

BASIC DESIGN STUDY REPORT
ON
THE PROJECT
FOR THE CONSTRUCTION OF THE MUSEUM CENTER
FOR THRACIAN ARTS OF EAST RODOPI MOUNTAINS
IN THE REPUBLIC OF BULGARIA

MARCH 2006

JAPAN INTERNATIONAL COOPERATION AGENCY

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PREFACE

In response to a request from the Government of the Republic of Bulgaria, the Government of Japan decided to conduct a basic design study on the Project for the Construction of the Museum Center for Thracian Arts of East Rodopi Mountains and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to Bulgaria a study team from November 15 to December 11, 2005.

The team held discussions with the officials concerned of the Government of Bulgaria, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Bulgaria in order to discuss a draft basic design, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Bulgaria for their close cooperation extended to the teams.

March 2006

Seiji KOJIMA
Vice President
Japan International Cooperation Agency

March 2006

Letter of Transmittal

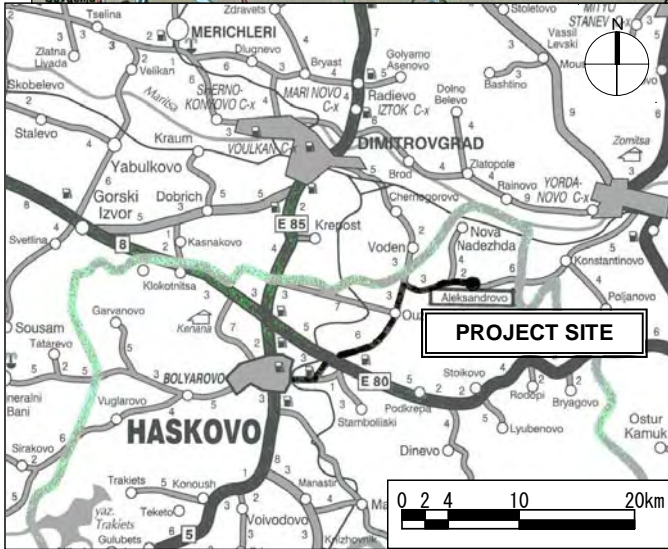
We are pleased to submit to you the basic design study report on the Project for the Construction of the Museum Center for Thracian Arts of East Rodopi Mountains in the Republic of Bulgaria.

This study was conducted by Zen-Noh Architects & Engineers Inc. under a contract to JICA, during the period from November 2005 to March 2006. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Bulgaria and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

Finally, we hope that this report will contribute to further promotion of the project.

Very truly yours,

Hidejiro UCHIGASAKI
Chief Consultant,
Basic design study team on
the Project for the Construction of the Museum Center
for Thracian Arts of East Rodopi Mountains
Zen-Noh Architects & Engineers Inc.



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Abbreviations

UNESCO	United Nations Educational, Scientific and Cultural Organization
EU	European Union
NATO	North Atlantic Treaty Organization
NIMC	National Institute for Monuments of Culture
ICCROM	International Center for the Study of Preservation and Restoration of Cultural Property
PHARE	Pologne, Hongrie, Assistance a la Restructuraion Economique
IMF	International Monetary Fund
GNP	Gross National Product
GDP	Gross Domestic Product
E/N	Exchange of Notes
VAT	Value Added Tax.
AV	Audio Visual
LAN	Local Area Network
A/P	Authorization to Pay
B/A	Banking Arrangement
RC	Reinforced Concrete
ALC	Autoclaved Light-weight Concrete

Summary

The tomb near Alexandrovo village (hereinafter referred to as “Alexandrovo Tomb”) was discovered in 2000 and its structure was preliminarily dated from the mid IV century B.C. and the wall painting decoration from the second half of IV century B.C., which indicate the Thracian culture in Southern Bulgaria. The structure of the Tomb is stone blocks masonry of dry walling type consisting of dromos, antechamber and chamber. Originally all rooms were entirely decorated with wall paintings that are not just a source of information on the Thracian life style and culture, but a significant evidence of the Thracian civilization.

The Alexandrovo Tomb has been added in September 2004 to the world cultural heritage tentative list of Bulgaria. The historical and artistic values of the wall paintings inside are considered to be very high. However, though it is expected to be recognized as one of the UNESCO world heritage sites in 2007, the current condition is not appropriate due to the poor preservation method. Even despite the eager research and efforts for proper preservation some sections of the paintings have been falling off. Additionally, although an increase of visitors and tourists is expected with its recognition as world heritage site, currently there is no facility to accommodate them.

On the other hands, the full utilization of the tourist potential to develop various tourist products as well as development of rural and cultural tourism is considered as important opportunity in the National Economic Development Plan of the Republic of Bulgaria over the 2000 – 2006 periods. This Project is being developed in the frames of the general country’s policy for preservation of the archaeological heritage, including the Thracian culture. Similar project has been realized for the Thracian mound near the village of Sveshtary /World heritage site/ and the Thracian tomb in the town of Kazanlak / World heritage site.

Due to these circumstances, the Government of Bulgaria has requested assistance from Japan’s Grant Aid Program for the construction of a museum center with a replica of the Tomb. This aims at the preservation and restoration of Alexandrovo Tomb and Thracian cultural heritage, and the promotion of research, exhibitions and development of tourism resources.

In response to this request, the Government of Japan decided to conduct the Basic Design Study and the Japan International Cooperation Agency (JICA) dispatched the Basic Design Study Team to Bulgaria from November 15 to December 11, 2005 to confirm the contents of the request and to conduct a site survey and other related field work. On its return to Japan, the Basic Design Study Team analyzed the gathered information and compiled a draft basic design report. The Team was then dispatched to Bulgaria from February 19 to February 26, 2006 to explain this report to the Bulgarian side. The present Basic Design Study Report has been compiled, incorporating the results of visits to Bulgaria and the work conducted in Japan. The principal purpose of the Basic Design Study is to study the present conditions of the proposed project by the Government of Bulgaria in order to examine the contents and outputs of the Project and the relevance of the Project to the Grant Aid scheme of the Government of Japan.

After examination of the project purpose and components, the above mentioned request was altered in order to arrange a facility for displaying the replica of the Tomb and studies, not for the direct restoration of the Tomb and wall paintings. This is foreseen to contribute to increasing the interest and understanding of Thracian culture and promote the laboratory research of the excavations. Thus, the Project includes construction of the Museum Center and procurement of equipment for exhibition, seminar, preservation and research, and the replica of the Tomb. The wall paintings in the Alexandrovo Tomb have deteriorated due to the preservation method taken when it was first excavated in 2000. The Government of Bulgaria is expected to take immediate action regarding this matter.

Facility and equipment planning takes into consideration the exhibition plan, the activity plan and operation and maintenance ability. In order to keep the Tomb and the wall paintings in good condition, it is difficult to be open to the public, though the closer the visitors can be to the exhibitions, the more interest and knowledge there would be. After the discussion of the best way of exhibiting, the replica of the Alexandrovo Tomb shall be the main feature of the exhibition hall along with the exhibitions of relics

and explanations of Thracian culture. The Museum Center containing the replica of the Tomb will be the center of public access.

The Museum Center will also be able to provide seminars for students and visitors in order to increase their interest and knowledge for Thracian culture. The Museum Center will be more useful by targeting not only students of higher education but also students at the elementary and secondary levels as basic interests build up in the early stages and the Bulgarian curriculum includes subjects regarding Thracian culture. The capacity of the lecturing-room will be 50 people.

One of the most important objectives of the Museum Center is to attract as many visitors as possible. Therefore it must be easy to access and motivating to visit. In this Project, a parking lot for the public will be constructed on a space easily visible from the existing public road, connected by a pedestrian path encircling the Museum Center to the Tomb. The Museum Center will be wheelchair friendly so that disabled users will have an opportunity to visit the cultural heritage site.

The Basic Design has also considered the environment, the view, and the domestic and overseas press release. Both the Bulgarian side and the Japanese side will discuss the quality of the design, respect each other's opinions and reflect them in the plan as much as possible so that the results will not ruin the reputation of Japanese assistance. Limestone, which is commonly used in Bulgaria, will be used for the exterior as it tends to resist degradation and discoloration.

The planned Museum Center consists of the construction of facilities and procurement of equipment as follows:

	Rooms	Structure	Floor Area
Facility	Exhibition hall, Tomb view, Entrance hall and Reception, Audio-visual lecturing room, Exhibits Storage, Lab-workshop, Storage, Staff office, Director/reception room, Security room, Rest rooms etc.	Reinforced concrete, One story	844.6 m ²
	Outside exhibition space		71.2 m ²
	Total		915.8 m ²
Equipment	Replica of the Tomb, AV system, Exhibition case, Camera and accessories, Stereoscopic zoom microscope system		

If the Project is implemented with Grant Aid provided by the Government of Japan, the total project cost is estimated to be approximately 306 million Yen (Japanese portion of 291 million Yen and Bulgarian portion of 15.24 million Yen). It is estimated that the Project will require some 15.5 months for completing, including the period for the detailed design and the construction of the planned facilities.

The implementation of the Project is expected to have the following direct and indirect effects.

Direct Effects:

Current Situation and Problem	Improvement Measures under the Project (Japan's Grant Aid)	Project Effect and Level of Improvement
No proper methods for the preservation of the Alexandrovo Tomb and the wall paintings inside have yet been established	Construct facility and procure equipment for laboratory research Arrange exhibits storage of articles and excavations	The facility and equipment for the laboratory research of the Thracian cultural heritage will be in use, and promote the archaeological study for restoration and preservation the Tomb and surroundings.
The Alexandrovo Tomb cannot be open to the public	Arrange Tomb replica (chamber, antechamber, droms and wall paintings) Exhibit the situation of the Tomb by visual materials	The replica with wall paintings inside will enhance the interests and enlarge the knowledge in cultural assets of Thracian culture.
There is no facility to accommodate visitors, hold exhibitions, or give explanations	Arrange audio-visual lecturing room where seminars will be held with audio-visual equipment	The Museum Center will be in use and give the general public and students in Bulgaria an opportunity to learn about the Thracian culture which is included in the study curriculum of Bulgaria, and enhance the understandings.

Indirect effects:

Current Situation and Problems	Improvement Measures under the Project (Japan's Grant Aid)	Project Effect and Level of Improvement
The environment around the Alexandrovo Tomb is not appropriate as a facility to accommodate visitors.	Arrange the Museum Center and its access appropriately.	The environment and view around Alexandrovo Tomb will be improved.
There are no prominent tourism resources and no development of tourist industry in Haskovo.	Establish the Museum Center to accept tourists from outside and inside of Bulgaria.	It will contribute to the development of the tourist industry in Bulgaria, by cooperating with other tourist places nearby and effective promotion. The Museum Center will promote the tourist industry in Haskovo. Name value of Thracian Culture will be increased in Bulgaria and neighboring country.

Given the facts that the Project will have the great effects described above and will contribute to the promotion of laboratory research of the Tomb, the precious Thracian cultural heritage, and enhancing interest in education and studies concerning Thracian culture among the people, the provision of grant aid for part of the Project is judged to be relevant to the purpose of Japan's Grant Aid scheme for cultural heritage. The manpower strength and technical standard on the Bulgarian side are judged to be sufficient for the proper operation and maintenance of the planned facilities.

In order to retain this Project effects sustainable, the following is recommended to the Bulgarian side regarding the management of the Museum Center, etc.

- The exhibits and displays in the Museum Center must be well managed and the visitors must be able to have the latest information regarding related matters.
- There must be a secured and enough budgets allocated and qualified staff in order to operate and maintain the facility and equipment provided by this Project.
- As Haskovo Historical Museum has been managed for a long time, there will be no need to provide technical assistance. However there will be more to expect for the Bulgarian side in order to increase the number of visitors by improving the exhibition methods, well managing the access to the exhibits, etc. Preparing ticket and advertisement for the Museum Center in common with Haskovo Historical Museum are expected for multiplier effect.
- Tour basing Plovdiv, which visit Cultural and Historic Site in the Old Part of Plovdiv, Perperekon site, Bachkovo Monastery, or tours include visit to Kazanlak and Sveshtary will be produced (it could be named "Thracian road"). Perperekon site is 25km away from Haskovo recently found in Kardzali, Rodopi Mountains.
- The Sveshtary site has been promoting itself in the exhibition targeting tourist agent twice a year. As the Alexandrovo Tomb is not well known, an effective promotion is necessary. It is important for not only Haskovo Municipality but also the Ministry of Culture and NIMC to implement an active promotion in order to increase the visitors to the Alexandrovo Tomb.

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Chapter 1 Background of the Project

Chapter 1 Background of the Project

The Government of Bulgaria has requested assistance from Japan's Grant Aid for construction of the museum center and procurement the equipment necessary for the introduction of the tomb to the public, the preservation and restoration of cultural heritage which are exclusively significant elements for archaeological research and the development of tourism resources.

Although the wall paintings in the tomb near Alexandrovo village (hereinafter referred to as "Alexandrovo Tomb") have deteriorated due to the preservation method used when it was first excavated in 2000, the value of the Tomb as a piece of art and as a historical treasure is considered to be very high. Due to these circumstances, the Government of Bulgaria once requested a project in order to remove a part of the Tomb mound and to cover the remaining parts with a domed wall, so that the preservation of the whole tomb would become easy, and to arrange air conditioning system for the preservation of the Tomb.

This is the method used for the tomb of Kazanlak which has been recognized as a world heritage site. This first request had included an underground museum in order to exhibit a replica of the Tomb, as well as the development of access by maintaining and improving a parking lot and roads. The following equipment had also been requested; photogrammetric equipment, photographic equipment, equipment for laboratory research, microclimatic equipment, and a car for field work.

Currently, there is no facility to provide information regarding the Alexandrovo Tomb and Thracian culture around the site despite the fact the Tomb is envisaged to be recognized as a UNESCO world heritage site in 2007, and as a result, to attract many visitors for sightseeing, study trips, official visits, etc. Hence, after discussions with the Ministry of Culture and National Institute for Monuments of Culture (hereinafter referred to as "NIMC"), the above mentioned request was altered in order to arrange a facility for displaying the replica of the Tomb and studies, not for the direct restoration of the Tomb and wall paintings. This is foreseen to contribute to increasing the interest and understanding of Thracian culture and promote the laboratory research of the excavations. As for the equipment, the following has been newly requested for the Museum Center; a replica of the Tomb, photogrammetric equipment, photographic equipment, equipment for laboratory research, microclimatic equipment, and audio-visual equipment.

The organizations concerned, the items requested by the Government of Bulgaria, and the function of the Museum Center in the Project are as follows:

(1) Organizations concerned

- Responsible organization: Ministry of Culture of the Republic of Bulgaria
- Implementing organization: National Institute for Monuments of Culture (NIMC)

(2) Contents of the request

- The construction of the Museum Center
- Procurement of the equipment for the Museum Center
 - The replica of the Alexandrovo Tomb
 - Photogrammetric equipment
 - (metric camera, scanner, PC, software for editing, printer, etc.)
 - Photographic equipment
 - (camera, camera accessories, digital camera, and digital video camcorder)
 - Equipment for laboratory research
 - (stereoscopic zoom microscope, lamp, video camera, monitor, etc.)
 - Microclimatic equipment (air drier, air humidifier, air conditioner, ventilation device, and measuring system (carbon dioxide and humidity, etc))
 - Audio-visual equipment (DVD, VHS, CD, etc., and wireless microphone)

(3) The functions of the Museum Center

The Project aims at the construction of the Museum Center and the procurement of the equipment for the Museum Center. Therefore it will not be involved in the preservation and restoration of the Tomb. The Museum Center places emphasis on the exhibit, having the replica of the Tomb as the main feature. The function of the Museum Center includes studies and researches regarding the heritage from Thracian culture around the East Rodopi Mountains.

The detailed functions of the Museum Center are as follows.

- To provide necessary information on the Thracian tombs in Haskovo County,
- To afford the facility for pursuing research,
- To hold seminars for researchers and history classes for local students to enhance the general archaeological level in Bulgaria,
- To provide some exhibits so that visitors can easily interpret Thracian heritage.

Chapter 2 Contents of the Project

Chapter 2 Contents of the Project

2-1 Basic Concept of the Project

The historical and artistic values of the wall paintings inside the Alexandrovo Tomb are considered to be very high, and it is expected to be recognized as one of the UNESCO world heritage sites in 2007. Although an increase in the number of visitors and tourists is can be expected with its recognition as world heritage site, the Tomb can not be open to the public for the protection from damage on the Tomb and wall paintings inside, and currently there is no facility to accommodate them. Hence immediate action for the construction of the museum is necessary for opening the site to the public.

