise all goods on sale at the Preserve.

10.6.3. Parking and off-site signage

The issue of parking is a well known problem which is addressed in some of the sections of the Territory Organization Plan for the Tauric Chersonese National Preserve. Under development now is a road interchange near the central entrance to the ancient city of Chersonese, as is envisaged by the Master Development Plan for the City of Sevastopol until 2025.

The option of park-and-ride shuttle buses and/or the limitation of car and bus traffic to the main Preserve parking lot will also be considered as possible solutions to the problem of congestion during the peak season.

Off-site signage directing visitors to the Preserve has partially improved in the past few years, and there are now road signs to the Preserve at a number of points along the main access routes entering Sevastopol. The Education and Outreach Department of the Preserve acknowledges that signs and information about Chersonese should be available at train stations and airports in Ukraine, but this kind of nationwide publicity is difficult because of budget constraints. Efforts are being made to reach an agreement with the Sevastopol and Crimean tourism authorities and government offices for culture for funding of a wider publicity campaign.

10.6.4. Relations with travel and tourism companies

The Education and Outreach Department of the Preserve is in charge of maintaining relations with travel and tourism companies. The head of the Department represents Chersonese at tourism fairs throughout Ukraine. As of

today, 63 contracts have been signed between the Preserve and Ukrainian tourism operators.

It is vital to continue these links with tourism operators, not only to ensure the steady flow of tourists from near and far, but also to cooperate with them in terms of the trading of information about visitors, their expectations and the availability of visitor services and other opportunities at Chersonese. All too often cultural heritage managers and tourism operators view each other's motives with suspicion and their needs with ignorance. Having mutually beneficial relationships with tourist companies is however a valuable asset to the Preserve.

Special consideration should be given to the potential problems of handling large numbers of visitors coming from large cruise ships and arriving by bus. It is essential that the Preserve staff should be given adequate advance notice that as many as five or six hundred visitors may arrive at one time. Where possible, such large groups should be broken up into smaller components that are distributed between the ancient city and the archaeological park (and other tourist destinations in or around Sevastopol).

10.6.5. Guided and other types of tours

To encourage repeat visits and a wider range of choices, guided tours on various themes should be offered and advertised at the entrances to the ancient city and the archaeological park (e.g. ancient wine production at Chersonese, religious worship in medieval Cherson, the Roman garrison and methods of warfare etc).

Measures to provide information to visitors not taking guided tours and not willing to buy brochures or other printed material should also be considered. Outdoor panels with detailed information in more than one language (as a minimum in Ukrainian, Russian, and English) should be placed at all the important archaeological structures. These panels, in addition to better and more orientation signs, should be installed throughout the site so that the visitor can move about more confidently.

A means of providing for managed accessibility and offering material for repeat visits is the introduction of self-guided tours. There is at present no provision for the independently guided visitor to the site. Methods to provide a quality self-guided tour include maps with corresponding information in printed brochures or audio tours.

10.6.6. On-site visitor safety provisions

At present, there are almost no on-site safety provisions available to the visitor at the Preserve. There is no control over access to different parts of the Preserve and there are many hazardous places, where children and older people are at risk of falling into deep excavated holes. There is also no supervision exercised over potentially dangerous structures, such as the 1935 Basilica, where visitors regularly clamber on the ruined walls of the façade.

The risk of personal injury (and consequent compensation claims) is therefore great. The situation is exacerbated by the fact that there are no facilities for dealing with injuries at the Preserve. In terms of medical assistance, the

presence of at least one first-aid station is critical, especially during the peak summer season.

11. SCIENTIFIC AND SUPPORT STAFF DEVELOPMENT

11.1. Staffing

The Preserve has a number of highly qualified and competent professional researchers. Still, the institution should take care of a young generation of specialists, who should be properly trained to be able to conduct archaeological investigations and prepare research projects, reports and publications.

The Preserve staff includes well trained object conservators and collections managers. There are also individuals with a basic knowledge of site conservation, data management and the application of GIS. The monitoring and maintenance program will, however, need a broader knowledge base than the one currently available at the Preserve and individuals with the required skills will be identified and appointed to act on behalf of the Preserve.

The Preserve staff and the appointed consultants will as a group be proficient in the following skills:

- conducting excavations using up-to-date methods and producing publications;
- design, implementation and interpretation of condition surveys of sites and collections as well as making short- and long-term condition prognoses;
- use of storage techniques for archaeological material, archive and library collections as well as digital data;
- application, implementation and maintenance of computer-based geographic information systems (GIS) and other databases; and
- conservation and maintenance of immovable cultural property, collections etc.

Special consideration should be given to expanding the staff list to be able to recruit more programmers in order to develop and maintain the Preserve's information system.

11.2. Special survey, monitoring and maintenance training

In order to maintain a high standard of survey, monitoring and maintenance of the sites and collections at the Preserve, all its relevant professionals will undertake professional development as part of an organized training and development programme.

A more informal training programme for all members of the Preserve staff and other interested stakeholders will be initiated to inform all staff of the survey, monitoring and maintenance process on the sites and collections. Many sites and buildings administered by the Preserve are rarely visited by the staff and so local

residents, history groups, school parties, tourist guides and government agencies will act as an important “first line of defence” to alert the Preserve administration to problems as they become evident.

11.3. In-house professional training

There will be a comprehensive programme of in-house training courses for all grades of staff. The courses will vary in length, but should operate during working hours. They will take the following forms, depending on their nature (practical work or classroom format) and subject matter:

- whole-day sessions (one or several days a week over a period);
- half-day sessions (one or several days a week over a period);
- lectures and/or demonstration sessions (less than half a day).

Lecturers and demonstrators will be selected, according to level of instruction and subject matter, principally from Preserve staff. However, external lecturers and demonstrators will be used where opportunities arise.

In addition to these specialist sessions and courses, there will be regular one- or two-day courses for new staff members, to introduce them to the background, functions and working methods of the Preserve.

11.4. Open professional courses

In view of the significant professional skills of the Preserve staff and their scientific and professional partners, a programme of courses for senior Preserve staff, professionals and experts from other heritage and scientific institutions and museum organizations within Ukraine will be developed.

Consideration will also be given to the organization and management of such courses in collaboration with other institutions, both national and international, such as the Institute of Archaeology (National Academy of Ukraine), the National Research Centre of Ukraine for Restoration, the National Academy of Fine Arts and Architecture, the Institute of Monument Protection Research (Ministry of Culture and Tourism of Ukraine), the National Commission of Ukraine for UNESCO, the ICOMOS National Committee for Ukraine as well as Ukrainian and foreign universities.

11.5. Orientation courses

As part of educational and outreach activities of the Preserve at the school level, courses should be held, perhaps at weekends, providing orientation guidelines for schoolteachers and others accompanying groups of schoolchildren. These will be designed so that teachers may provide background information on Chersonese for their pupils in advance of their visits to the Preserve and distribute worksheets and introductory material.

11.6. Scientific and methodological conferences

On an annual basis, the Tauric Chersonese National Preserve holds scientific conferences in relevant research fields. However, these are not enough.

The Preserve will develop an active policy for organizing conferences on topics relevant to its work, either on its own initiative or in association with other bodies. These will be aimed at national and international audiences and will operate on a semi-commercial basis, working with local transportation, tourism and hotel enterprises.

11.7. Training of guides

With the anticipated increase in the number of visitors to Chersonese, it is inevitable that Sevastopol and Yalta will see an increase in the numbers of professional tourist guides, accompanying groups of visitors, both national and international, to spend varying lengths of time in the ancient city and the archaeological park. Experience in other countries has shown that a good deal of inaccurate information can be imparted by inexperienced or untrained tourist guides.

Consideration will therefore be given to the provision of short orientation and updating courses for guides, held at weekends in the off-season for tourism and providing them with accurate information and facts for passing on to their clients.

12. FINANCIAL MANAGEMENT

12.1. Budget structure

The Tauric Chersonese National Preserve is funded from a general budget fund and a special fund, with the general budget fund made up of the allocations from the State Budget of Ukraine and the special fund formed by:

- revenues from excursions, preserve entrance fees and admission fees for special exhibitions;
- revenues from charges for photography, video filming, telephotography and film shooting within the boundaries of the Preserve;
- revenues from rented public property;
- revenues from cultural and educational activities conducted on a contractual basis for various public, private and community enterprises, organizations and institutions as well as private individuals;
- revenues from selling souvenirs and other creativity products;
- and
- revenues from other fee-based services.

The general and special funds are used in accordance with the budget programme passports adopted by the Ministry of Culture and Tourism and the Ministry of Finance of Ukraine, namely:

1802030 Historic and Cultural Heritage Conservation in Preserves and

1802040 Cultural Heritage Protection Measures, Passportization, Inventorization and Restoration.

The use of the funds is based on general and special fund estimates approved by the Ministry of Culture of Ukraine, including such economic classification expenditure codes as:

- salaries and wages;
- pay-roll charges;
- purchase of supplies and materials, communication and transportation services, maintenance of transport vehicles, equipment, stock and buildings, other services and expenses;
- energy and utilities;
- purchase of equipment (incl. computers and photocopiers), and durables;
- overhaul of buildings and structures;
- reconstruction;
- restoration of cultural, historic and architectural monuments;
- passportization of cultural heritage monuments;
- elaboration of the sections of the Master Development Plan of the Preserve.

12.2. Financial control

There is a set Financial and Budgetary Reporting Procedure developed for organizations and institutions of Ukraine on the basis of the Budgetary Code of Ukraine, the Law of Ukraine on Accounting and Financial Reporting in Ukraine and the Provisions on the State Treasury of Ukraine adopted by the Decree of the Cabinet of Ministers of Ukraine.

Financial and budget reports are drawn up and submitted by the staff members of the Preserve responsible for management of state-provided funds to the State Treasury of Ukraine, the Ministry of Culture of Ukraine, the Pension Fund of Ukraine as well as the tax authorities in the city of Sevastopol.

The state controls the use of provided funds through the State Treasury of Ukraine, the Ministry of Culture of Ukraine, the Control and Auditing Authority and the Chamber of Accounts of the Verkhovna Rada of Ukraine.