Additionally, the current condition is not appropriate due to the poor preservation method. Even despite the eager research and efforts towards proper preservation some sections of the paintings have been falling off. Therefore, immediate action for establishment of the proper preservation method is necessary.

Due to these circumstances, the Government of Bulgaria has requested assistance from Japan's Grant Aid Program for the construction of a museum for the public with a replica of the Tomb housed there. This aims at accommodation to the visitors, introduction, exhibitions and lecturing of the Alexandrovo Tomb and Thracian culture, and establishment of method for the preservation and restoration of Thracian cultural heritage. This Project is included in a part of national policy for cultural assets protection and tourism development, and it is expected to enlarge the knowledge and enhance the interest and understanding of people in Bulgaria and neighboring countries towards Thracian culture, and promote of the Tomb and cultural heritage research.

This Grant Aid Project therefore includes construction of the Museum Center and the Tomb replica, procurement of equipment for exhibition, lecturing and research. The Bulgarian side shall be responsible for the exhibitions except for replica and arrangement the staffs of the Museum Center.

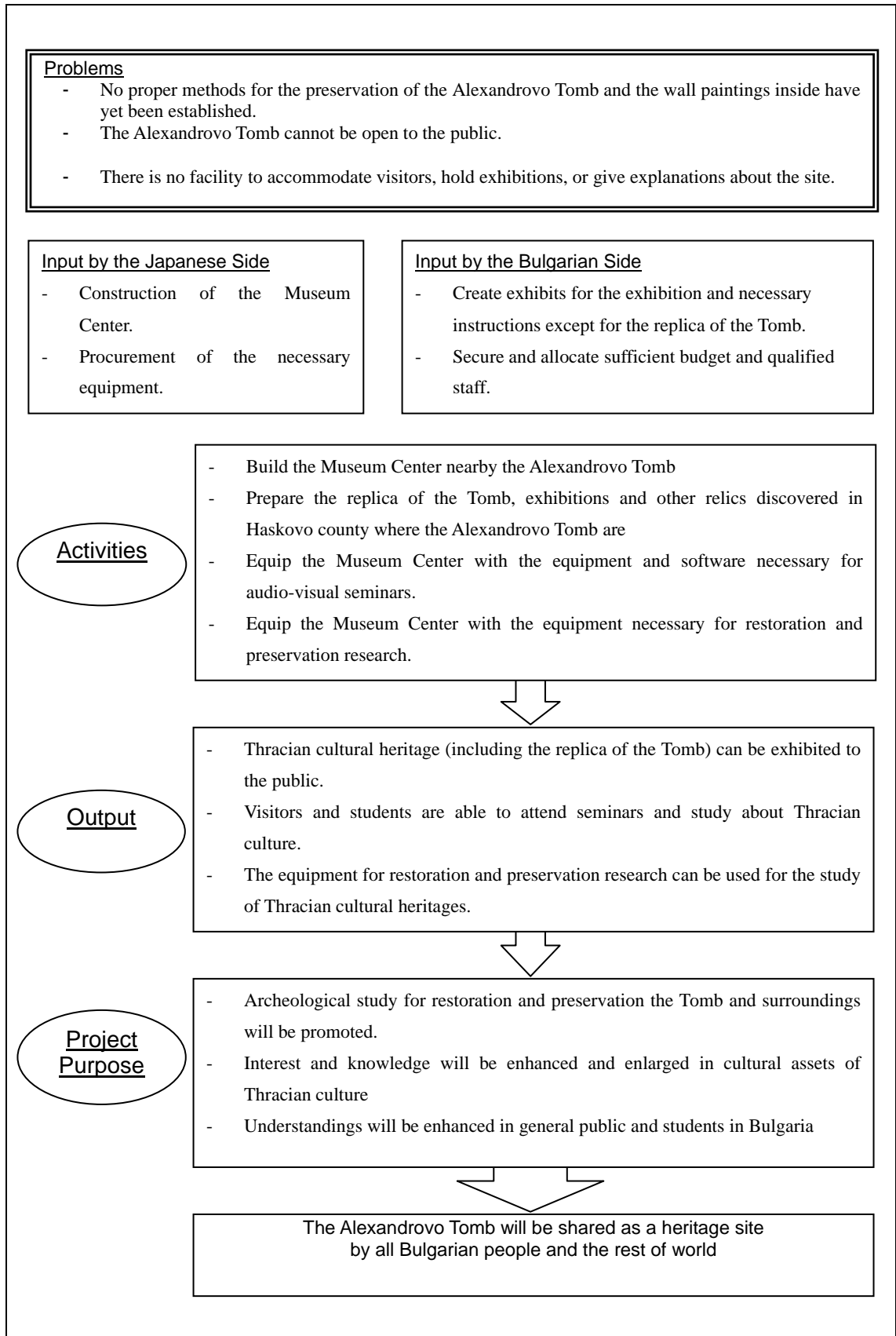


Figure 2-1 Summary of the Project

2-2 Basic Design of the Requested Japanese Assistance

2-2-1 Design Policy

(1) Basic Policy

This Grant Aid Project includes construction of the Museum Center and procurement of equipment necessary for the Museum Center near Alexandrovo Tomb in order to implement the Project for the construction of the Museum Center for Thracian Arts of East Rodopi Mountains aim at informatics and promotion to proper preservation method on the Alexandrovo Tomb and Thracian culture. The Alexandrovo Tomb is expected to be recognized as a UNESCO world heritage site. If that happens, the following items must be considered, having in mind the numerous visitors to visit the site from all over the world.

- The wall paintings in the Alexandrovo Tomb have deteriorated due to the preservation method taken when it was first excavated in 2000. The Government of Bulgaria is expected to take immediate action regarding this matter. This Project aims to construct the Museum Center which promotes laboratory research for the Alexandrovo Tomb and surrounding Thracian cultural heritage, and provide equipment for that purpose.
- Based on the confirmed basic concept of the Museum Center, the architectural plan takes into consideration the exhibition plan, the activity plan, the allocation of staff, and the planned number of visitors, which correspond to the capacity requested at first; the equipment plan will correspond to the exhibition plan, and the confirmed priority of the requested equipment.
- In order to keep the Tomb and the wall paintings in a good condition, it is difficult for it to be open to the public, though the closer the visitors can be to the exhibitions, the more interest and knowledge there would be. Therefore the best way of exhibiting the replica has been discussed, and the replica of the Alexandrovo Tomb will be the main feature of the exhibition hall. As the Tomb is unlikely to be open to the public in order to preserve the Tomb structure and wall paintings, the Museum Center and exhibition hall, containing a replica of the Tomb will be the center of public access.
- For the enhancement of the understandings on Thracian culture, the exhibitions of relics and explanations of Thracian culture will be exhibited in the Museum Center.
- The Museum Center will also be able to provide seminars for students and visitors in order to increase their interest and knowledge of Thracian culture. The Museum Center will be more useful by targeting not only students of higher education and the general public but also students at the elementary and secondary levels as basic interests build up in the early stages and the Bulgarian curriculum includes subjects regarding Thracian culture. The capacity of the audio-visual lecturing room will be 50 people which is about the same number as the passengers of a tour bus.
- One of the most important objectives of the Museum Center is to attract as many visitors as possible. Therefore it must be easy to access and motivating to visit. In this Project, a parking lot for the public will be constructed on a space easily visible from the existing public road, connected by a pedestrian path encircling the Museum Center to the Tomb.
- The Museum Center will be wheelchair friendly so that disabled users will have an opportunity to visit the cultural heritage site.
- The basic design has also considered the environment, the view, and the domestic and overseas

press release. Both the Bulgarian side and the Japanese side will discuss the quality of the design, respect each other's opinions and reflect them in the plan as much as possible so that the results will not ruin the reputation of Japanese assistance. Limestone, which is commonly used in Bulgaria, will be used for the exterior as it tends to resist degradation and discoloration.

- As no special equipment is needed for the preservation, restoration, and exhibition of cultural heritages, or is the Bulgarian side inferior in this respect, there will be no need for technical assistance, such as soft component.

(2) Policy concerning natural conditions

Natural conditions should be approached as follows.

① At the construction site, granite bedrock is exposed under around 120cm below ground level. As the rocks show the N-value, or standard penetration resistance of 60 (meaning it is difficult to do excavation work), the ground level will be set at the level of rock-excitation work thus minimizing leveling. This will also reduce the cost. Direct footings are considered adequate as the foundation of the building. This results in the foundation being shallow at the Southern end and deep in the Northern end. Therefore the northern part of the building, around the entrance, will be filled up to 2m.

② In winter, the temperature goes down to minus 10°C. Therefore outer heat insulators will be installed on the outer walls and the roofs.

(3) Design policy in regard of socio-economic condition

The Museum Center is expected to have many visitors. The quality of the design and the finishing must be adequate considering that it will be constructed by Japan's assistance. As the Government of Bulgaria has suggested, the outer walls will be stone, which is common for public building and will be made of the similar material of the Tomb. It is also superior to the other materials in terms of insulating properties and durability.

(4) Policy for the building trend/ procurement situation/ special issues/ commercial conventions

1) Policy for the Bulgaria's construction standard

As the Government of Bulgaria has set the construction standard, the building will follow the standard, as well as consulting with National Institute for Monuments of Culture (hereinafter referred to as "NIMC"), the implementing organization, as it is responsible for the planning and management of the museum in Bulgaria.

2) Policy concerning building trends

In recent years, a construction boom has occurred in Sofia, the capital, and on the coast of the Black Sea, anticipating EU accession, which has resulted in a rise of construction costs. Therefore the construction costs shall be reconsidered at the point of detailed design. When they are likely to exceed the ceiling price specified in the Exchange of the Notes (hereinafter referred to as "E/N"), some components of Japanese undertakings, accounting the construction cost such as exterior work, shall be taken over by the Bulgarian side.

The Ministry of Culture will submit the application form in order to obtain the construction permit which is examined and issued by Haskovo Municipality.

(5) Policy for the usage of local companies

In terms of construction technology and finishing works, the local contractors are hardly different from other advanced countries. In this Project, as the construction requires no special methods or work, it is

feasible to carry the construction work with local companies and workers under the supervision of Japanese engineers. Therefore Japanese engineers will make the best use of Bulgarian workers.

(6) Policy for operation and maintenance ability of the executive organization

Since the planned operation and maintenance organization, Haskovo Historical Museum has been managing museums larger than the one in this Project, its operation and maintenance ability is not an issue of concern.

(7) Policy concerning quality of the construction and equipment plans

As the museum will be open to the public, accepting visitors not only domestically, but also from abroad, the Museum Center must be as good as other constructions in EU countries, in terms of the quality and consistency of the materials, technological level and design. The management section will be emphasized more in its function and efficiency in order to reduce the costs.

(8) Policy concerning the schedule

This Project requires about 15.5 months in order to be completed after the E/N. After adopting the resolution of the Japanese cabinet regarding this Project, the resolution of the Bulgarian cabinet regarding VAT exemption and resolution by National Assembly will follow. As the E/N will be done after the resolution, the schedule of this process must be well considered and shortened. When the Project is adopted by the Japanese cabinet, it is expected the Ministry of Culture will do their best as the institute responsible since the E/N must be agreed by early September at the latest in order to complete the construction work as planned.

The schedule needs to consider the temperature in winter. The average day temperature is below 3°C from December to February. The excavation and concrete work during this period requires special attention and arrangements. It is considered to be better to avoid this period in order to guarantee the quality of the work and decrease the cost.

2-2-2 Basic Plan (Exhibition/Construction/Equipment Plan)

(1) Exhibition plan

The exhibition plan, as discussed with NIMC, is as follows.

- The replica of the Tomb (including the wall paintings inside the chamber and antechamber) shall be the main feature of the exhibition and made within this Grant Aid Project.
 - As no funeral objects have been found in the Alexandrovo Tomb, relics, which have been collected and exhibited at Haskovo Historical Museum, will be displayed as the exhibits of the Museum Center. The exhibits prepared by the Bulgarian side are shown in the list of exhibits below.
 - The exhibition will consist of four parts as below, namely introduction part, main (replica of the Tomb), permanent, and special (designed) exhibitions. Explanations for each exhibition will be prepared by the Bulgarian side.
- ① The introduction exhibition will explain the chronology of Thracian culture with maps, diagrams, satellite photographs, etc.
 - ② The main exhibition will be a precise replica of the Alexandrovo Tomb including wall paintings. As the Tomb cannot be open publicly, the replica must be recreated as the same size and appearance when the Tomb was first excavated. The wall paintings will be explained in detail with photographs, etc. beside the replica.

- ③ In the permanent exhibition, the features and structure of the Thracian tomb with models, diagrams, etc. and excavations from around Haskovo (Refer to the list of exhibits below).
- ④ A special (designed) exhibition will present the results and the process of archaeological studies. The audio-visual lecturing room and entrance hall will be used for this purpose.

Table 2-1 List of Exhibition

1) Silver jug	Original	1
2) Silver appliqué from horse ammunition	Replica	6
3) Silver ornamentation for a helmet	Replica	1
4) Amphorae	Original	2
5) Amphorae	Original	2
6) Ceramic bowls	Original	2
7) Golden jewelry set (from Madjarovo tomb)	Original	1 set (286 pieces)
8) Silver torso decoration (pectoral)	Original	1
9) Ceramic craterous with monochrome decoration	Original	1
10) Ceramic lekane	Original	1
11) Ceramic bell like urn	Original	1
12) Iron Thracian dagger (mahaira)	Original	1
13) Iron spearheads	Original	2
14) Golden buttons	Replica (available)	1 set (20 pieces)
15) Necklace made of golden pendants	Replica (available)	1 set (20 pieces)
16) Silver cup (goblet)	Replica (available)	1
17) Iron double axe (labris)	Original	1
Note: The naked infantryman from the painting inside the Alexandrovo tomb is depicted carrying the same axe.		
18) Ceramic bowls	Original	2
19) Silver coins (tetra drachmae)	Original	1 set (60 pieces)

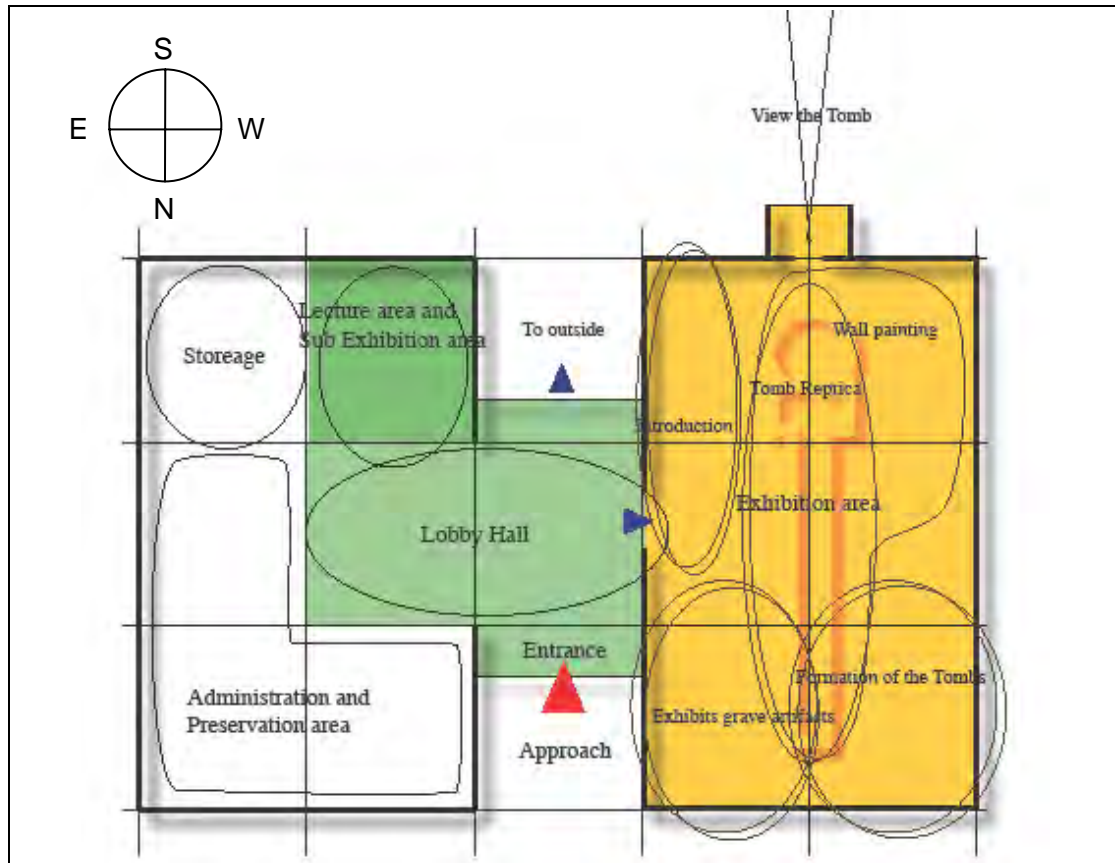


Figure 2-2 Exhibit Zoning Plan

(2) Construction plan

1) Floor plan and finishing plan

The Museum Center will consist of three blocks as follows. ①West block : exhibition hall, ②East block : audio-visual lecturing room as a visitor center, and research and management section ③Central block : entrance hall which connect these west and east blocks.