12.3. Financial planning and tendering

The principal financial document of the Tauric Chersonese National Preserve as a state-financed institution is its Budget, which is subject to approval

by the Ministry of Finance of Ukraine. The Budget is drawn up on the basis of the long-term economic and social development plan and specific long-term plans covering the key activity areas of the Preserve. The Preserve has a general fund and a special fund. The Budget projects allocations and expenditures for the general fund as well as revenues and expenditures for the special fund.

The general fund is made up of the allocations from the State Budget of Ukraine.

The special fund consists of the revenues that the Preserve receives from excursions, entrance fees, admission fees for exhibitions, charges for photography, video filming and film shooting, cultural and educational activities, rent, souvenir sales and other fee-based services it provides.

The general and special funds are used in accordance with the economic classification codes and the budget programme passports adopted by the Ministry of Culture and the Ministry of Finance of Ukraine for such programmes as:

1802030 Historic and Cultural Heritage Conservation in Preserves

1802040 Cultural Heritage Protection Measures, Passportization, Inventorization and Restoration.

In accordance with the Law of Ukraine on Public Procurement, the Preserve makes an annual procurement plan and holds competitive tenders, thereby observing the economic and juridical principles of state-financed procurement of goods, works and services, encouraging fair competition and ensuring reasonable and efficient use of the state provided funds.

12.4. Fund raising

The Preserve has been receiving sponsor assistance from the Chersonesos Support Charitable Foundation (on the basis of the Cooperation Agreement between the Preserve and the Institute of Classical Archaeology at the University of Texas in Austin (USA) with the support of the Packard Humanities Institute) and from the A. G. Leventis Foundation (on the basis of the Memorandum between the Preserve and the A. G. Leventis Foundation signed on 26 April 2010). The Chersonesos Support Foundation has been providing charitable assistance consisting in covering the costs of overhauling a building (Packard Laboratory) and purchasing computers, materials, stationery etc, with no funds transferred by the Chersonesos Support Foundation directly to the account of the Preserve. The A. G. Leventis Foundation has been transferring funds to the account of the Preserve to overhaul the premises and design a new exhibit of antiquities.

13. PERIODIC REVIEW AND UPDATING OF THE MANAGEMENT PLAN

The present management plan has been drawn up as a basic document and builds on existing standards adopted for historical and cultural preserves of

Ukraine in correspondent national regulations of Ukraine as well as on the practices of foreign museums and preserves that do not run counter to Ukraine's current cultural heritage protection legislation.

Apart from that, this management plan takes into consideration the provisions set out in those sections of the Territory Organization Plan for the Tauric Chersonese National Preserve that have already been approved by the Ministry of Culture of Ukraine. According to current Ukrainian legislation, a territory organization plan is a basic document for strategic planning of any historical and cultural preserve, which is why any provisions made in the preserve's territory organization plan should be fully reflected in its management plan.

Since the Territory Organization Plan for the Tauric Chersonese National Preserve with all of its sections in place is scheduled to be finalized in 2012, the present management plan is to be reviewed no later than 2013.

From then on, the management plan shall be reviewed once in 5 years, although changes can be made in it in between if corresponded amendments are introduced to the national regulations governing the Preserve.

14. ILLUSTRATIONS

Fig. 1. Map of the Crimean Peninsula with designated location of the Property the Ancient City of Tauric Chersonese and its Chora

Fig. 2. Map of Sevastopol with designated protected areas of the property the Ancient City of Tauric Chersonese and its Chora

Fig. 3. Layout of the protected areas of the city of Tauric Chersonese and its chora within the city of Sevastopol

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Fig. 9. Layout of the protected chora plot on the isthmus of the Mayachny Peninsula and its buffer zone within the city of Sevastopol (Component part No. 006)

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Fig. 11. Ancient antiseismic strengthening constructions on an ancient farmstead in the chora of Chersonese

- Fig. 12. Ruins of the Sixpillar Church in the city of Chersonese damaged by shore erosion
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- Fig. 18. Dissonant power transmission tower on the protected site in the Yukharina Gully
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- Fig. 23. Evidence of black digging in the protected area in the Streletskaya Gully
- Fig. 24. Visitors on the ruins of defensive walls in the ancient city of Chersonese
- Fig. 25. Deteriorating ruins of a ground-based church on Cape Vinogradny 15 years after conservation
- Fig. 26. Unconserved remains of an explored ancient farmstead in the protected area in the Yukharina Gully
- Fig. 27. Access road to the protected site in the Yukharina Gully
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- Fig. 29. Souvenir stalls at the entrance to the ancient city of Chersonese
- Fig. 30. Paved footpaths in the central part of the ancient city of Chersonese
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- Fig. 34. Enclosure around St. Vladimir's Cathedral isolating part of the ancient agora of Chersonese
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- Fig. 36. Unconserved remains of vineyard planting walls in the protected area on the isthmus of the Mayachny Peninsula
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- Fig. 38. Scheme of access ways, parking areas and proposed visitation routes around the city of Chersonese
- Fig. 39. Scheme of priorities for conservation works in the ancient city of Chersonese

Fig. 40. Scheme of priorities for archaeological investigations in the ancient city of Chersonese

Fig. 41. Existing management scheme of the Tauric Chersonese National Preserve

Fig. 42. Condition of the ancient ruins in the city of Chersonese based on 2004 GIS monitoring

Fig. 43. Preserve visitation chart for 2006 – 2010

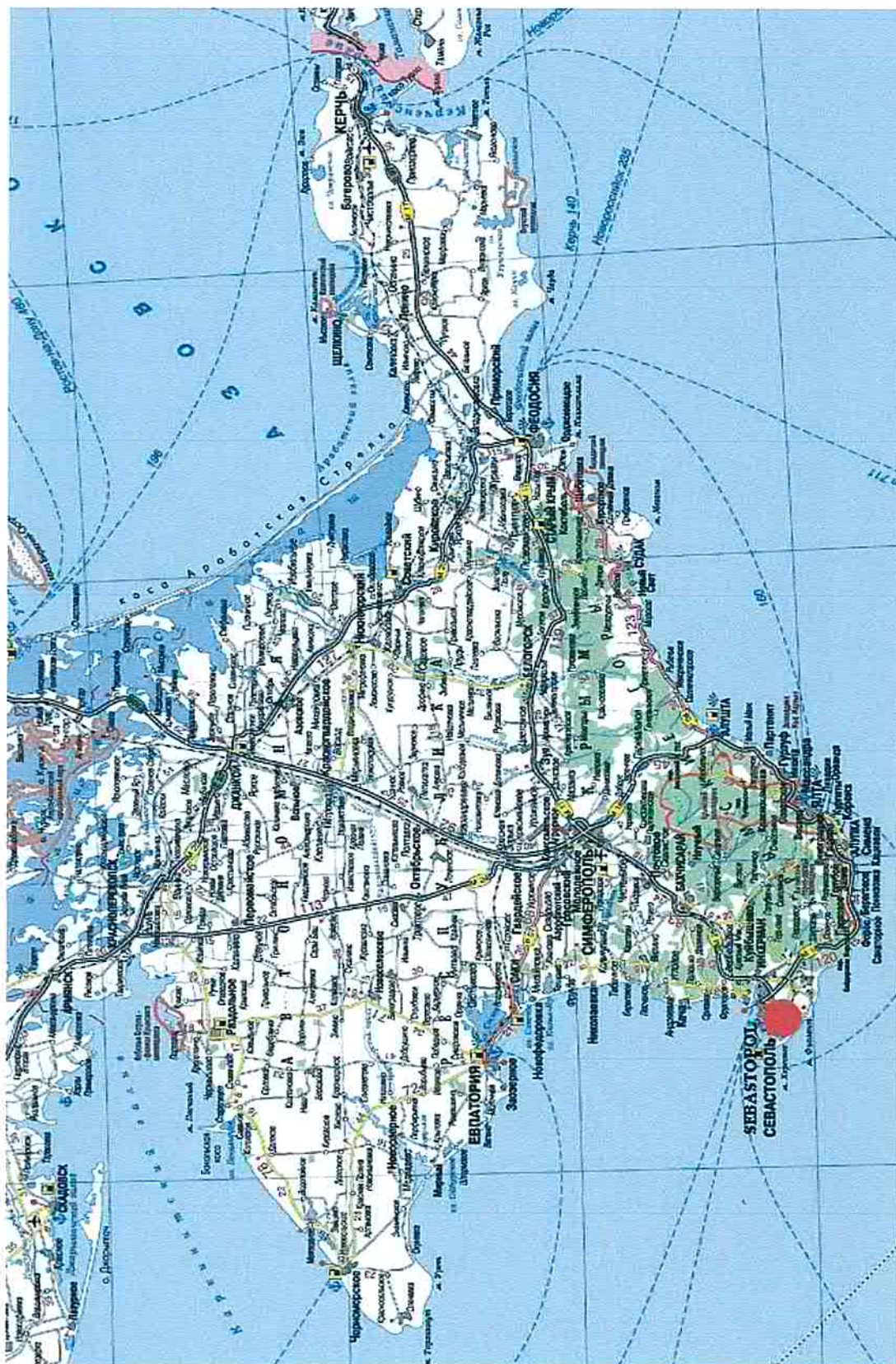


Fig. 1. Map of the Crimean Peninsula with designated location of the property the Ancient City of Tauric Chersonese and its Chora