The entrance hall will be situated between two blocks made of glass screens, facing the Tomb. Through the central part, the walkway leads to the Tomb.

In the West block exhibition hall, the replica of the Tomb will be displayed. The size of the hall will be as large as the replica and related exhibits can also be exhibited, in order to make a full use of the walls. Inside the hall the replica will be lit up and the various excavations will be shown effectively against a dim light interior. On the other hand, in the South of the hall, there will be a small room, surrounded by glass screens, for viewing the real tomb mound. Even in rain or cold weather, or when the walkway cannot be used, it will still be possible to look at the tomb mound and compare the replica with the real tomb from here. This place will give the visitors a little break.

In the East block, behind the entrance hall and the reception counter, an audio-visual lecturing room will be constructed. Across from this room, rest rooms will be arranged. At the reception counter, visitors will pay entrance fees. There will be guides and vendors of library documents, post cards, etc. In the audio-visual lecturing room, lectures and seminars on the Thracian culture for 50 people at once using audio-visual equipment will be available. The equipment will be used for guidance for visitors and play the role of a buffer when the Museum Center is crowded. The audio-visual lecturing room will also be designed for multiple purposes so that it can be used for special exhibitions as well. Considering that visitors will come by bus, there will be 4 cubicles in the ladies'

room, 1 cubicle and 3 urinals in the men's room, and a multifunctional toilet for wheelchair users and infants.

Behinds these rooms, there will be research and management section for staff only. The exhibits storage area will be one sixth as large as the exhibition hall and the lab-workshop will be situated next to it. The excavations and relics from surrounding sites will be treated, analyzed, identified in the lab-workshop, and restored. As the purpose of the audio-visual lecturing room will vary (seminar/exhibition), there will be chairs, exhibition cases, etc. in the general storage space. A staff office will be used for curators and accountants, and a waiting room for guides. The director room will function as a reception and meeting room as well.

Since the Museum Center is away from downtown, there will be security guards all day and night. Therefore a security office will be established for reasons of disaster and crime prevention. A rest room and a kitchenette will be made for these security guards and staff members.

The floor area of the Museum Center, surrounded by walls, is planned to be about 805.7 m². It is 844.6 m² when the space under approach eaves located in front of the entrance hall, which will be able to use as outer exhibition place, is added. If the space between the walls in front and at back, which will be able to use as an outer exhibition place, is added, it is 915.8 m². The floor area and main functions of each room are shown in the table below. Considering the historical environment and durability, and taking into consideration the request of the Bulgarian side, the outer walls will be covered with limestone with insulation; the floors of the entrance hall, exhibition hall, reception space and audio-visual lecturing room will be granite tiles; the floor of the management section will be PVC tiles. The wall will be made of plaster boards with a coating on. The ceiling of the exhibition hall will be a steel grid as it is useful for various exhibits and lightings. The other ceiling will be plaster boards with coating on.

Table 2-2 Outline of the Museum Center (Floor Area and Main Functions)

Name of Room	Floor area(m ²)	Main Functions
Exhibition Hall	362.9	Main exhibition of the Museum Center introducing Thracian culture by exhibiting a same-scale replica of the Tomb, excavated objects, models and explanation panels, etc.
Tomb View	8.6	A room for viewing the real tomb mound and having a break
Vestibule	19.4	Enhance the effect of the air conditioner at the Northern exit.
Entrance Hall/ Reception	116.4	Multiple reception-desks serve as a buffer to the exhibition hall and audio-visual lecturing room, collecting entrance fee, providing information about the exhibition, selling materials and postcards.
Audio-Visual Lecturing Room	60.7	The capacity will be 50 people, which is the same as the number of passengers on a tour bus. Lectures and seminars on Thracian culture using audio-visual equipment. Multiple uses such as providing guidance to visitors, being a buffer when the Museum Center is overcrowded, and exhibition room when a special exhibition is displayed.
Rest Room	28.2	4 cubicles in the ladies' room, 1 cubicle and 3 urinals in the men's room, and a large multifunctional toilet.
Exhibits Storage	57.8	The scale will be one sixth of the exhibition hall. In order to make the best use of the space without expanding, wooden mezzanine-type shelves have been planned.
Lab-Workshop	23.6	Treatment, analysis, identification, and restoration of the excavation from the neighborhood. (for a few persons)
Storage	23.6	Depending on the use of the audio-visual lecturing room (seminar/exhibition), there will be chairs for lectures or an exhibition case, as well as storing equipment.
Staff Office	25.0	Office for curators and accountants as well as a waiting room for guides. (for 4 to 5 persons)
Director/Reception Room	19.4	It functions as a director room, reception room, and meeting room.
Security Room	11.9	The center for prevention of disaster and crime, 24 hours a day.
Kitchenette/Toilet/ Utility Room	11.0	For security guards and staff
Corridor, etc	37.0	Corridor, a place for electrical boards (except for the exhibition hall), etc.
Subtotal Floor Area	805.7	Inside the Museum Center
Under Approach Eaves	38.9	For outside exhibitions with a roof. Surrounded by walls on two sides.
Total Floor Area	844.6	
Outside Exhibition Space	71.2	For outside exhibition. Surrounded by walls on two sides.
Floor Area	915.8	Total floor area plus outside exhibition space

Table 2-3 Structure of the Museum Center

Structure	Reinforced concrete, one story East Block: Flat roof, reinforced concrete slab West and Central Blocks (exhibition hall and entrance hall): Steel beam and steel roof deck
Roof Height	Exhibition hall: 5.4m, entrance hall: 4.3m, and East block : 4.5m
Foundation	Direct footing foundation

Table 2-4 Exterior of the Museum Center

Outer Wall	ALC block Stone (lime stone) wall with insulation, (Dried fabrication)
Fixture	Double glass in aluminum insulating sash, aluminum insulating sash doors Entrance and Vestibule : laminated glass screens and tempered glass doors
Roof	Insulation and asphalt waterproofing, aluminum composite parapet (East block: With protective concrete)
Entrance approach Outside Exhibition Space	Granite tiles

Table 2-5 Interior of the Museum Center

Name of Room	Floor	Skirting	Wall	Ceiling
Exhibition Hall	Granite tiles	Same as floor	Gypsum board, EP coating	Steel mesh
Tomb View	Granite tiles	Same as floor	Glass screen, Gypsum board, EP coating	Light steel base, Gypsum board, EP coating
Entrance Hall and Reception	Granite tiles	Same as floor	Glass screen, Gypsum board, EP coating	Light steel base, Gypsum board, EP coating
Audio-Visual Lecturing Room	Granite tiles	Same as floor	Gypsum board, EP coating	Light steel base, Gypsum board, EP coating
Rest Room	Granite tiles	Same as wall	Ceramic tiles	Light steel base, Gypsum board, EP coating
Exhibits Storage	PVC tiles	PVC	Gypsum board, EP coating	Single ceiling, EP coating
Lab-Workshop	PVC sheet	PVC	Gypsum board, EP coating	Light steel base, Gypsum board, EP coating
Rooms at East Block and Corridor	PVC tiles	PVC	Gypsum board, EP coating	Light steel base, Gypsum board, EP coating
Partition Wall at East Block (except exhibits storage)	General part: light steel base, double Gypsum board both sides, EP coating Ceramic tile base in Rest rooms: holy bricks			
Inside doors	Aluminum flash			

* No materials containing asbestos will be used for the interior.

2) Elevation plan

The height of the West Block will be 6.0m which has been based on the minimum height from the floor to the ceiling of the exhibition hall (indicated in the following sectional plan). The East block, will be the same height as the West Block with extended wall in order not to block the view with the outer units of the air conditioning installed on the roof. The height of entrance hall will be 4.3m in order to secure a height of 3.6m from the floor to the ceiling.

The outer walls of East and West blocks will be made of limestone which is best for insulation and also common for public buildings in Bulgaria and therefore it is easy to obtain. It has the effect of showing the relevance with the material of the Tomb too. The entrance hall of Central block will be a glass screen in order to keep a good view of the Tomb itself.

From the ground, the floor will be 150mm up in the southern part. In order to minimize the filling, ground level at the North part will be inclined. At the North central part, in order to avoid steps, it will be 1/50 inclined from the entrance to the access walk, and the floor adjacent to the access walk will be 150mm down from the standard floor level.

3) Section plan

Although the higher the ceiling is, the more spacey the exhibition hall, the ceilings will be cut down to 4.5m in order only to allow the replica of tomb can be displayed for reasons of cost-efficiency. The ceiling of the audio-visual lecturing room will be 3.6m high as the standard for a lecture room in Bulgaria is set to be more than 3.5m. The ceilings of the entrance hall and the reception will be the same height as the audio-visual lecturing room so as to keep the spatial continuity.

The ceiling of the corridor and rooms in the management section will be 2.7m in height. The ceiling of exhibits storage room will be a single (non-suspended) considering the mezzanine-type shelves. Apart from in the rest rooms, there will be no steps.

4) Structure plan

The structural frame will be made of reinforced concrete and the wall will be of ALC concrete blocks which are a general material in Bulgaria. Both the width and length of the wall will be 3m or less with reinforced concrete studs and ring beams. The roof of the East block will be reinforced concrete slab, and the roofs of West block exhibition hall with a large span and the entrance hall whose frame should be light will be steal beams and roof deck.

The construction site is 1/10 inclined and deeper than around 1.2m under the ground consists of granite. Therefore the foundation of the South part must be supported 40cm or deeper as the depth of freezing and the shallowest. The North part, as direct footing foundation, will have the foundation with around 1.5m differential according the incline. Under the floor slab will be mounted. Floor under tomb replica made of stone masonry will be reinforced.

As there are earthquakes in Bulgaria, the Government has set construction standards. The Museum Center will be designed according to Bulgaria's construction standards.

- Dead Load	Net weight of structure and finishing materials
- Snow Load	118kg/m ²
- Wind Load	Not considered as it will be flat and reinforced concrete
- Seismic Load	Kc=0.27

5) Building Services plan

The Building Services plan is as follows:

- Electricity: distribution board, fire alarm, and security alarm (inside the security room and on the wall in front of the room) will be installed and centrally controlled,
- Lighting: The lighting will be planned corresponding to the exhibition plan of the exhibition hall. The entrance hall, the reception, and audio-visual lecturing room will be mainly lit up with fluorescence down lights along with spot lights which can be used for exhibits, too. The Bulgarian side needs to prepare a rolling tower or a lift as an accessory for work on high, such as changing bulbs at the exhibition hall. The rooms at the management section will use general fluorescent lights. It has been considered to install energy saving devices with sensor in the rest rooms. There will be down lights at the entrance porch and the West and the North outer walls will be lit up as well,
- Telephone: There will be terminal posts in the rooms in the management section and the reception counter so that telephones and computers can be available,

- Broadcast: there will be broadcasting equipment for the Museum Center. Speakers will be installed in every room and microphones will be at reception and security room,
- Water supply: Haskovo Municipality will extend water pipes and supply water to sanitary equipment such as toilets by direct pressure. Water tank will not be arranged considering that it cost for maintenance, periodically inspection and cleaning, measure to avoid freezing in winter season, and that it is a blot on the landscape,
- Toilet: Flush toilet. Men's toilet will be automatic flush in order to clean them easily and to decrease maintenance cost,
- Treatment of sewage: a waste water purifier and filtration basin will be set at the northeast of the site,
- Air conditioning: Heat pump air conditioners will be installed. In ceiling type units will be installed in the exhibition hall, the entrance hall, the reception and the audio-visual lecturing room. The air conditioning units in these rooms will use air viaducts. Hang type air conditioners will be installed in each room at the management section. There will be a package type air conditioner on the floor of the exhibits storage room. A humidifier and a dehumidifier will be installed in the exhibits storage room as well. The outer units will be installed on the roof of the East block,
- Ventilation: The exhibition hall will be ventilated by a mixture of air from outside thorough the outer walls and from inside through the air conditioner in the ceiling. The extra air will be evacuated by the ceiling fan in the rest room. The management section will be air-supplied through the grill between the reception and the management section and the air will be evacuated from the ceiling fans in each room.
- Monitoring: The Museum Center plans to exhibit not only the replica but also real excavated objects, which require high security. Therefore monitor camera system will be installed in the Museum Center. Additionally, the monitor camera system will be planned and suggested for Alexandrovo Tomb in order to observe by the security guard in the Museum Center and to monitor the condition of wall paintings inside. As the Japanese side will not deal with the real tomb, installation of the monitor cameras for the Tomb will be performed by the Bulgarian side.
- LAN: Pipes for LAN will be set up from the security room to the exhibition hall and the staff office. When establishment of the extra network system proves necessary, wireless LAN will be used.

(3) Equipment plan

1) Basic policy for the whole plan

The equipment procured in this Grant Aid Project includes the replica of the Tomb, which will be the main feature of the exhibition, as well as the equipment necessary for exhibitions, seminars, and research.

The equipment to be procured will be selected after confirming the priority and existing equipment according to the request from the Government of Bulgaria.

The main exhibition equipment will be the tomb replica. As the real tomb cannot be open to the public, the exhibition of this replica at the Museum Center is necessary and important. The Museum Center will be displaying information by exhibiting not only the tomb replica but also information panels, photos, and videos. Equipment necessary for the exhibits at the Museum Center will be included in the Project.

Audio-visual equipment will be procured in order to organize seminars to promote better understanding and enhance interest in Thracian culture. Although the audio-visual lecturing room will be used for various purposes such as designed exhibitions, these seminars and exhibitions will be effectively implemented with the help of the audio-visual equipment. Also, the equipment procured as a part of this Project will promote laboratory research regarding not only the Alexandrovo Tomb but also other cultural heritage sites nearby.

The photogrammetric equipment and microclimatic equipment is of less priority. They have been

requested with the prospect of studies around Haskovo, but NIMC already possesses such equipment. Therefore the equipment will not be procured within this Project. Air conditioners have been also requested a part of this equipment but they will be included in the construction work.

Software for the purpose of information display in the Museum Center will not be supplied as Grant Aid. This includes information panels, photos, videos, etc.

2) Equipment plan

① Replica of the Tomb

The material used to make the replica will be as similar as possible to the material that the actual tomb is made from. The structure will be stone and the base of the inner walls, which will be the foundation of the wall paintings, will be lime cement coated by plaster. The wall paintings will not be drawn in the old pigment of the real tomb but in modern paint and duplicated. Those materials are considered the best in terms of durability too.

② AV System

The fact that audio-visual equipment has the highest priority (level 3) and is expected to be frequently in use in the Museum Center, not only for exhibitions but also for seminars has been included in this Project.

Although a projector was requested by the Bulgarian side as audio-visual equipment, a flat panel monitor will be procured instead, considering the intensity of illumination in the room and the difficulty of spare parts procurement.

③ Exhibition Cases

The exhibition cases have been included in this Project after the discussion with the implementing organization, as they are necessary for displaying the relics. As the exhibition includes very precious relics, the cases must guarantee security. The number will be about 30 and each case is planned to contain 5 to 6 items (the size of the objects is 5 to 20 cm²). The basic specifications of the case are as follows:

- main body: steel made
- interior: cloth laminated wood
- top glass: high transmitting glass with scatter proof film
- side glass: clear glass with scatter proof film
- open/close: slide rail, drawer type

④ Camera Set

The Project will procure a camera set (camera, lenses and filters). This equipment has the highest priority (level 3) as it will be frequently in use at the Museum Center, and it will not require any special skills for its operation.