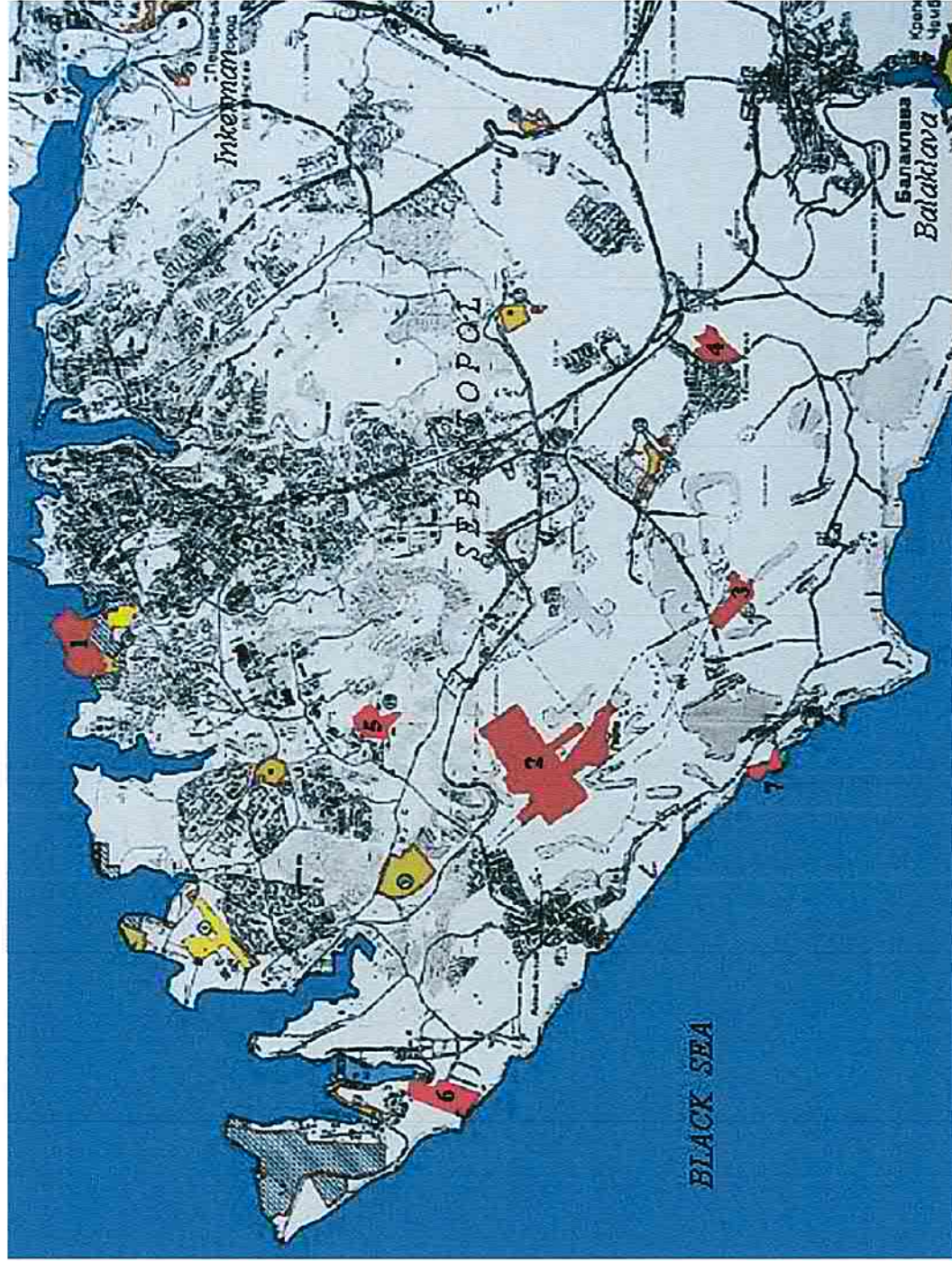


Fig. 2. Map of the city of Sevastopol with designated protected areas of the property the Ancient City of Tauric Chersonese and its Chora: 1 – the ancient city of Chersonese, 2 – Yukharina Gully, 3 – Berman's Gully, 4 – Bezymyannaya Height, 5 – Streletskaya Gully, 6 – isthmus of the Mayachny Peninsula, 7 – Cape Vinogradny

3.1 Sevastopol city plan
of the protected areas
and Chersones chora
sites preserved on the
Herakleian Peninsula

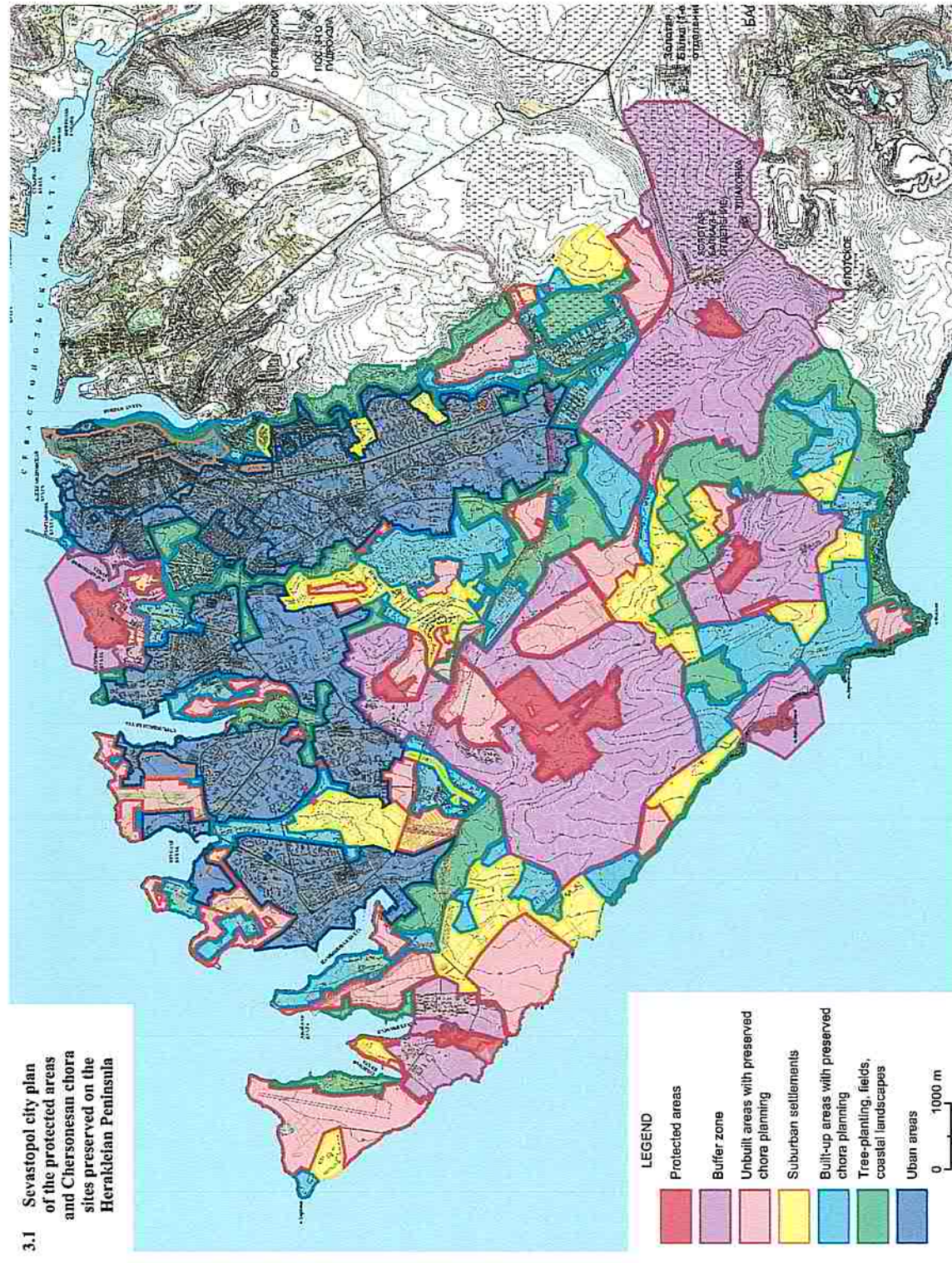


Fig. 3. Layout of the protected areas of the city of Tauric Chersonese and its chora within the city of Sevastopol

1.2 Chersonesos ancient
city site plan of the
protected areas and
buffer zones

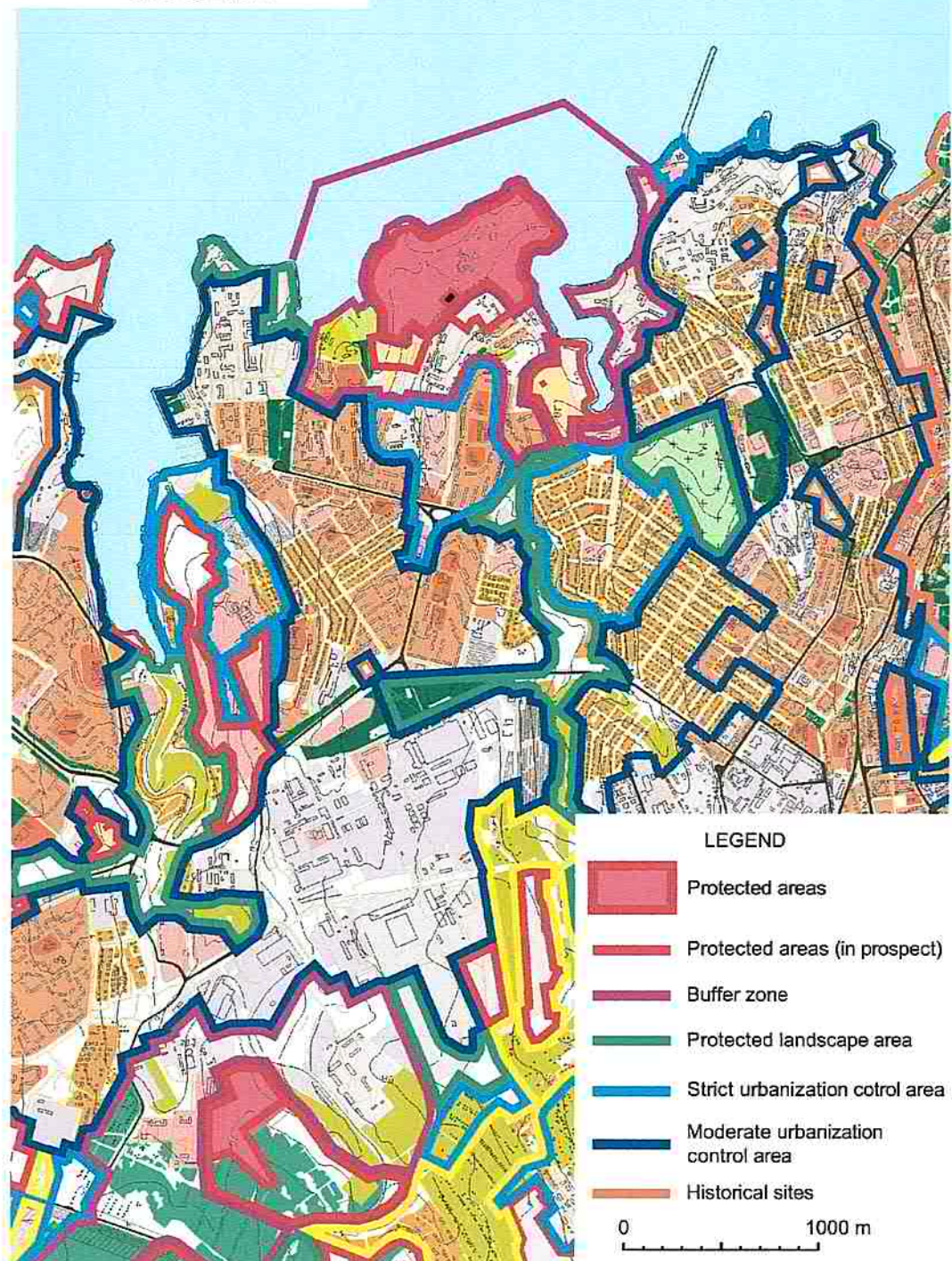


Fig. 4. Layout of the protected area of the city of Chersonese
and its buffer zone within the city of Sevastopol (001)