⑤ Stereoscopic Zoom Microscope System

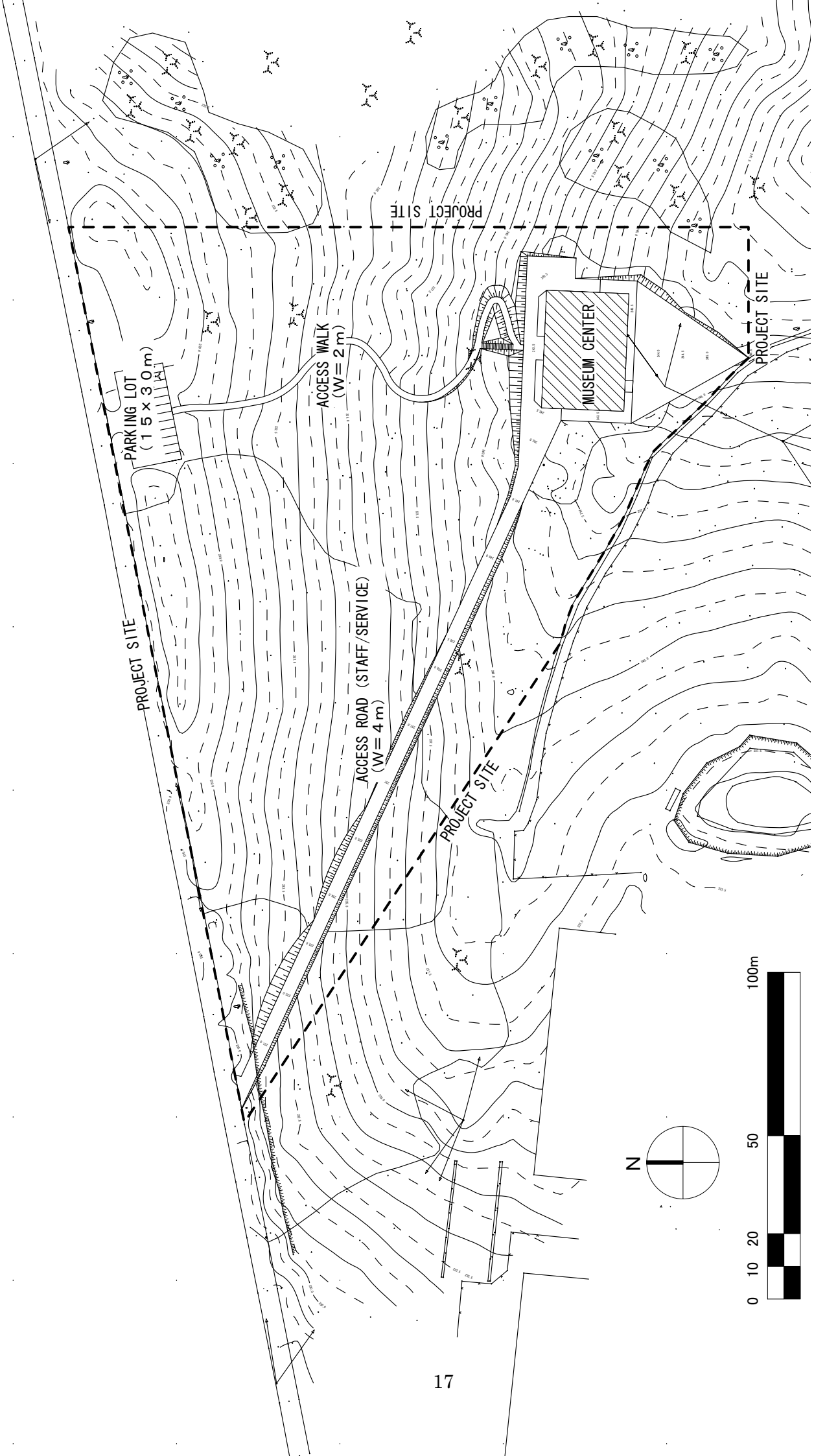
Stereoscopic zoom microscopes will be procured for lab research. This system will be used for the excavations. As they are generally used in research institutions and universities in Bulgaria, the usage will not cause any problems.

Table 2-6 Outline of Equipment Plan

Equipment	Specification	Q'ty	Purpose
Replica of the Tomb	Same-scale replica and wall paintings	1 set	As it is difficult to open the Alexandrovo Tomb to the public, the replica will be exhibited at the exhibition hall. It will be the main exhibit of the Museum Center.
AV System	Flat panel monitor, DVD players, VHS players, etc.	1 set	For the seminars at audio-visual lecturing room (special exhibition room) and visual exhibitions at exhibition hall.
Exhibition Case	Steel made, glass with scatter proof film	1 set	Thracian cultural heritage and excavations from around the Alexandrovo Tomb will be exhibited.
Camera and accessories	Camera, fisheye lens, wide-angle lens, standard lens, telephoto lens, and filter	1 set	For restoration and preservation research, camera and accessories will be used for taking photographs of the excavations and keeping them as cultural heritage data.
Stereoscopic Zoom Microscope System	Stereoscopic zoom microscope, digital camera, video camera, monitor, etc.	1 set	For restoration and preservation research, this system will be used for viewing the excavations in details and making data of cultural heritage.

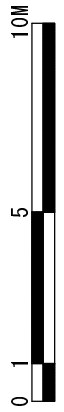
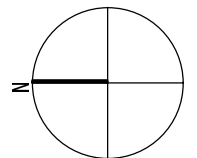
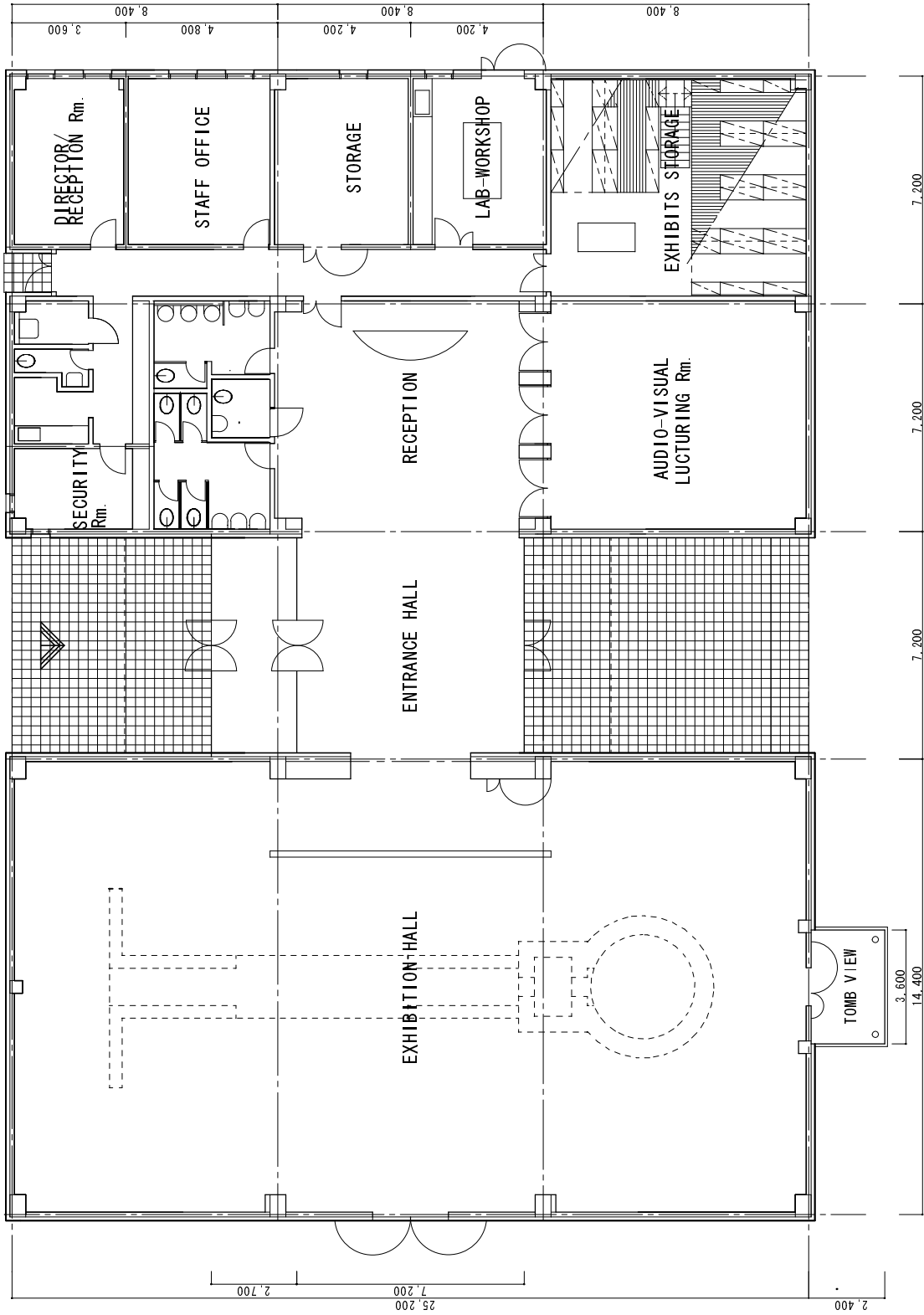
2-2-3 Basic Design Drawing

Site plan, floor plan, elevation, and section drawing are as follows.



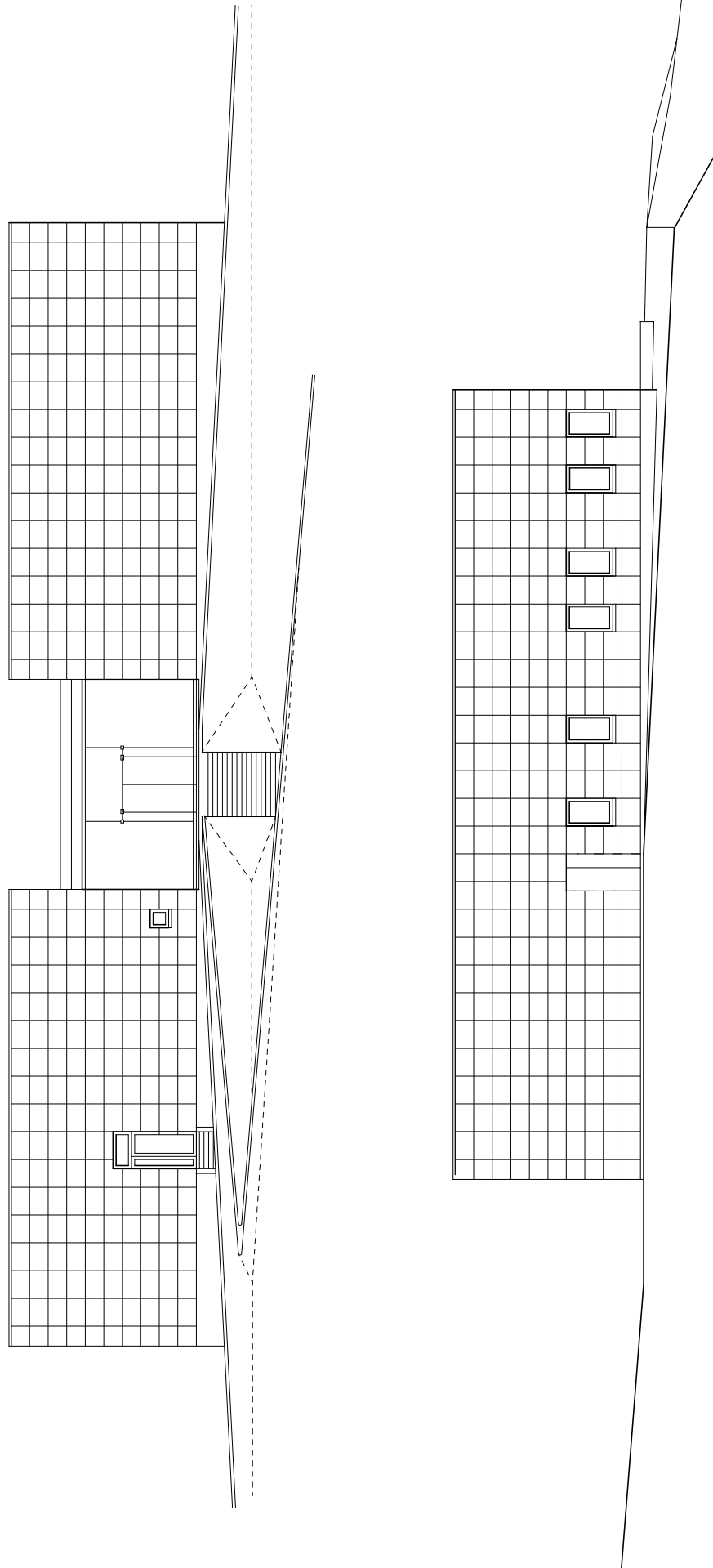
SITE PLAN

BASIC DESIGN STUDY ON THE PROJECT FOR THE CONSTRUCTION OF THE MUSEUM CENTER FOR THRACIAN ARTS OF EAST RODOPI MOUNTAINS

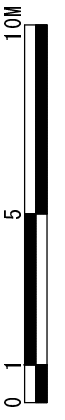


PLAN

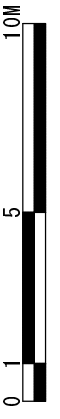
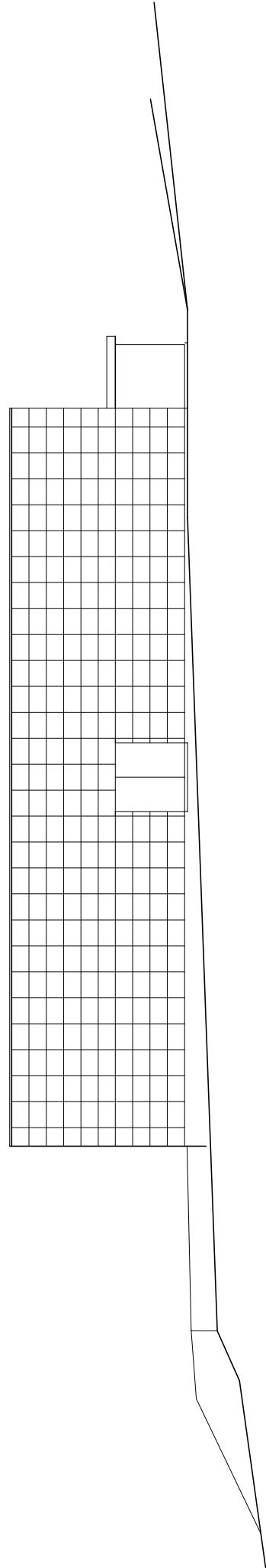
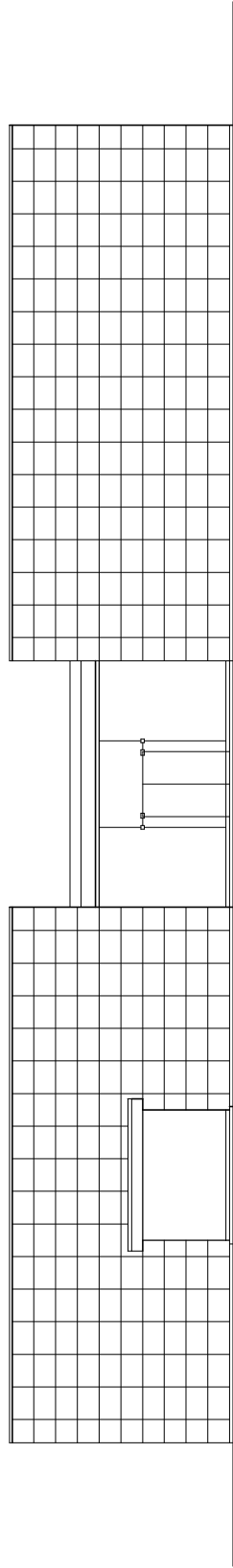
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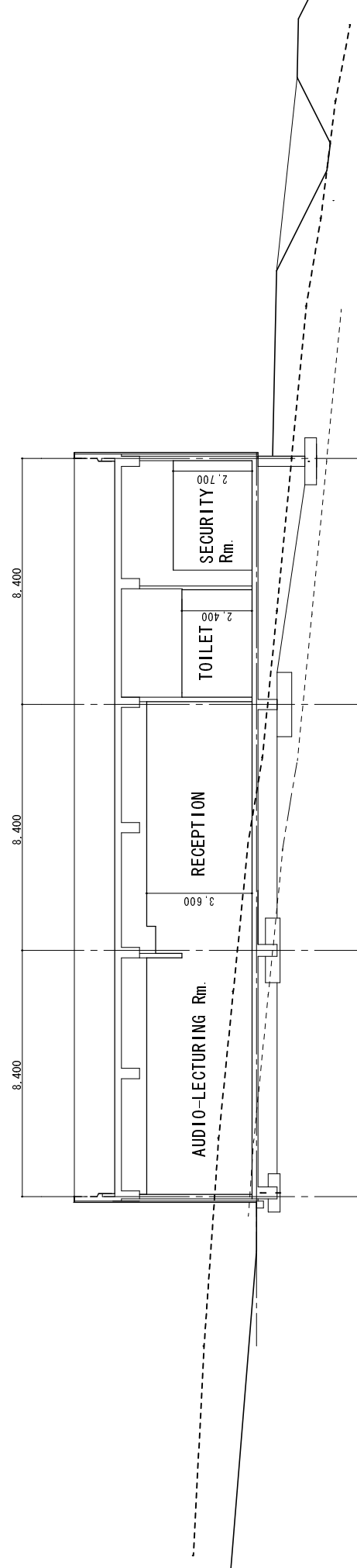
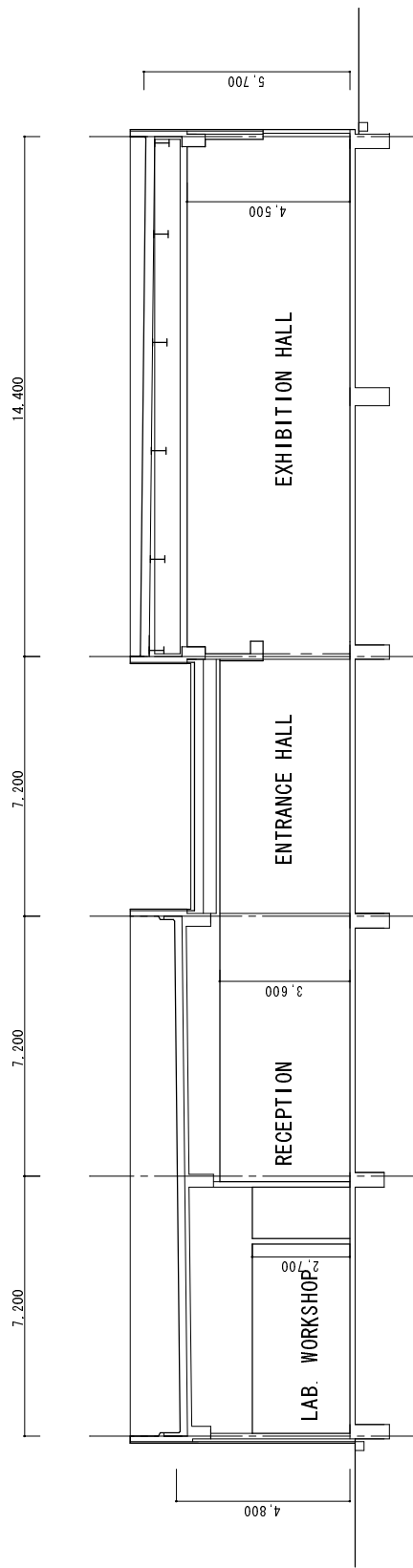
NORTH/EAST ELEVATION



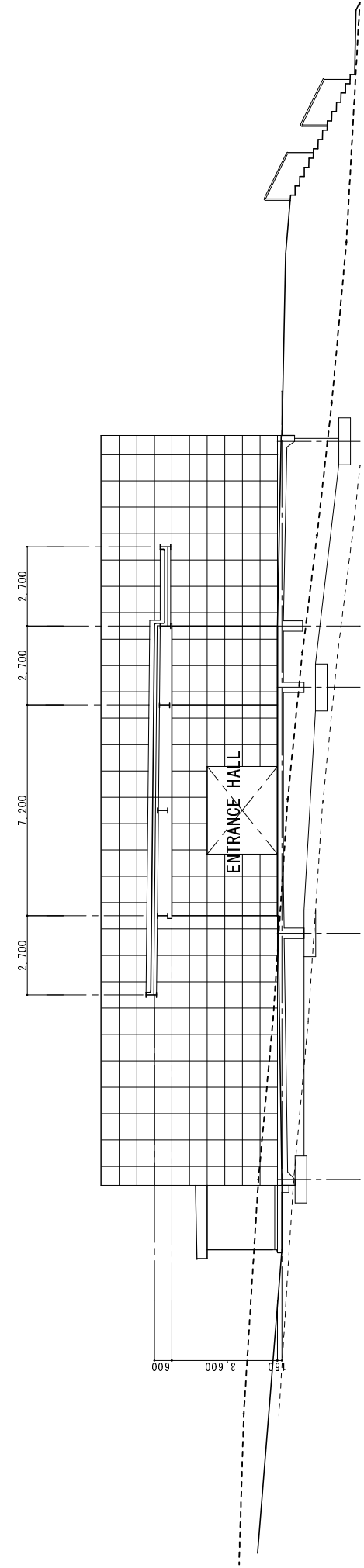
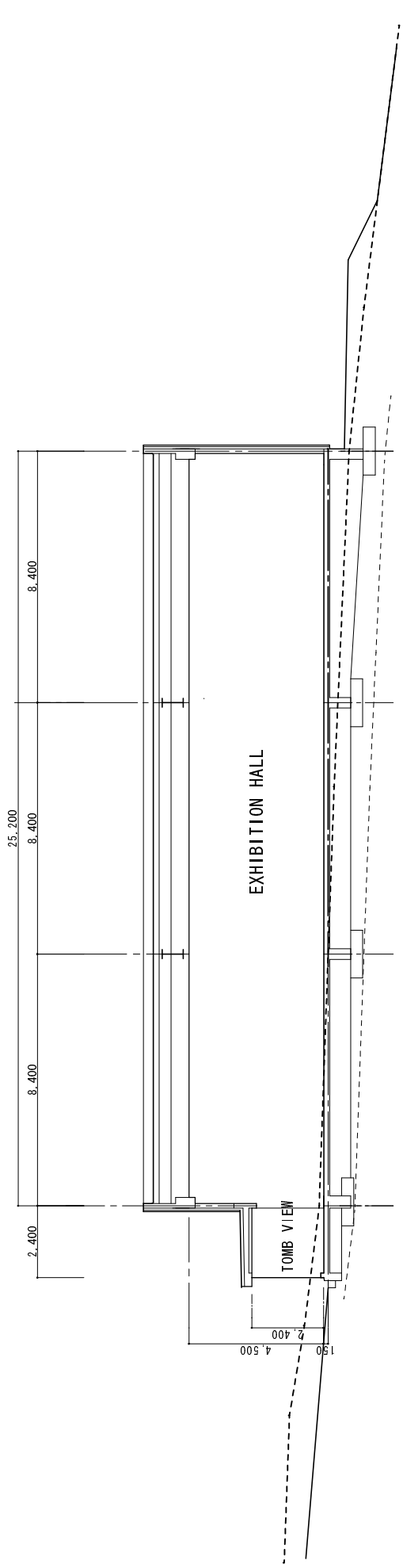
BASIC DESIGN STUDY ON THE PROJECT FOR THE CONSTRUCTION OF THE MUSEUM CENTER FOR THRACIAN ARTS OF EAST RODOPI MOUNTAINS



SOUTH/WEST ELEVATION



EAST-WEST/Reception SECTION



Exhibition Hall / Entrance Hall SECTION

2-2-4 Implementation Plan

2-2-4-1 Implementation Policy

(1) Implementing organizations

The responsible organization for this Project is the Ministry of Culture of Bulgaria and the implementing organization of the Project is NIMC. In order to implement the Project smoothly, the Ministry needs to be in close touch with and discuss with the Japanese consultant and contractor, and to assign the responsible person. The responsible person(s) need(s) to discuss the roles of the Museum Center and Haskovo Historical Museum, and the exhibition plan for the smooth implementation of the undertakings of the Bulgarian side, including the arrangement of the infrastructure at the planned construction site, and the maintenance of proper exhibitions.

(2) Consultant

In order to implement the construction of the Museum Center and the procurement of the equipment for the Project, there will be an agreement on detailed designing and supervising between a Japanese consultant and the Ministry of Culture. The consultant will prepare tender documents and implement the tender on behalf of the Ministry.

(3) Contractor

Within the Japan's Grant Aid scheme, a Japanese contractor who is selected through a bidding procedure will implement the construction of the Museum Center and organize the procurement of the equipment.

Even after the building and the equipment are handed over, it is still necessary to contact the contractor regarding after-sale services, repair and maintenance.

(4) Necessity of engineer dispatch

The construction work in this Project includes material and equipment procurement, transportation and construction, which requires coordination between the parties concerned.

Also it is necessary to dispatch a chief supervisor from Japan to manage and supervise construction, including the schedule, quality, and safety. This person will also arrange and manage the schedule of local construction workers, in order to make a most effective use of them under this Project.

(5) Policy concerning construction

Effective use of local materials and methods will be considered a high priority in this Project for the smooth implementation and cost reduction.

(6) Policy for procurement

The equipment procured by Japan's Grant Aid shall be used mainly for the purposes of research and the exhibition at the Museum Center. The development of the necessary software for exhibition will be done by the Bulgarian side, which includes the media through which visitors will use approach the contents of the Museum Center, such as excavated objects, photos, panels, videos, and visual data. As equipment which requires special skills for operation and maintenance would delay the creation of necessary software and impede its maintenance, it must be multifunctional and available on the market.

2-2-4-2 Implementation Conditions

(1) Regarding construction condition

Haskovo is the center city of the county which makes it possible to hire general engineers and worker. There are a couple of concrete production plants inside the city and it is possible to procure general construction material, equipment and machines. As the construction rush has continued for a few years anticipating EU accession in 2007, it is considered that the construction and labor costs will increase. Furthermore, as the temperature in January and February gets below minus 10°C, excavation and concrete work should be avoided during this period.

(2) Regarding the use of local material and equipment

As much construction material and equipment as possible shall be procured from the local area. Since the supply of some materials and equipments may be not enough, the preparation must be well done. As the period of work is limited to 10 months, any delay in procurement of materials and equipment must be avoided. In order to avoid that, the orders must be made at the first stage of the work. A study regarding suppliers and materials will be necessary for the better understanding of the material production and selection of suppliers.

(3) Regarding security

It is necessary to maintain the security of the workers at the construction site. As the construction of the Museum Center includes work up high, the following must be considered: prohibiting work above other workers, securing scaffold, and instructing and training in safe work. There will be need for security guards at night also in case of crime, as the construction site is far from the city.

(4) Regarding the concern for archeological relics

When the Government of Bulgaria implemented the excavation of cultural heritage in November and December 2005, no archeological relics were found at the planned sites of the Museum Center and parking lot. On the other hand, it is still possible to excavate some relics when the excavation work for the construction of Museum Center is implemented. Therefore it is necessary to consider the arrangement for the case of that situation, such as the supervision of the Bulgarian side, etc.

According to the Ordinance No.17 of the Ministry of Culture, whenever a cultural heritage is excavated in Bulgaria, a special committee composed of archaeologists, NIMC, and Academy of Science is established in order to evaluate the archaeological value of the excavation. The results of the excavation will decide the regime. If any archeological relics are excavated, they shall be reported to NIMC immediately following the resolution.

2-2-4-3 Scope of Works

The undertakings of the Japanese side and the Bulgarian side are shown in the table below (refer to 2-3 Obligation of the Recipient Country for the general undertakings of the recipient country in Japan's Grant Aid project).

Table 2-7 Undertakings of the Project Work

Items	Japan	Bulgaria	Note
1. Secure land			
(1) secure and reclaim construction site		○	Including ground leveling (excavation and filling)
(2) secure temporary space for work		○	Next to the construction site
(3) construct access roads and supply infrastructure		○	Including extending electricity, phone and water supply, and these intakes
2. Construct building			
(1) construct the Museum Center	○		Including the building services, a reception counter, exhibits storage shelves, and work benches
(2) construct gate and fences temporarily for the work	○		
(3) paving road in construction site, parking lot, and access lanes	○		Including the curb stones, gutter and paving of the road mentioned in 1. (3).
(4) arrange and paving lanes		○	Path to the Tomb from the south of Museum Center
3. Procure equipment			
(1) general furniture		○	Including a rolling tower or lifter
(2) project equipment	○		Described in the report (tomb replica, flat panel monitor, etc.)
4. Security			
(1) during the construction work	○		Limited to the construction site
(2) the Alexandrovo Tomb		○	Including the construction period
5. Exhibitions (exhibitions, exhibition software, etc.)			
(1) tomb replica	○		Including installation
(2) other exhibitions (exhibitions, panels, photos, explanations, computer software, video software, etc.)		○	Including delivery and installation

Note: ○ shows each undertaking.

2-2-4-4 Consultant Supervision

In accordance with Japan's Grant Aid scheme, the consultant will form a project team in order to design and supervise the correct progress of the construction work, following the prescriptions made at the point of basic design. Taking into consideration the fact that the Project site is recognized as a cultural heritage site and will be registered as UNESCO world heritage, the consultant will supervise the Project in terms of the schedule, quality, management, and safety. The consultant will participate at each manufacturing place if necessary, in order to prevent discrepancy after delivering the material and equipment, when the material and equipment is delivered and assembled in Bulgaria.

(1) Basic policy concerning construction and procurement supervision

The supervisor must be qualified and have knowledge of related Japanese laws and regulations concerning construction works and have experience of supervising at the time of implementation of the Grant Aid Project. Depending on the scale and contents of the construction work in this Project, the technical engineer mentioned in the list below will be dispatched accordingly. General workers and drivers will be hired locally.

Table 2-8 Consultant Dispatch

Title	No.	Responsibility	Period
Resident consultant	1	Supervise the whole work of the Project Discuss and negotiate with the persons and the parties concerned	During the construction period
Technical Engineers	accordingly	Supervise important points such as the structural work, electrical work, mechanical work and production of the replica, etc.	Accordingly during the construction period
Chief	1	Supervise the whole project	Either at the beginning or the end of the construction period

The supervision includes material and equipment procurement, temporary works, earth work, structure work, mechanical and electrical work, interior work, and exterior work. The consultant will complete the following tasks with the cooperation of the Bulgarian side, the implementing organization, ministries related to construction and infrastructure, local people, etc.

- Construction schedule control
- Progress report and solution of problems
- Quality control
- Discussion and negotiation
- Payment management

(2) Construction schedule control

In order to meet the deadline specified in the contract, progress should be compared to the schedule every week or every month. In case it seems to be delayed, the consultant should caution the contractor and request measures for the problem's solution and the completion of the work within the contracted period.

The items to be compared with the schedule are as follows.

- ① Overall progress (progress of the material and equipment procurement, and construction work)
- ② Material and equipment delivery (material, equipment and accessories for construction)
- ③ Temporary work and provision of construction machines (accordingly)
- ④ Necessary and actual numbers of engineers, technicians, general workers, etc.

(3) Quality and performance control

The consultant will confirm if the procured equipment and the constructed building satisfies the specifications and performance as the ones specified in the contract by doing the listed below. If they seem to fail, the consultant will request that the contractor make corrections, changes, and amendments.

- ① Examine shop drawings and specifications of construction work
- ② Examine shop drawings and specifications of accessories and fixtures
- ③ Attendance to the production place of the material and equipment or examine the inspection results
- ④ Examine installation plans and methods of equipment
- ⑤ Inspect and confirm performance and result

(4) Safety Control

The consultant will supervise the construction site, through discussions with the contractor's staff in charge of safety control, in order to prevent any accident occurring to employees and other people. The issues of concern at the construction site are as follows.

- ① Establish rules of safety control and appoint person in charge
- ② Prevent accidents by inspecting construction machines periodically
- ③ Establish an access route for construction vehicles and machines and confirm its safety
- ④ Establish a safety facility and inspect it periodically
- ⑤ Ensure social benefits for laborers and encourage them to take days off accordingly

(5) Construction management by contractor

In order to ensure the quality of the building and meeting deadlines, it is necessary to be managed by the Japanese side. Therefore a well experienced Japanese engineer as the director and an administrator will be dislocated at the construction site for the whole period of construction. Technical chiefs will be also dispatched according to the progress. Other necessary engineers will be hired locally.

During the construction period, the Japanese engineers are expected to transfer their construction management skills to Bulgarian engineers.