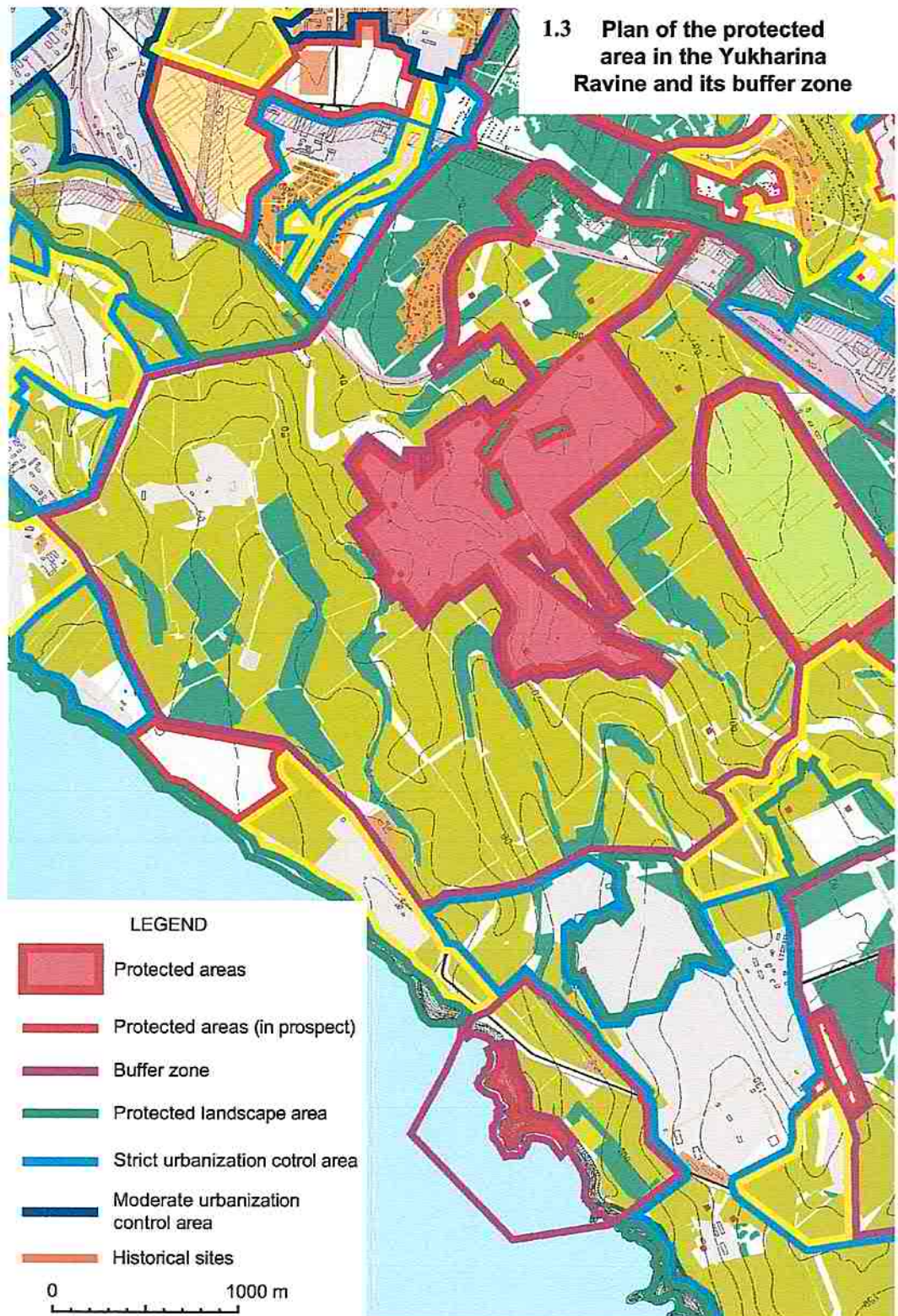


Fig. 5. Layout of the protected chora plot in the Yukharina Gully and its buffer zone within the city of Sevastopol (002)

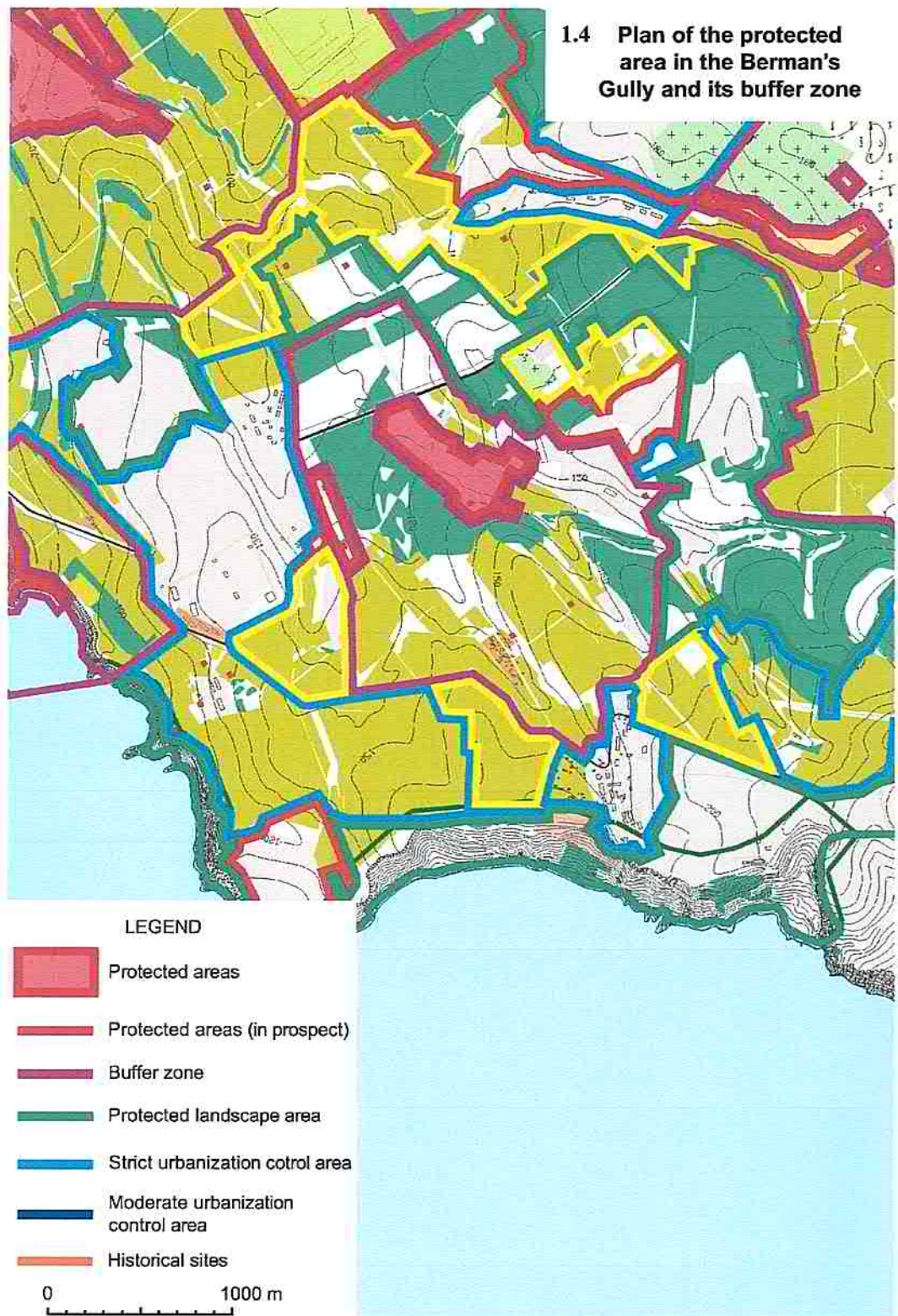


Fig. 6. Layout of the protected chora plot in Berman's Gully and its buffer zone within the city of Sevastopol (003)