An administrator will be employed for the arrangement of engineers and materials procured in Bulgaria, as their numbers will be large. The arrangement and management will be crucial in the construction period.

Considering the scale of the construction in this Project, at least the engineers listed below will be necessary.

Table 2-9 Personnel Distribution by the Contractor

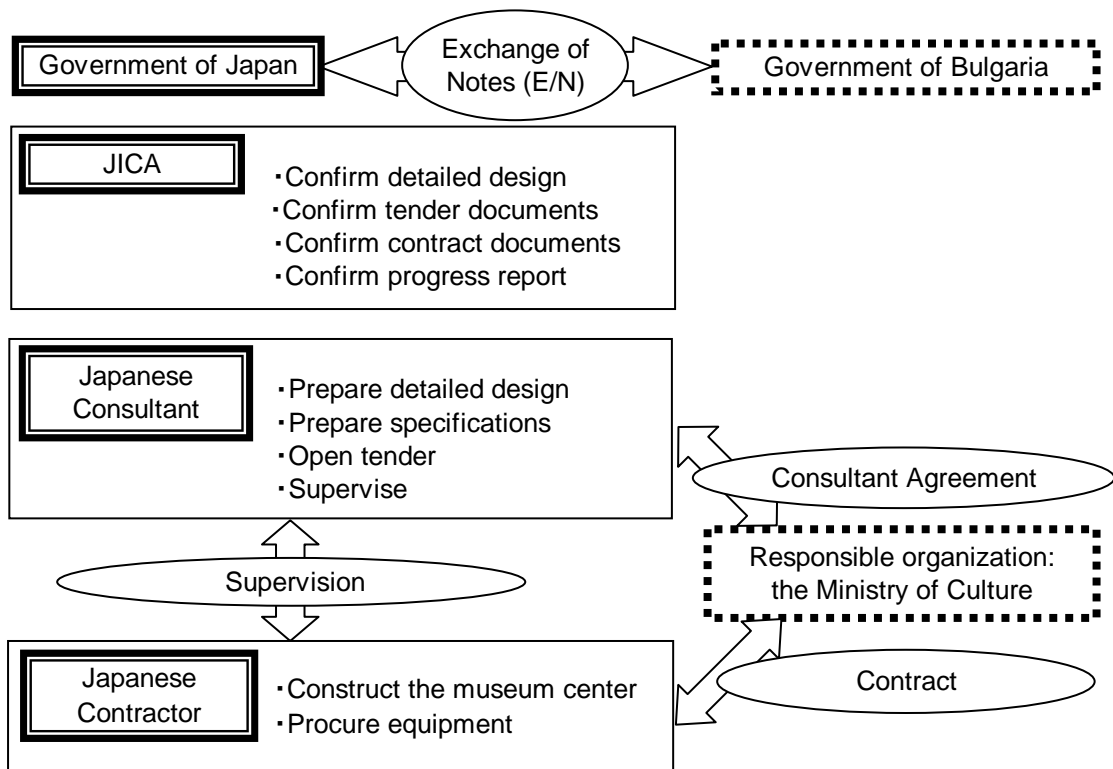
Title	No.	Responsibility	Period
Director (site representative)	1	Manage the whole work, obtain approval, manage procurement of material, equipment and accessories, manage workers, and site works	Whole construction period (Japanese)
Technical chiefs (mechanical and electrical)	accordingly	Manage mechanical and electrical work, obtain approval, manage procurement of material, equipment and accessories, and manage laborers	Accordingly during the construction period
Administrator	1	Manage procurement of material, equipment and accessories, workers, and do the accounting	Whole construction period (Japanese)

Other local workers will be employed accordingly.

- Engineers to manage the works (architectural engineer, assistant for architectural engineer, drawer, mechanical and electrical engineer), accountant, driver, etc.

(6) Outline of the Project actors

The following drawing shows the relationships between actors in this Project including the implementation period.



* The agreements of the consultant and the contract(s) require the verification by the Government of Japan.

Figure 2-3 Relationships of Actors

2-2-4-5 Quality Control Plan

It is feasible to procure the materials, equipment and machines for the construction domestically. However, as Bulgaria has imported many goods from neighboring countries, the quality of them varies. Therefore the specifications and performance of the materials, equipment and machines used for this Project require examinations before they are approved. For the quality control of re-bar, concrete, mortar etc., which will be processed at the construction site, must follow the rules specified in the implementation plan.

2-2-4-6 Procurement Plan

As mentioned above, it is feasible to procure the materials, equipment and machines for the construction domestically. Especially those materials, aggregate, cement, re-bar, steel, timber, paint, etc., are easy to obtain as they are made in Bulgaria and also some are imported from foreign countries. It is also possible to lease or procure vehicles for construction and delivery.

No production of a big scale replica has been done in Bulgaria recently except for the one in Kazanlak in 1961. Although the finishing may lack some perfection, in the light of the cultural heritage materials and researchers, it is will adequate to produce the replica in Bulgaria. In order to reach the perfect finishing, the production will be implemented under the supervision of the Japanese side and approval and inspection from NIMC and concerned experts at the Bulgarian side. The equipment for the audio-visual system and the stereoscopic zoom microscope system will be procured from Japan as they need system configuration. Exhibition cases will be also procured from Japan as they are safer and more reliable, considering that they will hold the original relics as well as they need to correspond to the construction plan for an effective display.

2-2-4-7 Implementation Schedule

The procurement of equipment for exhibition, especially the replica, will require special attention to meet the deadline. The production of the replica inside the exhibition hall will be started when the ceiling above is completed and the scaffoldings are removed. The creation of the replica inside the exhibition hall will take about 3.5 months. The replica will be brought in for the final assembling, positioning, finishing, and the wall paintings. At the same time the work for the interior and exterior of the Museum Center will be continued and it is estimated one month longer than the construction work without production of the replica.

The schedule of the whole work is shown in the bar chart below according to Japan's Grant Aid scheme. As January and February is very cold, excavation and concrete work must be avoided.

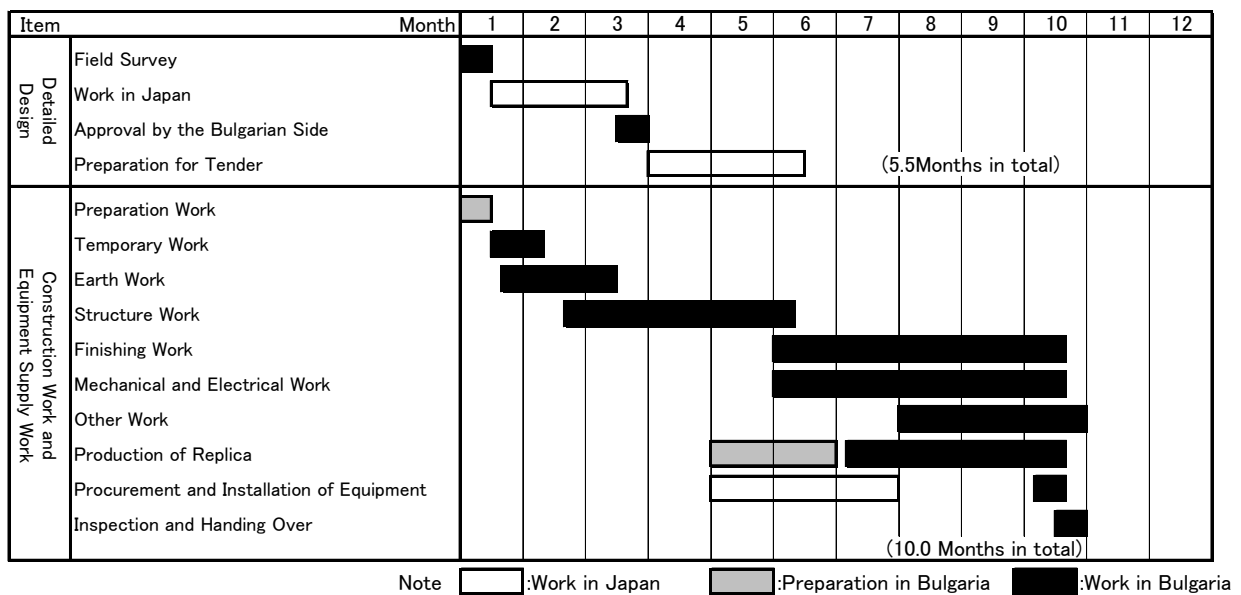


Figure 2-4 Project Schedule

2-3 Obligations of Recipient Country

(1) General obligations of the recipient country

Apart from the undertakings mentioned at 2-2-4-3 Scope of Work, Japan's Grant Aid scheme specifies general obligations of recipient country as follows. The effects of this Project partly depend on the adequate implementation of these obligations.

- 1) Provide necessary information and data for the plan and the implementation of the Project
- 2) Apply and obtain accords from organizations concerned
- 3) Secure (excavate, fill and level) the construction site and access roads before the construction provided by Grant Aid Project begins
- 4) Exempt the material, equipment and products for this Project, including the ones procured in Bulgaria, from customs duties, internal taxes and other fiscal levies
- 5) Accord Japanese nationals, whose services are under the verified contract, their entry into the recipient country and stay therein for the performance of their work
- 6) Exempt Japanese nationals whose services are under the verified contract, at the same time as the material and equipment, from customs duties, internal taxes and other fiscal levies
- 7) Bear bank commissions charged by opening a bank account and other charges according to the bank policy

- 8) Bear all the costs, other than those to be borne by the Japan's Grant Aid
- 9) Appoint counterparts specified for this Project in order to obtain technical assistance for the management of the Project
- 10) Operate and maintain the facility and equipment provided by Japan's Grant Aid appropriately and effectively
- 11) Reserve and maintain routes for material and equipment transportation
- 12) Secure safety of people concerned and the construction site during the construction period

The following organizations will implement those abovementioned undertakings.

Table 2-10 Organization Concerned with Obligations of Recipient Country

Bank commissions charged by opening a bank account other charges according to the bank policy	Ministry of Culture
Issuing Authorization to Pay (hereinafter referred to as "A/P")	Ministry of Culture
Procedure for tax exemption	Ministry of Finance
Permission for construction, ground leveling, and infrastructure supply	Haskovo Municipality
Allocation of staff	Ministry of Culture
Provide exhibits, exhibition articles, their software and accessories, office furniture and goods	Haskovo Historical Museum
Maintenance costs after the completion of the Project	Ministry of Culture

(2) Regarding infrastructure

Currently, 220v low voltage electrical source is used for air conditioning and lighting of the Tomb. As the Museum Center is considered to require 80 to 100kva electrical capacity, extension of the electricity (20kv) will be necessary from the residential area of Alexandrovo village to the construction site. It will be the same for phone line and water supply. This infrastructure works will be implemented by the Haskovo Municipality.

Since there is no public sewage pipes around the construction site, a waste water purifier will be installed for sewage drainage in order it to be filtered into the ground.

(3) Arrangement of access roads and ground leveling of the construction site

The ground leveling of the construction site and the cleaving of access roads will be borne by Haskovo Municipality, as well as the extension of the infrastructure. The access roads will be for the staff members, service and wheelchair use. The general visitors will use a 100m walkway from the parking lot facing a national road. Paving the access roads and the parking lot has planned to be included in the work of Japanese side.

(4) Exhibitions in the Museum Center

It has been confirmed that the Bulgarian side will bear all exhibitions except for the replica, and the production of all articles such as panels, videos and slides for the explanations.

(5) Tax exemption

As no construction projects had been implemented by Japan's Grant Aid in Bulgaria recently, the procedure and the methods for VAT exemption was discussed with the Ministry of Economy and Energy, the Ministry of Culture, the Ministry of Finance, Foreign Aid Agency, General Tax Directorate, the Japanese Embassy in Bulgaria, and JICA Bulgaria office on 5 December 2005.

As a result of this discussion, the Ministry of Culture will propose VAT exemption specified in the E/N for this Project on the resolution of Japanese cabinet. Then the resolution of Bulgarian cabinet, the approval by the Bulgarian National Assembly and its public announcement will follow, which will end with the E/N. The Ministry of Culture expressed to make best efforts to complete the procedure of tax exemption within two and a half months. The detailed methods for tax exemption are specified Bulgarian VAT law and it shall be adhered to precisely.

2-4 Project Operation Plan

(1) Organization structure of the Bulgarian side

The Ministry of Culture will be in charge of operation and maintenance costs of the Museum Center, which will be considered as branch of Haskovo Historical Museum.

(2) Operation and Maintenance of the Museum Center

As mentioned below, it will be necessary to operate and maintain the facility and equipment, update the exhibitions.

1) Operation of the Museum Center

The following work will be necessary in order to operate the Museum Center well: opening and closing of the Museum Center, reception of visitors, planning and implementation of the exhibitions, delivery, treatment, analysis, examination, restoration and storage of the relics and excavations from surrounding area.

The reception of visitors includes charging the admission fees, provision of information with brochures, and selling memorial goods (e.g. post cards). Staff members will work at the reception during the Museum Center working hours. Guides will attend the visitors and explain the exhibitions. Curators will be in charge of planning exhibitions and restorers will be responsible for laboratory research.

2) Maintenance of the Museum Center

The facility, electrical utilities, air conditioning, security system, the procured equipment will require periodical inspection, maintenance, exchange of consumables, and repair. The engineers at Haskovo Historical Museum will do these maintenance works. The Museum Center will be kept clean by cleaners.

It is also necessary to have an agreement on the management of the waste water purifier in order to implement periodical inspection and maintenance of it.

3) Maintenance and update of the exhibitions

The following work will be necessary: design of exhibitions, making and positioning of exhibitions (panels, photos, explanations, models, etc.), production and playing of videos, and update of these kinds of software.

2-5 Project Cost Estimation

2-5-1 Initial Cost Estimation

The approximate estimated costs of this Grant Aid Project provided by the Government of Japan are about 291 million yen. The costs borne by the Japanese and the Bulgarian sides are shown in the tables below. Those numbers have been estimated with the conditions mentioned below also. The costs are only tentative and are not necessary the same as the ceiling price specified in the E/N. This cost estimate is provisional and would be further examined by the Government of Japan for the approval of the Grant.

(1) Costs borne by the Japanese side

Construction of Museum Center and the equipment procurement
(Total floor area of the Museum Center: approx. 845 m²)

Table 2-11 Approximate Estimation of the Costs Borne by the Japanese Side

Item		Estimation (million yen)	
Facility	Museum Center	179	Subtotal 223
Equipment	Replica of the Tomb, AV system, Exhibition case, Camera and accessories, Stereoscopic zoom microscope system.	44	
Detailed design and supervision		68	
Total		291	

(2) Costs borne by the Bulgarian side

Securing, reclaiming and ground leveling of the construction site, cleaving the access roads, paving of the walkway from the Museum Center to the Tomb, electricity, phone line and water work, fixtures and office equipment, and preparing exhibitions: Approx. 216,000 BGN (approx. 15.24million yen)
Total costs shown in the table as below are only 0.7% of total budget and surely borne by Haskovo Municipality.

Table 2-12 Costs Borne by the Bulgarian Side

Item	Q'ty	Estimation		Organization
Securing, reclaiming and ground leveling of the construction site	2720 m ²	51,000 BGN	(approx. 3.60 million yen)	Haskovo Municipality
Cleaving the access roads	225 m			
Paving of the walkway from the Museum Center to the Tomb	400 m			
Electricity, phone line and water work	1 set	152,000 BGN	(approx. 10.72 million yen)	Haskovo Municipality
Fixtures, office equipment	1 set	13,000 BGN	(approx. 0.92 million yen)	Haskovo Municipality
Total		216,000 BGN	(approx. 15.24 million yen)	

(3) Estimation condition

- 1) Date of Estimation December 2005
- 2) Exchange rate 1EURO = 137.61 Yen
(Average value between 1 June and 30 November 2005)
1 EURO= 1.95 BGN (Fixed rate)
- 3) Implementation period
The schedule of detailed design, construction and procurement is shown in the schedule above fig.2-4.
- 4) Others This Project shall be implemented in accordance with Japan's Grant Aid scheme.

2-5-2 Operation and Maintenance Cost

The operation and maintenance costs for the Museum Center are estimated as follows.

Table 2-13 Operation and Maintenance Costs

Item	Price (BGN/ Year)	Computation Condition*
Cleaning Fee	7,300	
Electricity Charge	22,800	Lighting, air conditioning, etc.
Water Charge	550	For staff and visitor
Septic Tank Maintenance Fee	1,400	
Total	32,050	

*Estimated the number of visitor to be 5 thousand a year.