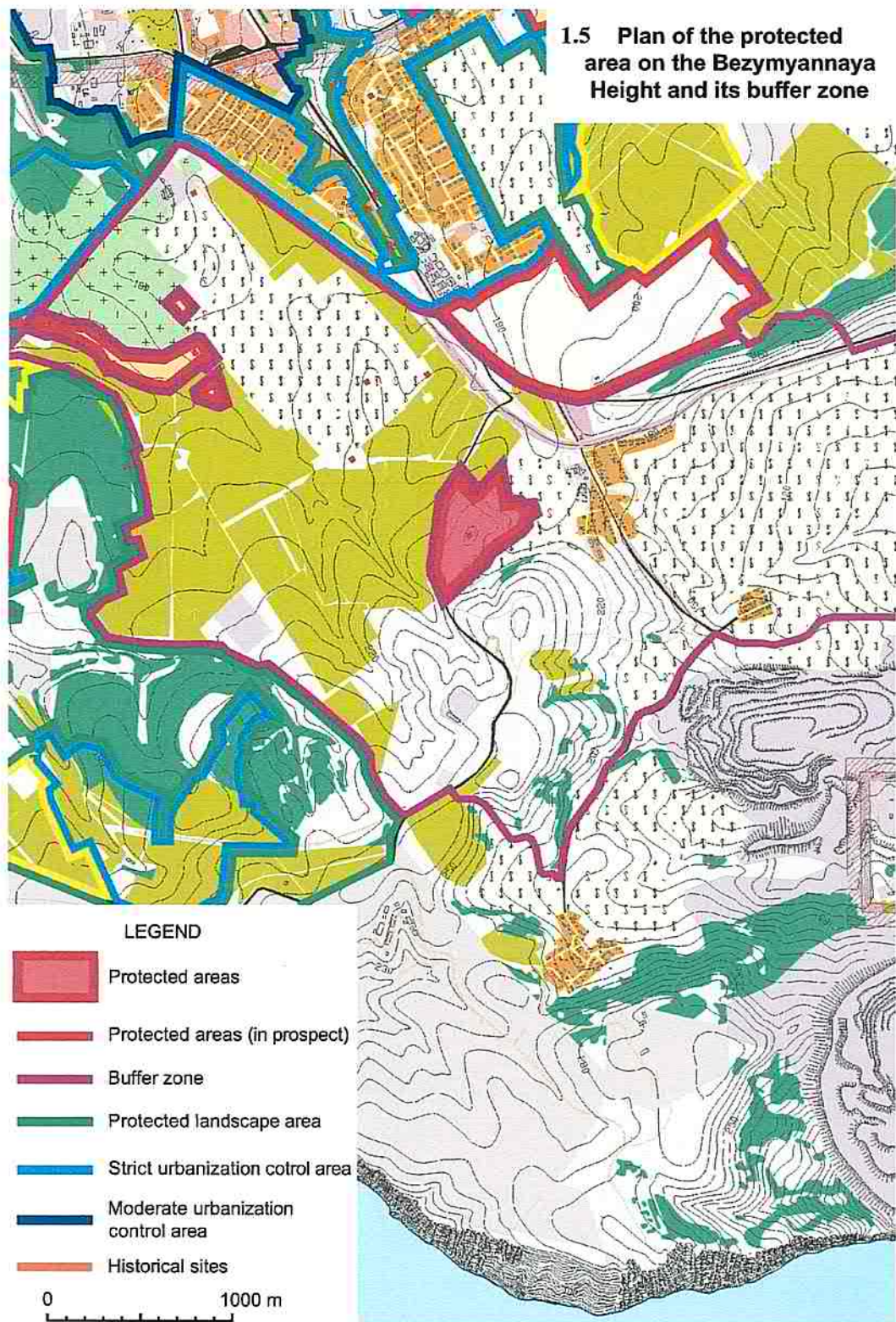


Fig. 7. Layout of the protected chora plot on the Bezmyannaya Height and its buffer zone within the city of Sevastopol (004)

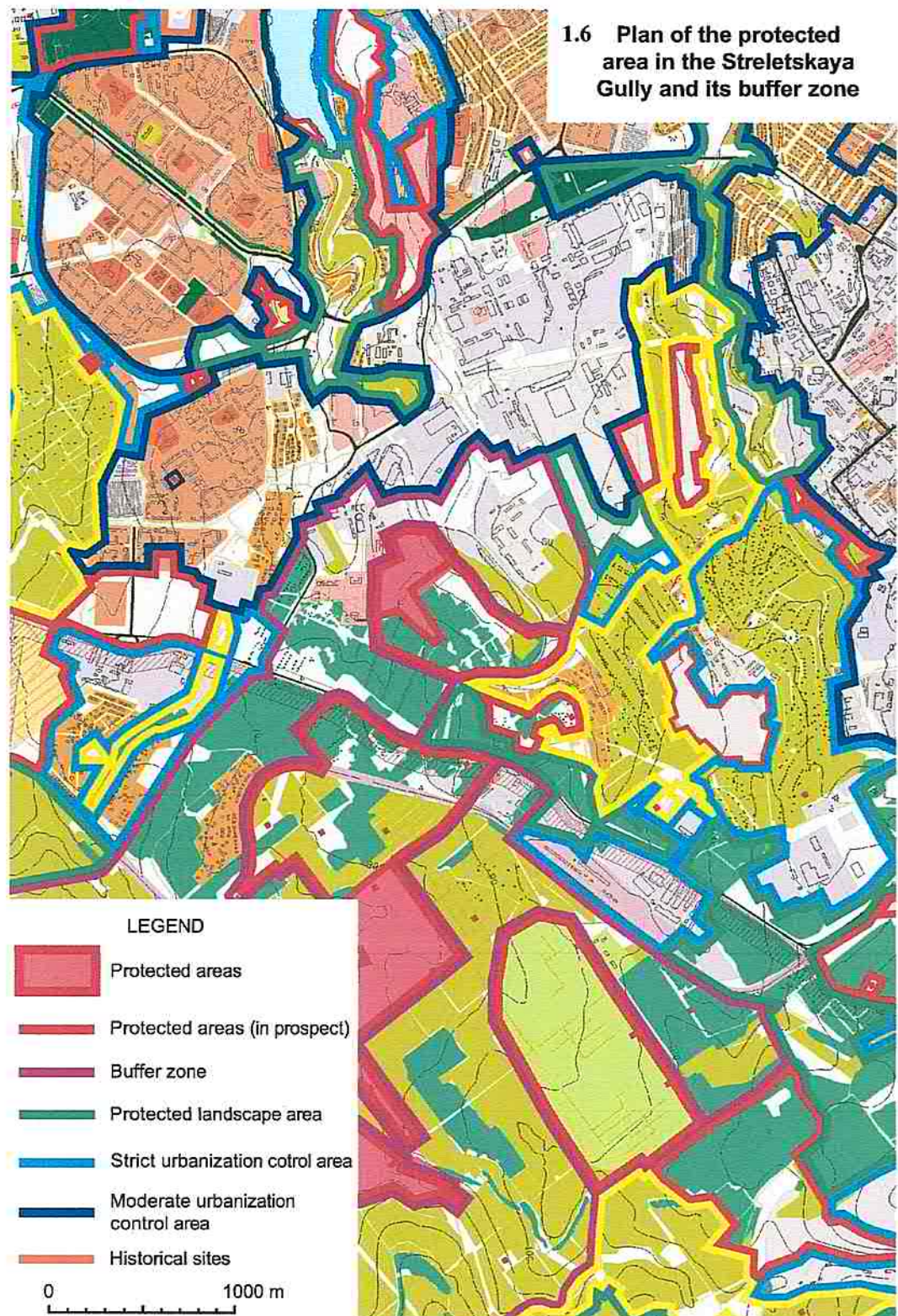


Fig. 8. Layout of the protected chora plot in the Streletskaya Gully and its buffer zone within the city of Sevastopol (005)

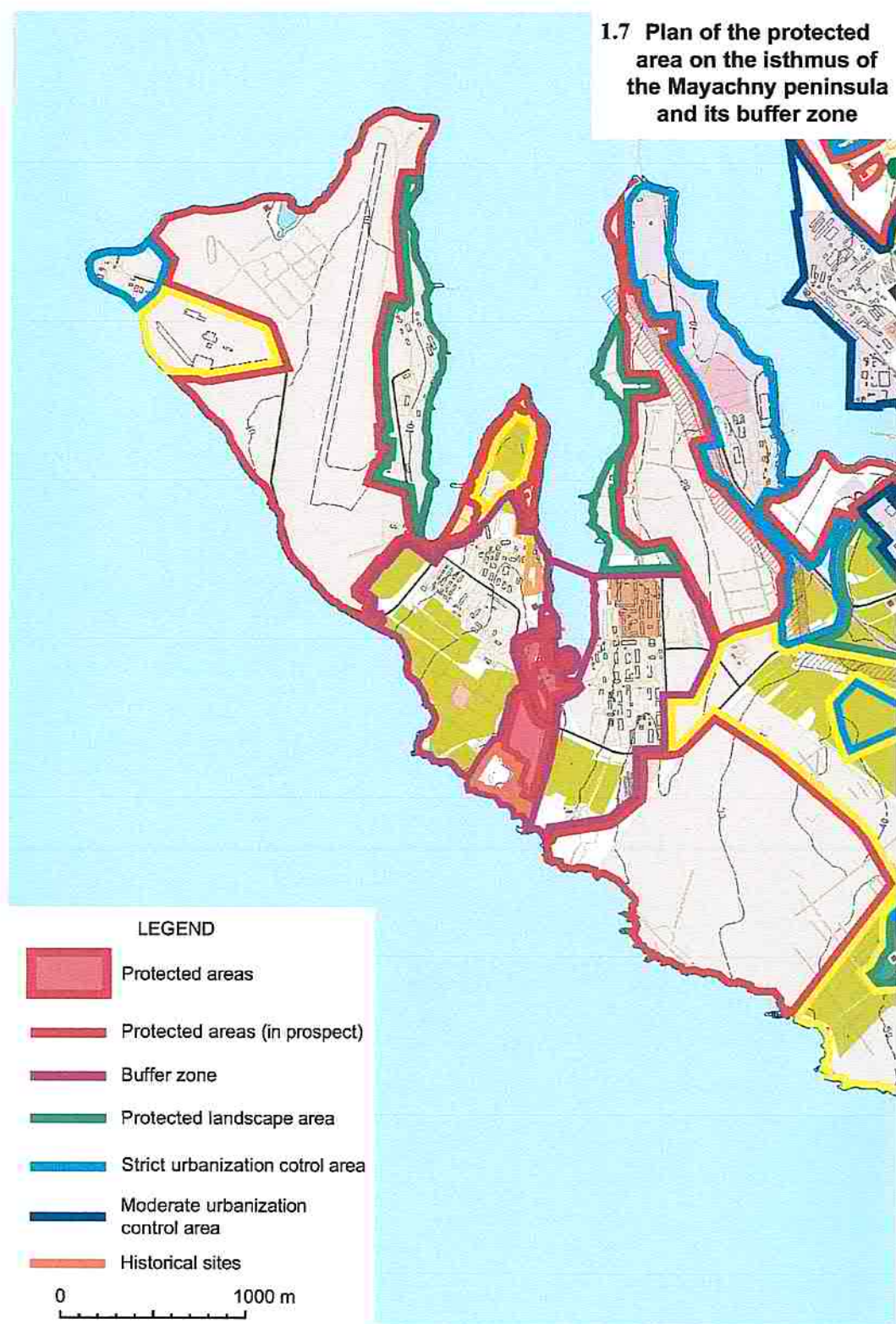


Fig. 9. Layout of the protected chora plot on the isthmus of the Mayachny Peninsula and its buffer zone within the city of Sevastopol (006)

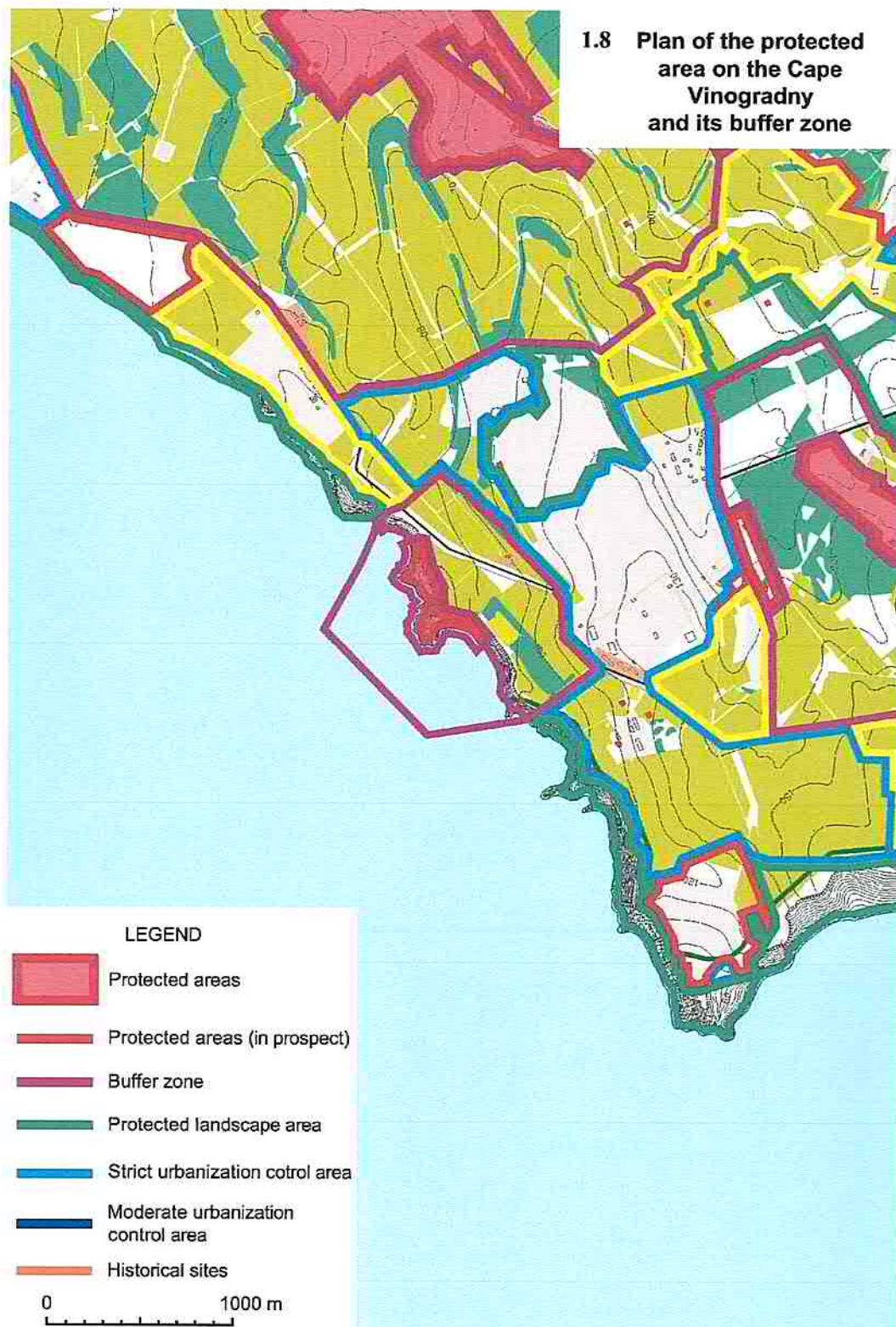


Fig. 10. Layout of the protected chora plot on Cape Vinogradny and its buffer zone within the city of Sevastopol (007)



Fig. 11. Ancient antiseismic wall strengthening constructions on an ancient farmstead in the Chersonese chora



Fig. 12. Ruins of the Sixpillar Church in the city of Chersonese damaged by shore erosion



Fig. 13. Terrace and cave constructions on Cape Vinogradny damaged by a landslide



Fig. 14. Island in Kazachya Bay with waterlogged remains of ancient structures



Fig. 15. Shrubs among the ancient ruins around the 1935 Basilica in the city of Chersonese



Fig. 16. Aftermath of steppe fire in the northern part of the ancient city of Chersonese



Fig. 17. Dissonant modern housing bordering on the protected area on the isthmus of the Mayachny Peninsula



Fig. 18. Dissonant power transmission tower on the protected site in the Yukharina Gully



Fig. 19. Cattle grazing in the protected area on the Bezmyannaya Height



Fig. 20. Construction waste on the protected site in the Streletskaya Gully



Fig. 21. Visitors to the city of Chersonese at a performance
at the ancient theatre



Fig. 22. Protected area on Cape Vinogradny used as a beach



Fig. 23. Traces of black digging in the protected area in the Streletskaya Gully



Fig 24. Visitors on the ruins of defensive walls in the ancient city of Chersonese



Fig. 25. Deteriorating ruins of a ground-based church on Cape Vinogradny 15 years after conservation



Fig. 26. Unconserved remains of an explored ancient farmstead in the protected area in the Yukharina Gully



Fig. 27. Access road to the protected site in the Yukharina Gully



Fig. 28. Modern housing on the approaches to the protected area on
Cape Vinogradny



Fig. 29. Souvenir stalls at the entrance to the ancient city of Chersonese



Fig. 30. Paved footpaths in the central part of the ancient city of Chersonese



Fig. 31. Road surface in the main street of the city of Chersonese



Fig. 32. Coloured powder used for interpreting the ruins of the ancient constructions in the southern part of the city of Chersonese



Fig. 33. Yacht club structures in the port area of the ancient city of Chersonese



Fig. 34. Enclosure around St. Vladimir's Cathedral isolating part of the ancient agora of Chersonese



Fig. 35. 2011 archaeological explorations at the ancient citadel in the Chersonese city



Fig. 36. Unconserved remains of vineyard planting walls in the protected area on the isthmus of the Mayachny Peninsula

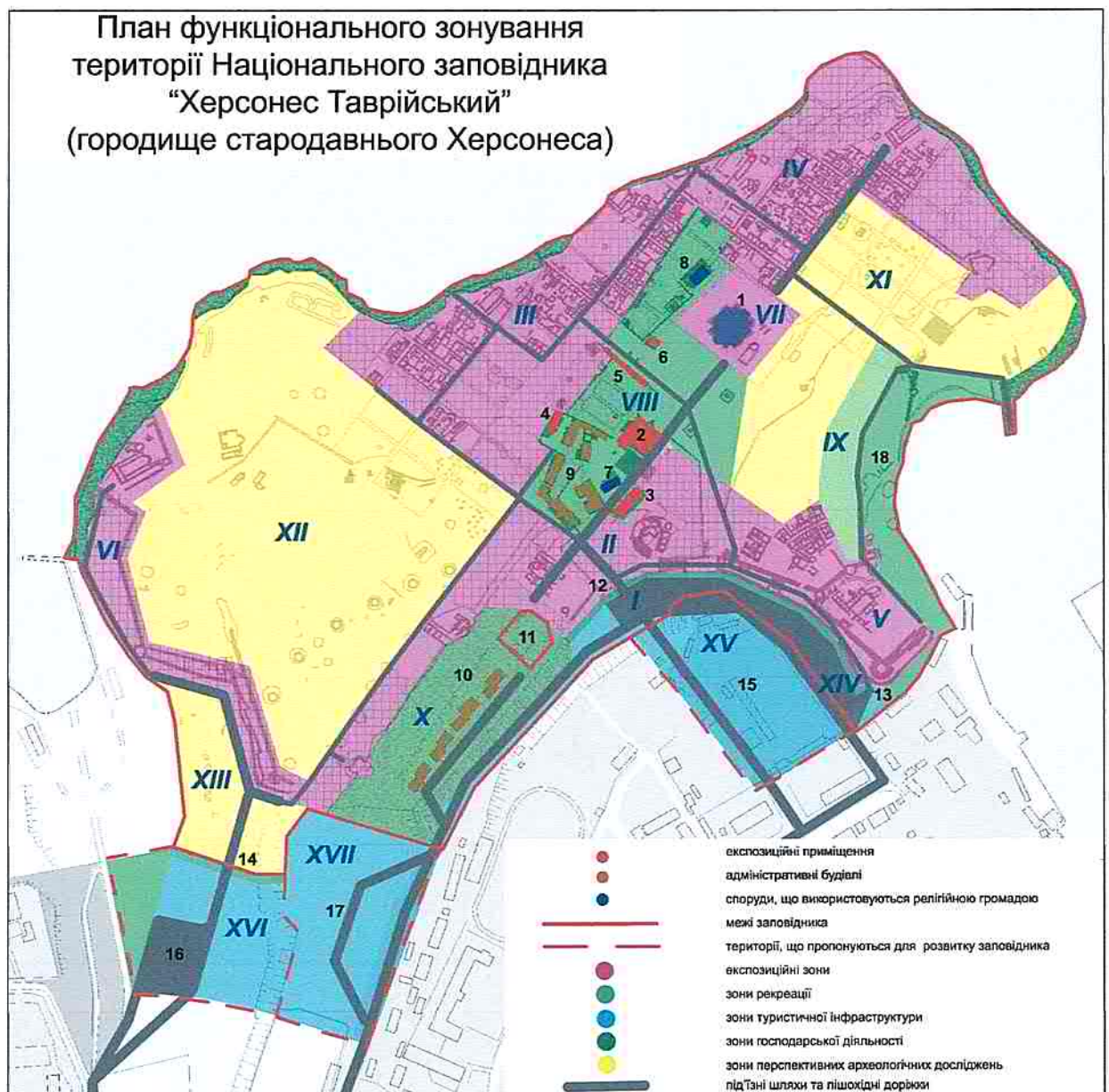


Fig. 37. Zoning scheme for the city of Chersonese with proposed expositional areas highlighted in violet, recreation areas in green, tourist infrastructure areas in blue and prospective archaeological investigation areas in yellow