The above mentioned total cost and personnel costs necessary to operate and maintain the Museum Center are surely borne by the Ministry of Culture. The amount of budget in conformity with costs of the Museum Center will be increased in the Ministry and Haskovo Historical Museum.

Although staff members except for the security guards and cleaner will be arranged by the Haskovo Historical Museum also, only the cleaner will be necessary to be appointed as the security guards for the real tomb can be assigned to the Museum Center as well.

The following number of staff members will be necessary.

Table 2-14 Numbers of Staff Necessary for Operation and Maintenance

Position	Director	Curator	Restorer	Guide	Accountant	Security Guard	Cleaner	Maintenance	Total
No.	1	1	1	*2	1	**4/4	1	By the employees of Haskovo Historical Museum	8

* The number will vary depending on the season.

** 4 shifts per day

The number of the employees at Haskovo Historical Museum, which has been planned to implement the operation and maintenance of the Museum Center, is 22 people and that is large enough for the Museum Center to be well managed.

2-6 Other Relevant Issues

The followings are the point of concern which may effect the smooth implementation of the Project.

- The Bulgarian side shall ensure tax exemption for the material, equipment and products (included the ones procured domestically).
- The Bulgarian side shall reclaim the land of the construction site and the access roads to the site for the smooth implementation of the work by the time construction work is started.
- The Bulgarian side shall make the exhibition of the Museum Center and the exhibition software by the time the interior work of the Museum Center is finished.
- The Bulgarian side shall secure and allocate the staff members for the Museum Center.
- After the Museum Center is open to the public, NIMC shall visit the Museum Center periodically and instruct the management system of the Center.

Chapter 3 Project Evaluation and Recommendations

Chapter 3 Project Evaluation and Recommendations

3-1 Project Effect

The Museum Center is planned to function as an exhibition, seminar, and research institute. The main feature of the Museum Center is the exhibition hall, having the same-scale replica of the Alexandrovo Tomb (chamber, antechamber, droms, and the wall paintings). The replica and the wall paintings will be duplicated precisely as the substitute. The replica will be open to the public and visitors will be able to look at the wall paintings inside. The exhibition hall will also display panels about Thracian culture and excavations from near Haskovo so that the visitors will be able to come into contact with Thracian cultural heritage. From the glass observation room (tomb view), facing the replica at the South of the exhibition hall, the visitors will be able to see the real tomb. Across from the exhibition hall, the entrance hall in between, there will be the audio-visual lecturing room and visitors will be able to join in lectures and seminars using audio-visual equipment. The audio-visual lecturing room will present a visual film regarding Thracian culture, as well as be used for many other purposes such as for designed exhibition. An equipped lab-workshop will be established also for the promotion of laboratory research. It will also store excavations.

The Museum Center will be located on a hill away from Alexandrovo village downtown, and the main transportation to the Center will be cars and buses. Even 1km away from the Museum Center, it is possible to look around the Museum Center and the Alexandrovo Tomb. The Museum Center will be lighted up at night in order it to be found easily in vehicles as well as for security reasons. The lanes from the public road to the Museum Center and from the Museum Center to the Tomb will be arranged like a path in a park in order to improve the landscape.

In view of the various social conditions in Bulgaria (cf. Appendices 5-1: Social Condition related to the Project) – including the positive growth of Bulgarian tourism, the high tourism development potential around the project site, and the expected regular student visits to museums including the Museum Center aiming at the educational observation made mandatory by the history curriculum– the expected direct and indirect effects of this project are summarized as follows, in Tables 3-1 and 3-2.

Table 3-1 Direct Effect

Current Situation and Problem	Improvement Measures under the Project (Japan's Grant Aid)	Project Effect and Level of Improvement
No Proper methods for the preservation of the Alexandrovo Tomb and the wall paintings inside have yet been established	Construct facility and procure equipment for laboratory research Arrange exhibits storage of articles and excavations	The facility and equipment for the laboratory research of the Thracian cultural heritage will be in use, and promote the archaeological study for restoration and preservation the Tomb and surroundings.
The Alexandrovo Tomb cannot be open to the public	Arrange Tomb replica (chamber, antechamber, droms and wall paintings) Exhibit the situation of the Tomb by visual materials	The replica with wall paintings inside will enhance the interests and enlarge the knowledge in cultural assets of Thracian culture.
There is no facility to accommodate visitors, hold exhibitions, or give explanations	Arrange audio-visual lecturing room where seminars will be held with audio-visual equipment	The Museum Center will be in use and give the general public and students in Bulgaria an opportunity to learn about the Thracian culture which is included in the study curriculum of Bulgaria, and enhance the understandings.

Table 3-2 Indirect Effect Expected by Implementing This Project

Current Situation and Problems	Improvement Measures under the Project (Japan's Grant Aid)	Project Effect and Level of Improvement
The environment around the Alexandrovo Tomb is not appropriate as a facility to accommodate visitors.	Arrange the Museum Center and its access appropriately.	The environment and view around Alexandrovo Tomb will be improved.
There are no prominent tourism resources and no development of tourist industry in Haskovo.	Establish the Museum Center to accept tourists from outside and inside of Bulgaria.	<p>It will contribute to the development of the tourist industry in Bulgaria, by cooperating with other tourist places nearby and effective promotion.</p> <p>The Museum Center will promote the tourist industry in Haskovo.</p> <p>Name value of Thracian Culture will be increased in Bulgaria and neighboring country.</p>

3-2 Recommendations

In order to retain this Project effects sustainable, the following is recommended to the Bulgarian side regarding the management of the Museum Center, etc.

- The exhibits and displays in the Museum Center must be well managed and the visitors must be able to have the latest information regarding related matters.
- There must be a secured and enough budgets, allocated and qualified staff in order to operate and maintain the facility and equipment provided by this Project.
- As Haskovo Historical Museum has been managed for a long time, there will be no need to provide technical assistance. However there will be more to expect for the Bulgarian side in order to increase the number of visitors by improving the exhibition methods, well managing the access to the exhibits, etc. Preparing ticket and advertisement in common with Haskovo Historical Museum are expected for multiplier effect.

In light of the tourist industry in Haskovo and the tendency of the visitors to museums, the active participation of the Bulgarian side will be necessary for securing visitors and contribution to the local economy. Haskovo County, especially Alexandrovo village is interested in the tourist industry and the number of tourists and the revenue from it in Bulgaria has been increasing. The potential to increase those numbers are still high. The following items can be implemented for this purpose.

- Tour basing Plovdiv, which visit Cultural and Historic Site in the Old Part of Plovdiv, Perperekon site, Bachkovo Monastery, or tours include visit to Kazanlak and Sveshtary will be produced (it could be named "Thracian road"). Perperekon site is 25km away from Haskovo recently found in Kardzali, Rodopi Mountains.
- The Sveshtary site has been promoting itself in the exhibition targeting tourist agent twice a year. As the Alexandrovo Tomb is not well known, an effective promotion is necessary. It is important for not only Haskovo Municipality but also the Ministry of Culture and NIMC to implement an active promotion in order to increase the visitors to the Alexandrovo Tomb.

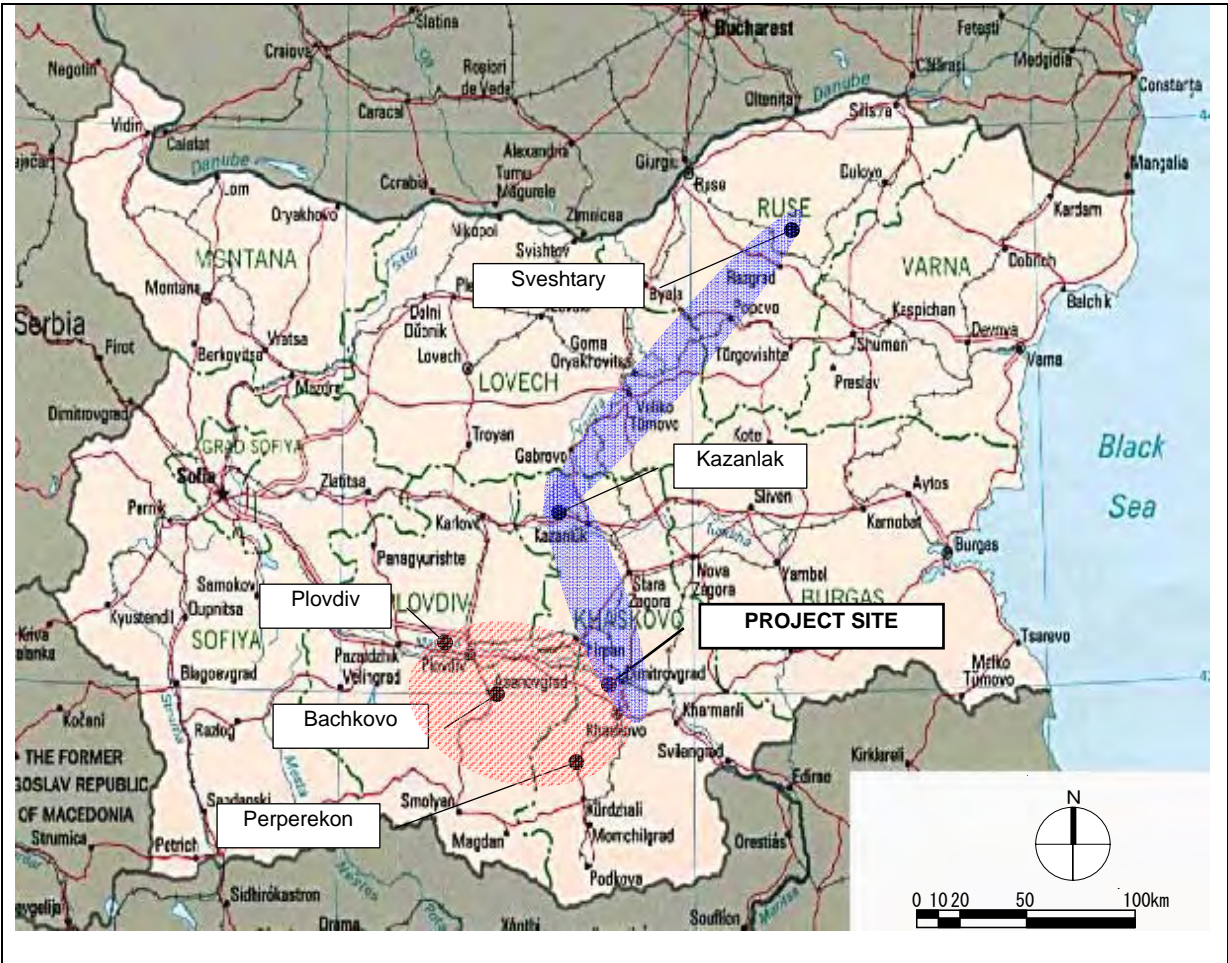


Figure 3-1 Suggested Route for Securing Visitors

Appendices

1. Member List of the Study Team
2. Study Schedule
3. List of Parties Concerned in the Recipient Country
4. Minutes of Discussions
5. Other Relevant Data
 - 5-1 Social Condition related to the Project
 - 5-2 Topographic Survey Report
 - 5-3 Geological Survey Report
6. Reference

1. Member List of the Study Team

1-1 Basic Design Study (from November 15,2005 to December 11,2005)

Name	Charge	Position / Institution
Mr. Keizo KAGAWA	Team Leader	Resident Representative of JICA Bulgaria Office, JICA
Ms. Sonoko IWAMOTO	Project Coordinator	ICT and Governance Team, Project Management Group I, Grant Aid Management Department, JICA
Mr. Hidejiro UCHIGASAKI	Project Manager / Architecture Planning	Consultant, Zen-Noh Architects & Engineers Inc.
Mr. Tsuneki NARAHARA	Architecture Designing / Construction Planning / Cost Estimation	Consultant, Zen-Noh Architects & Engineers Inc.
Mr. Yukio KATAYANAGI	Equipment Planning / Procurement Planning / Cost Estimation	Consultant, Zen-Noh Architects & Engineers Inc.
Mr. Hirofumi NAGAKANE	Exhibition Planning	Consultant, Zen-Noh Architects & Engineers Inc.

1-2 Explanation of Draft Report (from February 19, 2006 to February 26, 2006)

Name	Charge	Position / Institution
Mr. Keizo KAGAWA	Team Leader	Resident Representative of JICA Bulgaria Office, JICA
Mr. Hidejiro UCHIGASAKI	Project Manager / Architecture Planning	Consultant, Zen-Noh Architects & Engineers Inc.
Mr. Tsuneki NARAHARA	Architecture Designing / Construction Planning / Cost Estimation	Consultant, Zen-Noh Architects & Engineers Inc.
Mr. Yukio KATAYANAGI	Equipment Planning / Procurement Planning / Cost Estimation	Consultant, Zen-Noh Architects & Engineers Inc.

2. Study Schedule

2-1 Basic Design Study

	Date	Day	Official		Consultant:			
			Mr. Kagawa	Ms. Iwamoto	Mr. Uchigasaki	Mr. Narahara	Mr. Katayanagi	Mr. Nagakane
1	15-Nov	tue		NRT to Munich Munich to Sofia				
2	16-Nov	wed	Courtesy Call to EOJ and JICA Courtesy Call to Ministry of Culture, NIMC and other concerned organizations					
3	17-Nov	thu	Discussion with the Ministry and NIMC (Move to Kazanluk)					
4	18-Nov	fri		Survey for related facilities in Kazanluk (Move to Haskovo) Courtesy Call to Haskovo Municipality				
5	19-Nov	sat		Site Survey in Alexandrovo (Move to Plovdiv) Survey for related facilities in Plovdiv, Meeting with JOCV				
6	20-Nov	sun		Survey for related facilities in Plovdiv (Move to Sofia)				
7	21-Nov	mon	Discussion with the Ministry and NIMC on M/D Signing on M/D					
8	22-Nov	tue	Report to EOJ					
				(Move to Frankfurt,	Data Analysis, Preparing Report Internal Meeting			
9	23-Nov	wed		Arriving at NRT	Survey for Architectural Planning		Survey for Exhibition Planning	
10	24-Nov	thu			Survey for Architectural	Discussion with NIMC	Survey for Social Condition	Discussion with NIMC
11	25-Nov	fri			(Move to Haskovo) Site Survey in Alexandrovo			
12	26-Nov	sat			(Move to Sveshtary) Survey for related facilities in Sveshtary (Move to Razgrad)			
13	27-Nov	sun			Survey for related facilities in Razgrad (Move to Veliko Tarnovo) Internal Meeting			
14	28-Nov	mon			(Move to Kazanluk) Meeting with JICA Project Office			
15	29-Nov	tue			(Move to Haskovo) Discussion with Haskovo Municipality, Haskovo Historical Museum Survey for related facilities in Periperikon Survey for Construction, Equipment Planning, Social Condition			
16	30-Nov	wed			Site Survey in Alexandrovo Discussion with Haskovo Municipality (Move to Sofia)			
17	1-Dec	thu			Report to JICA Office Discussion with NIMC		Survey for Exhibition and Equipment Planning	
18	2-Dec	fri			Survey for Architectural Planning		Survey for Exhibition and Equipment Planning	
19	3-Dec	sat			Internal Meeting, Data Analysis, Preparing Report			
20	4-Dec	sun			Internal Meeting, Data Analysis, Preparing Report			
21	5-Dec	mon			Discussion on VAT Exemption		Survey for Exhibition and Equipment Planning	
22	6-Dec	tue			Contract on Topographic Survey and Geological Survey		Survey for Procurement and Cost Estimation, Social Condition	
23	7-Dec	wed			Discussion with Ministry of Culture and NIMC Survey for related facilities in Sofia			
24	8-Dec	thu			Survey for Construction		Survey for Procurement and Cost Estimation, Social Condition	
25	9-Dec	fri			Report to JICA Office Report to EOJ			
26	10-Dec	sat			Sofia to Munich, Munich to NRT			
27	11-Dec	sun			Arriving at NRT			