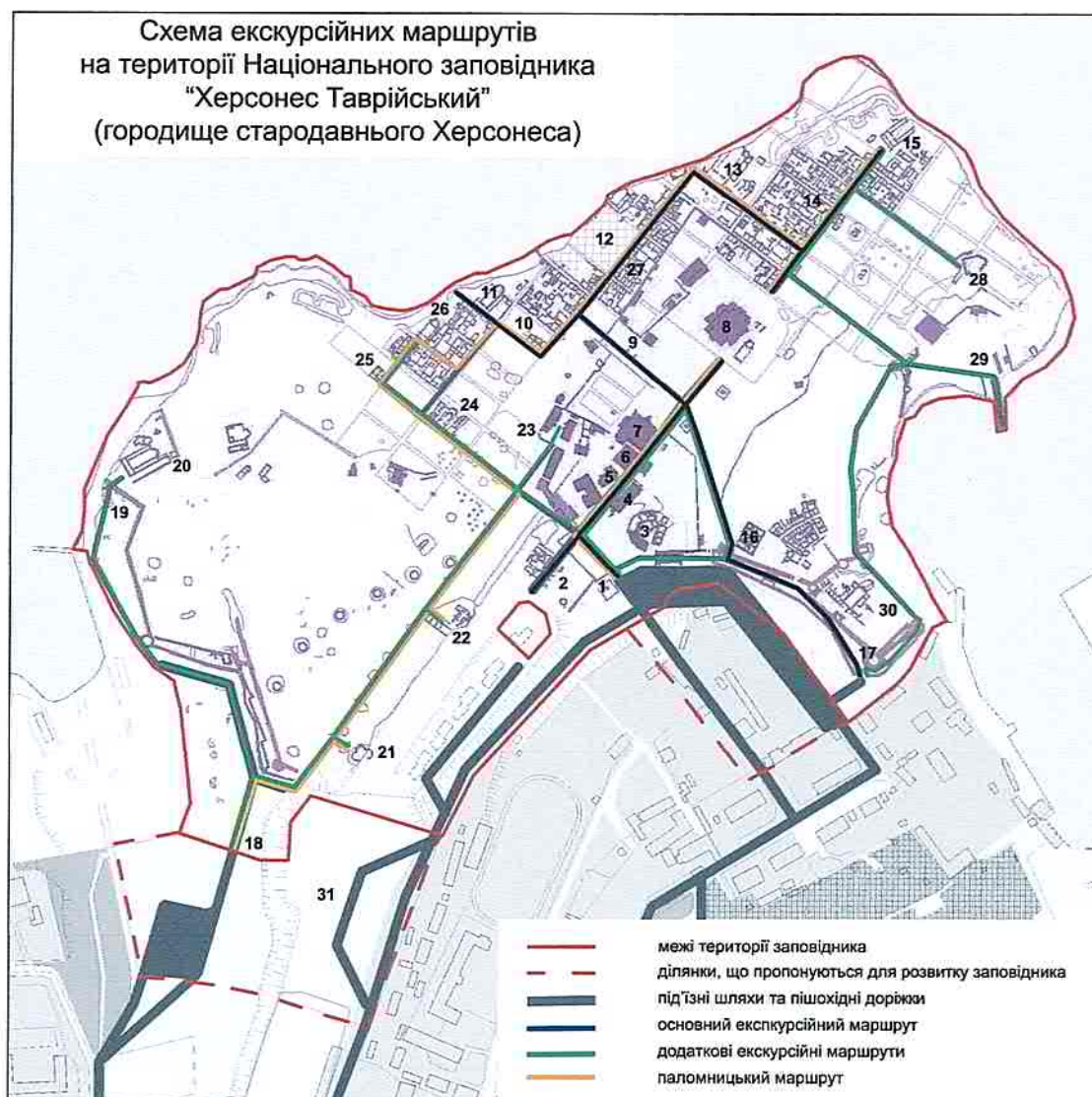


Fig. 38. Scheme of access ways, parking areas and proposed visitation routes within the city of Chersonese with access ways and parking areas highlighted in grey, the main visitation route in blue, additional and thematic visitation routes in green, and the pilgrim route in orange

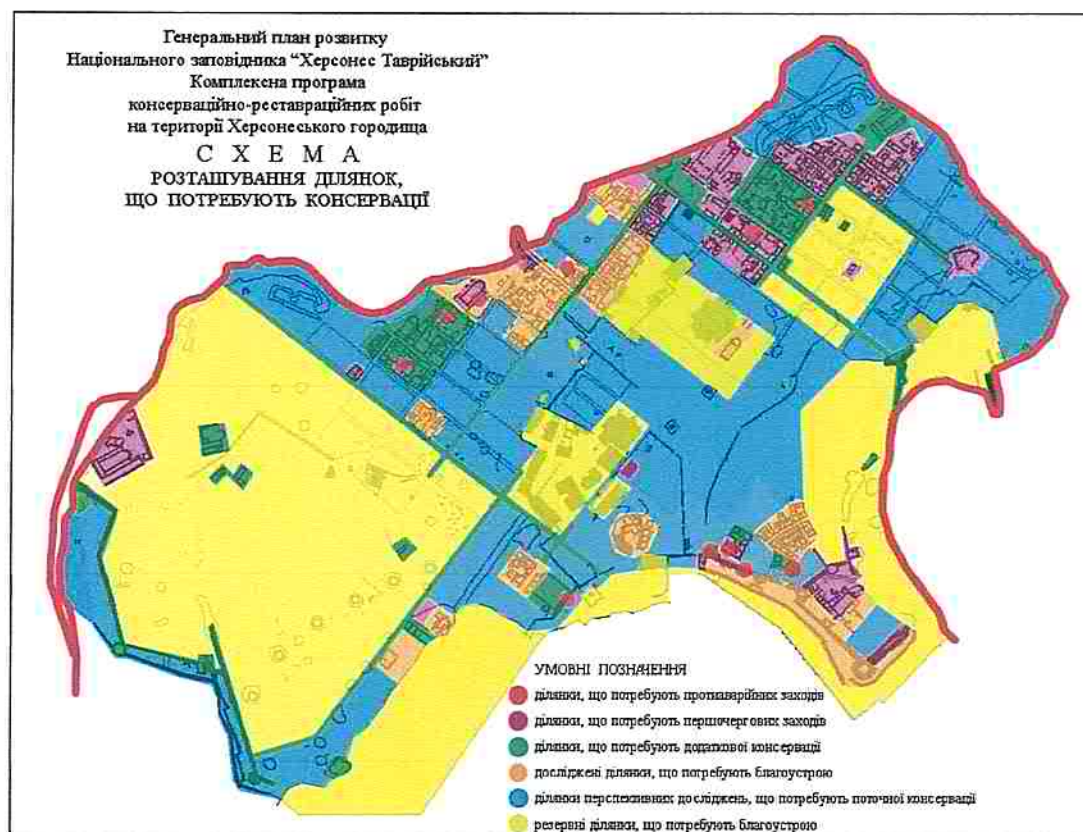


Fig. 39. Scheme of priorities for conservation works in the ancient city of Chersonese with the sites requiring top priority measures highlighted in red, those in need of emergency measures in violet, those in need of additional conservation in green, those in need of land improvements in orange and yellow, and those to be conserved during archaeological excavations in blue

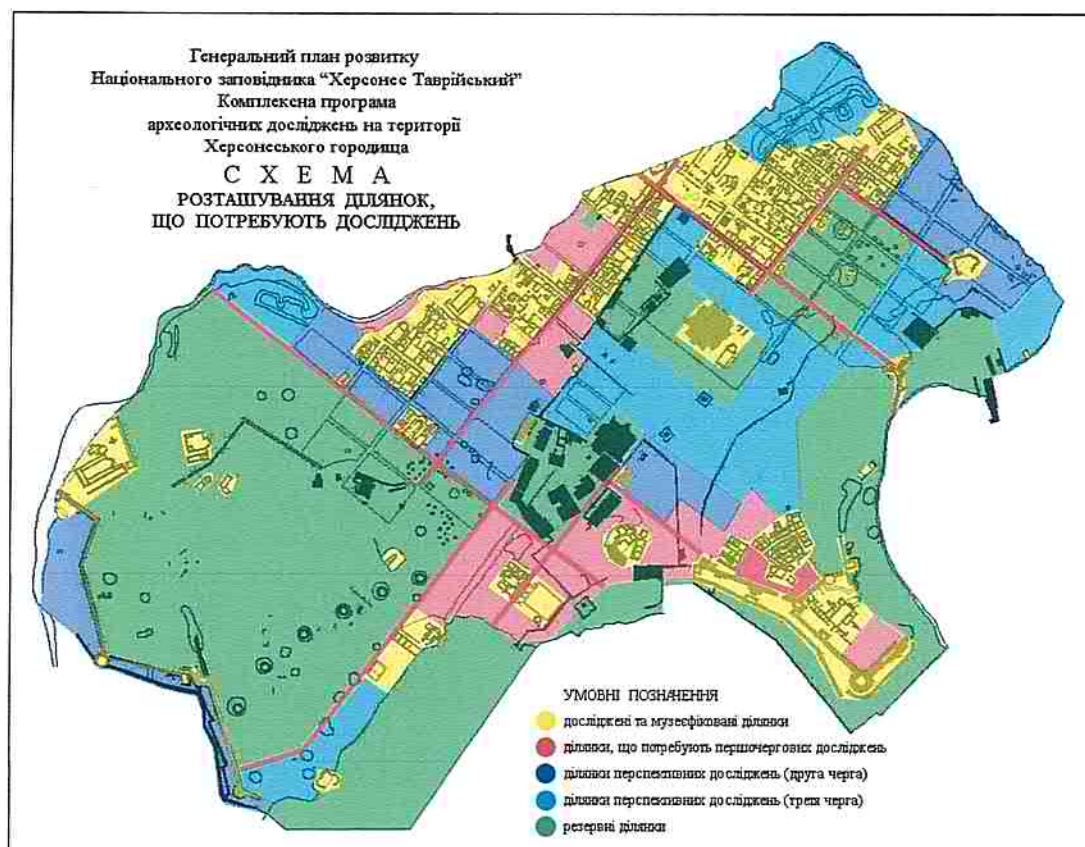


Fig. 40. Scheme of priorities for archaeological investigations in the ancient city of Chersonese with explored and interpreted sites highlighted in yellow, sites prioritized for explorations in red, prospective sites to be explored in the future in blue, and reserve sites where any archaeological explorations are temporarily banned in green

Management Structure of the National Preserve of Tauric Chersonesos

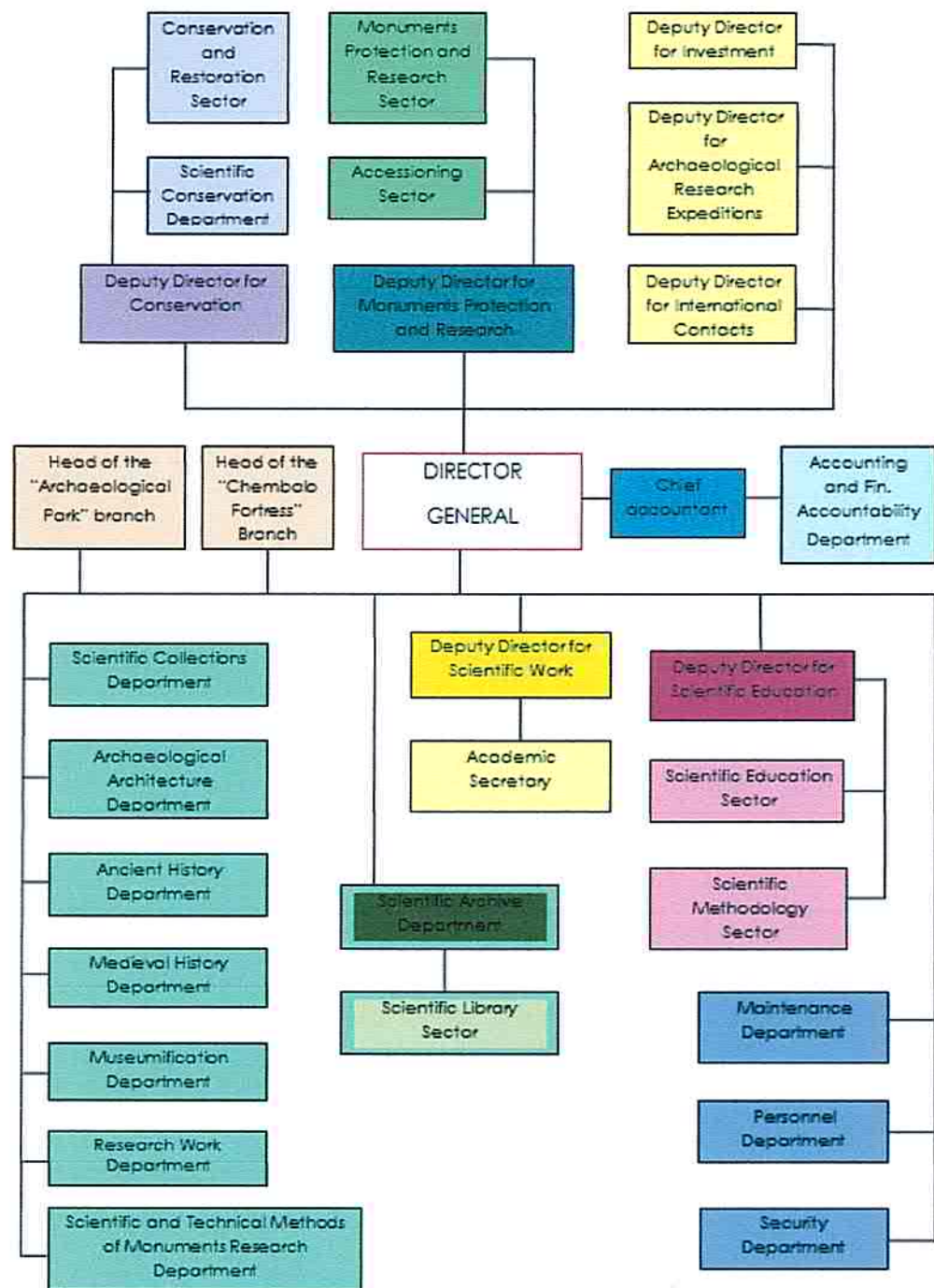


Fig. 41. Existing management scheme of the Tauric Chersonese National Preserve

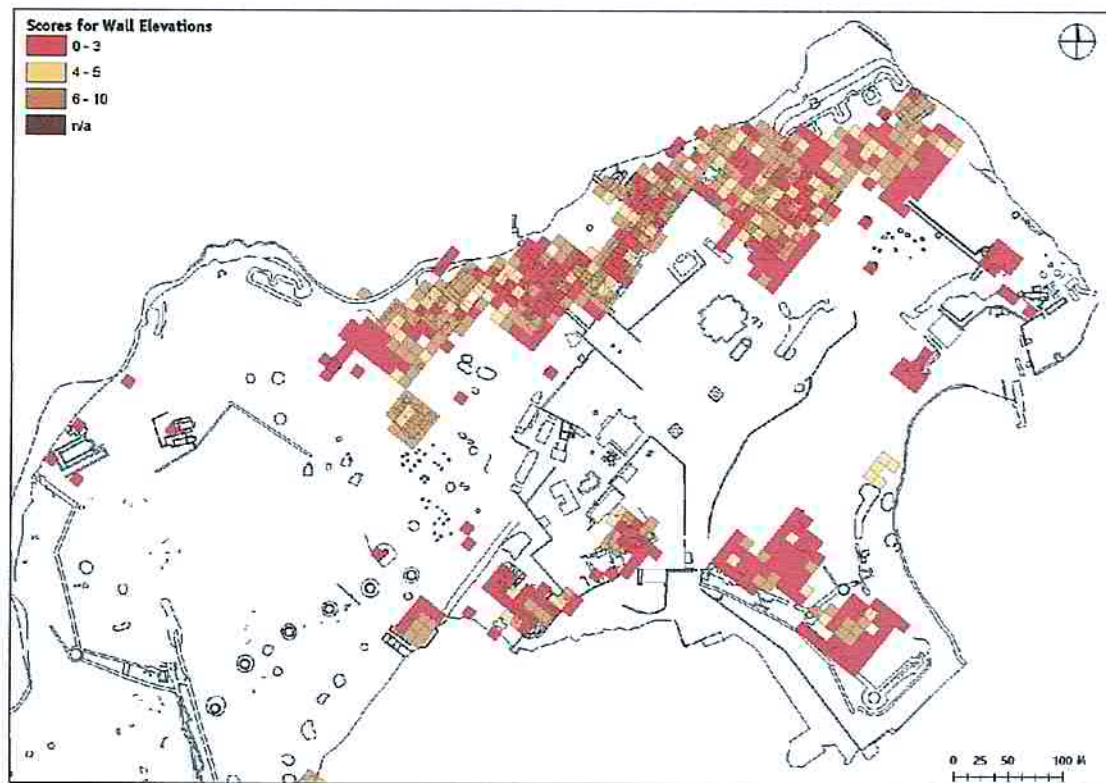


Fig. 42. Condition of the ancient ruins in the city of Chersonese based on 2004 GIS monitoring

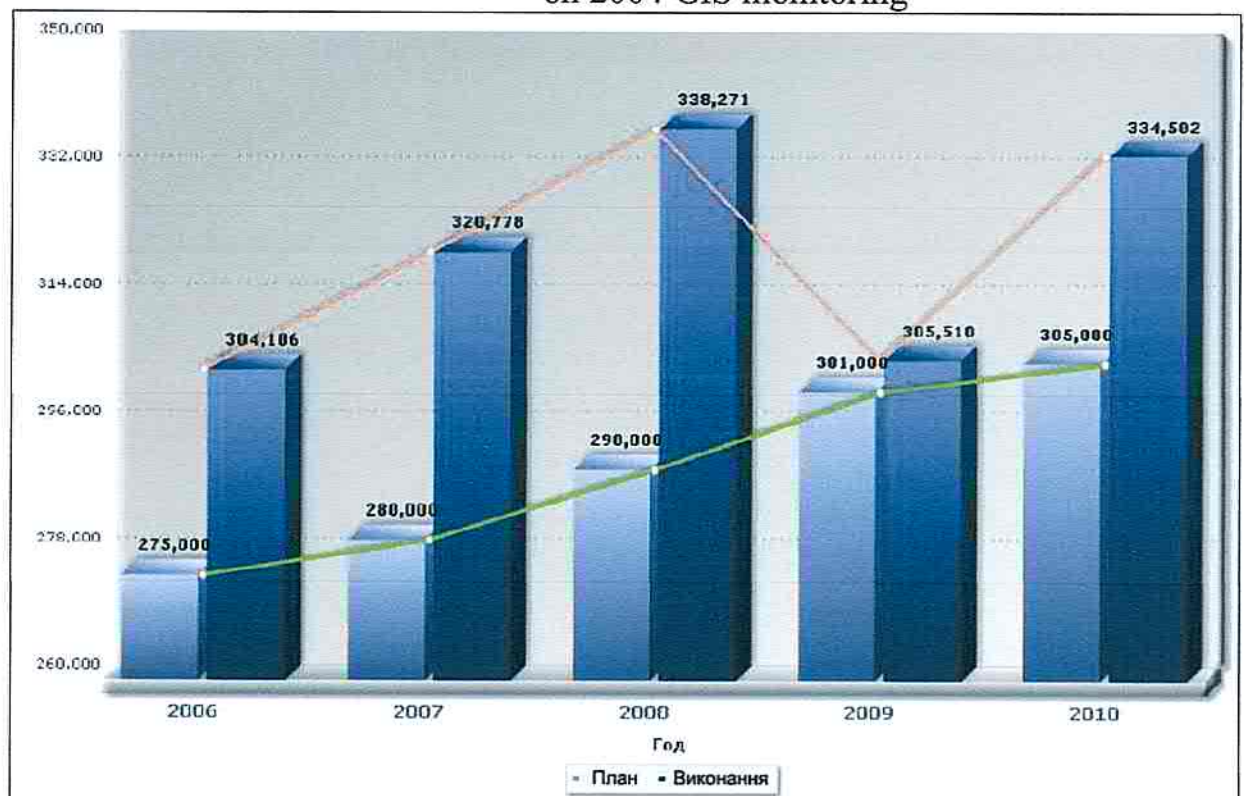


Fig. 43. 2006 – 2010 Tauric Chersonese National Preserve visitation chart with planned visitation growth in green and actual visitation in orange