2-2 Explanation on Draft Report

No	Date	Day	Official	Consultant		
			Mr. Kagawa	Mr. Uchigasaki	Mr. Narahara	Mr. Katayanagi
1	19-Feb	sun		NRT to Munich, Munich to Sofia		
2	20-Feb	mon	Meeting with JICA Bulgaria Office Meeting with the Ministry of Economy & Energy. Explanation of Draft Report and Discussion with Ministry of Culture and NIMC Meeting with the Embassy of Japan			
3	21-Feb	tue	Explanation of Draft Report and Discussion with Ministry of Culture and NIMC (Move to Haskovo)			
4	22-Feb	wed	Explanation of Draft Report and Discussion with Haskovo Municipality and Historical Museum Confirmation of Obligation by Recipient Side (Move to Sofia)			
5	23-Feb	thu	Meeting on the Minutes of Discussions			Confirmation of Geological Survey
6	24-Feb	fri	Signing on Minutes of Discussions Report to the Embassy of Japan Report to JICA Bulgaria Office			
7	25-Feb	sat		Sofia to Munich, Munich to NRT		
8	26-Feb	sun		Arriving at NRT		

3. List of Parties concerned in the Recipient Country

3-1 Bulgarian side

(1) Ministry of Culture

Ivan TOKADJIEV	Deputy Minister
Alexander PALICHEV	Advisor of the Minister
Diana DNAILOVA	Director, EU Integration and International Cooperation Directorate
Diana IGNATOVA	Head of Bilateral Cooperation Department
Dolya YORDANOVA	Architect, Chief Expert, Cultural Monument's Protection Directorate
Borislav ABADJIEV	Director, Cultural Monument's Protection Directorate
Teodora DONCHEVA	Junior Expert
Ivo MARINOV	Director, National Tourism Policy Directorate
Todor CHOBANOV	Head of Inspectorate for Cultural Heritage, National Center of Museum, Galleries and Arts
Evgeniy SACHEV	Director, National Center of Museum, Galleries and Arts

(2) National Institute for Monuments of Culture

Georgi UGRINOV	Director
Victor POPOV	Architect Expert
Tsviatko KADIYSKI	Air-Condition Expert

(3) Ministry of Economy and Energy

Ivo KONOV	Director, Donor Programs
Radoslav STANOLOV	Chief Expert, Donor Programs Directorate

(4) Ministry of Finance

Vasil IVANOV	Head of Division
Nelly SAVOVA	Chief Expert

(5) Ministry of Foreign Affairs

Natalia MISHEVA	Expert, Asia, Australia and Oceania
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(6) General Tax Directorate

Miroslav TUEV	Legal Advisor
Mitko SOYKKOV	Legal Advisor
Evgeniya POPOVA	Tax Expert

(7) Foreign Aid Agency

Chisto STOEV	
Rumev CHERVEVKOV	

- (8) Ministry of Education and Science
 Hristina MARKOVA Senior Expert on History and Geography,
 Education Policy Directorate
- (9) Thracian Expedition for Tumular Investigations/Temp
 Georgi KITOV Chairman of the General Meeting of the Scientists
 at AIM-BAS
- (10) Haskovo Municipality
 Georgi IVANOV Mayor
 Tatyana Vasileva DIMITROVA Deputy Mayor of Haskovo Municipality
 Neli STANEVA Director,
 Development and National Resource Management
 Boyana TODOROVA Public Relations Officer
- (11) Haskovo Historical Museum
 Georgi GRAMATIKOV Director
 Iroko PETROV Senior Curator, Archeology
- (12) Institute of Archeology with Museum, Bulgarian Academy of Science
 Diana GERGOVA Ph. D, Department of Thracian Archeology
 Kitan KITANOV
- (13) National Academy of Arts
 Grigori GRIGOROV Professor
 Valentin JODOROV Professor, Department of Restoration
- (14) Bulgarian Association of Travel Agents
 Donka SOVOLOVA President
- (15) Kazanlak Municipality
 Julyana PALAZOVA Deputy Mayor of Haskovo Municipality
 Kosio ZAREV Director, Kazanluk Historical Museum
- (16) Plovdiv Municipality
 Radka BANYALIAVA Curator
- (17) Isparih Historical Museum
 Zhivka MIHAILOVA Deputy Director
- (18) Razgrad Historical Museum
 Nikoninka NEDELICHEVA Guide

3-2 Japanese Side

(1)Embassy of Japan in Bulgaria

Yoshie AIHARA	Second Secretary
Aoi YAMAGISHI	Third Secretary

(2)JICA Bulgaria Office

Ken NAGAI	Program Officer
Hiroyuki NONAKA	Project Formulation Advisor
Tatsuya KATAGI	Coordinator of J.O.C.V.
Kazuhiko HIGUCHI	Coordinator of J.O.C.V.
Yuko NAKAJIMA	J.O.C.V.
Akiko KAWAGOE	J.O.C.V.

(3)Project for Kazanlak Area Revitalization

Ken KAWASAKI
Ryoichi OZAWA
Megumi HASHISAKO

4. Minutes of discussions

4-1 Basic Design

**Minutes of Discussions
on the Basic Design Study
on the Project for the Construction
of the Museum Center for Thracian Arts
of East Rodopi Mountains
in the Republic of Bulgaria**

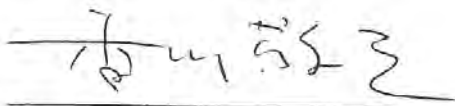
In response to the request from the Government of the Republic of Bulgaria, the Government of Japan decided to conduct a Basic Design Study on "The Project for the Construction of the Museum Center for Thracian Arts of East Rodopi Mountains" (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Bulgaria the Basic Design Study Team (hereinafter referred to as "the Team"), headed by Mr. Keizo KAGAWA, the Resident Representative of the JICA Bulgaria Office, and is scheduled to stay in the country from November 15th to December 10th, 2005.


The Team held discussions with the officials concerned of the Government of Bulgaria and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets in principle. The Team will proceed to further works and prepare the Basic Design Study Report.


Sofia, 21 November, 2005



Keizo KAGAWA
Leader
Basic Design Study Team
Japan International Cooperation Agency



Ivan Danev TOKADJIEV
Deputy Minister
Ministry of Culture
The Republic of Bulgaria



Georgi Dimitrov UGRINOV
Director
National Institute for Monuments of Culture
The Republic of Bulgaria

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ATTACHMENT

1. Objective

The objective of the Project is to build a museum center near a Thracian tomb north-east of Alexandrovo village, Haskovo Municipality to exhibit the replica of the tomb and the Thracian artifacts and to research for the conservation the Thracian tomb as a cultural heritage.

2. Project Site

The site of the Project is located approximately 200m far from a Thracian tomb north-east of Alexandrovo village in the countryside "Roshava Chuka", Haskovo Municipality, Haskovo county as shown in Annex-1.

3. Responsible and Implementing Organizations

The responsible organization of the Project is the Ministry of Culture of the Republic of Bulgaria and the implementing organization of the Project is the National Institute for Monuments of Culture.

The organization chart of implementing agency is shown in Annex-2.

4. Items Requested by the Bulgarian Government

After discussions with the Team, the building of the museum center and the equipment for the museum center described in Annex-3 were finally requested by the Bulgarian side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

5. Japan's Grant Aid Scheme

- (1) The Bulgarian side understands the Japan's Cultural Grant Aid scheme, its budgetary limit and the necessary measures to be taken by the Government of Bulgaria explained by the Team as described in Annex-4.
- (2) The Bulgarian side will take necessary measures, as described in Annex-5, for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.

6. Schedule of the study

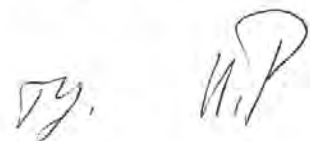
- (1) The consultants will proceed to further study in Bulgaria by December 10th, 2005.
- (2) JICA will prepare the draft report in English and dispatch a mission to Bulgaria in order to explain its contents around the middle of February, 2006.
- (3) In case that the contents of the report is accepted in principle by the Government of Bulgaria, JICA will complete the final report and send it to the Government of Bulgaria by



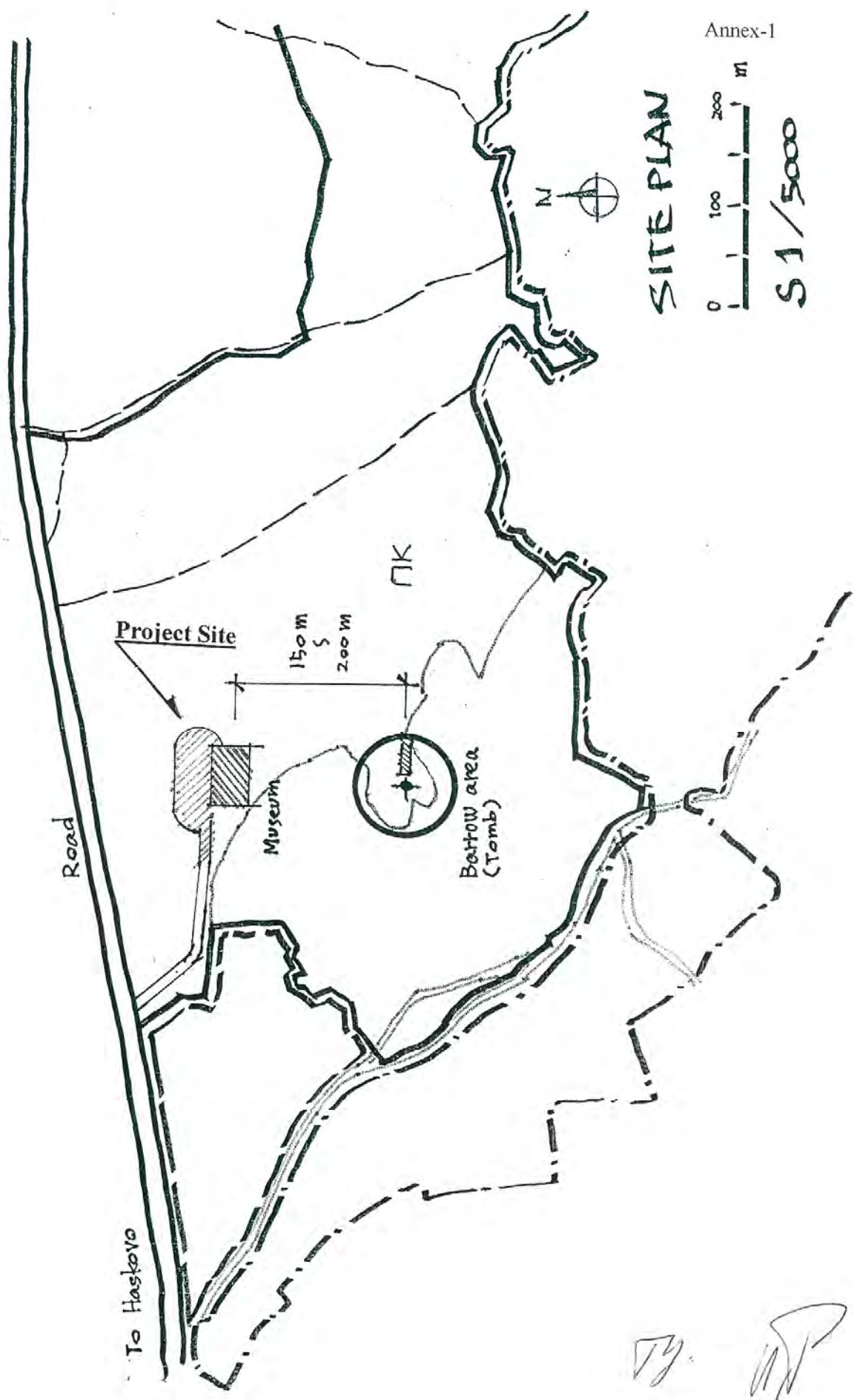
the end of April, 2006.

7. Other Relevant Issues

- (1) The Bulgarian side shall secure and allocate enough budget and qualified staff to operate and maintain the buildings and the equipment built and supplied by the Japan's Grant Aid properly and effectively.
- (2) The museum center to be constructed should not be a property of municipality but a property of Bulgarian government according to the Grant Aid scheme. (Grant Aid can be provided only to a government.)
- (3) The Bulgarian side agrees that the museum center would have the following functions:
 - To provide necessary information on the Thracian tombs in Haskovo County,
 - To afford the facility for pursuing the research.
 - To hold seminars to the researchers/people or history classes to local students to enhance general archaeological level in Bulgaria.
 - To provide some exhibits in order that the visitors can easily interpret the Thracian heritage.
- (4) The Bulgarian side guarantees that no archaeological relics exist under the planned construction site and will be held the necessary survey to reconfirm it by the end of December, 2005 with a presentation of its report to the Team.
- (5) Regarding exhibition in the museum center, both sides agree on the following issues:
 - The exhibition scenario, policy and plan should be discussed during the stay of the Team.
 - The content of the exhibition (explanations, videos, photos, etc.) shall be prepared by the Bulgarian side.
 - The explanation in the exhibits will be described in Bulgarian, English and Japanese language.
- (6) The Bulgarian side shall ensure prompt tax exemption and customs clearance of the products at the terminal of disembarkation.
- (7) The Bulgarian side shall bear all procedure and expenses for obtaining the construction permission of the museum center.
- (8) The Bulgarian side shall exempt from VAT concerning local procurement of goods and services under the Project to a Japanese contractor. The procedure of exemption should be determined by the end of the study of the Team.
- (9) The Bulgarian side understands that another official request on technical cooperation, etc. should be submitted through diplomatic channels such as the Embassy of Japan and/or the JICA Office.

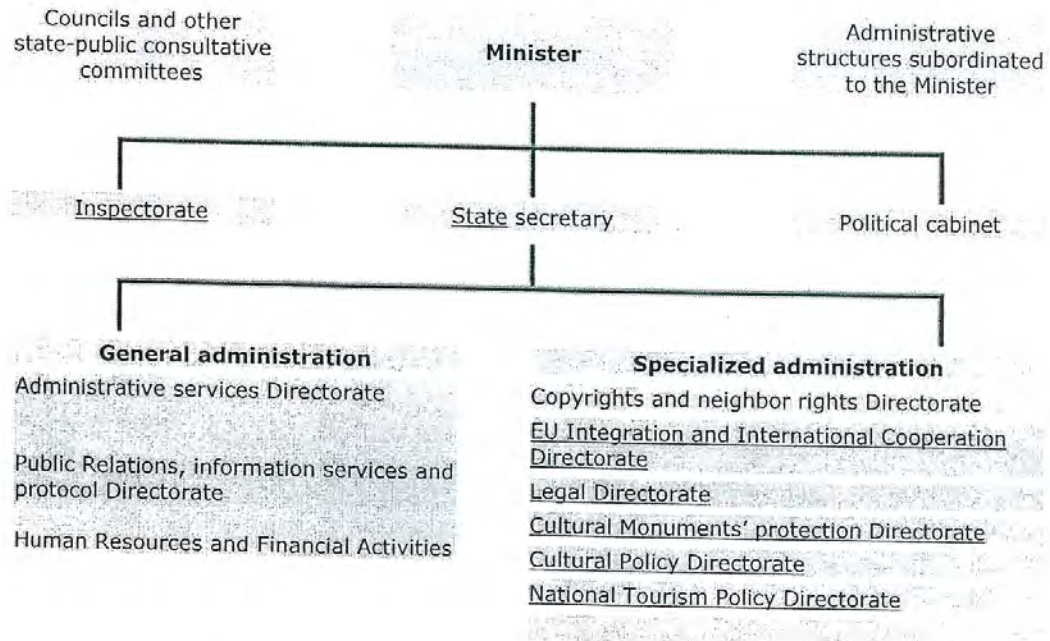


SITE PLAN



(16)

Organization Chart of the Ministry of Culture and Tourism of the Republic of Bulgaria /by July 2005/



National Centers for the Arts – arms-length bodies responsible for implementing of sub-sectoral policies: e.g. Music and Dance, Books, Theatre, Museums, galleries and visual arts; Executive Agency “National Film Centre”;

National Culture Fund – providing grants for cultural projects under different priorities several times per year.

National Institute for Cultural Monuments - subordinated to the Ministry; responsible for the protection of the immovable cultural heritage

Tentative list of the contents requested by the Bulgarian side

The design is to be discussed between the Bulgarian side and the Team and shall be determined during the stay of the team. Basically, the contents will be examined their necessity and pertinence.

Area size to be included in the Museum centre

Total floor area: appr. 700 sq.m.

Equipment to be procured in provisional priority order

Photogrammetric equipment

	Cameras for Digital Photogrammetry		Priority
I	R-flex 6008 metric camera	1	C
1.1	Tripod for the camera	1	
1.2	Flash Rollei SCA356	1	
1.3	Magazine 70 for 60x70 format	1	
II	Digital Photogrammetry System		C
2.1	Digital stereo plotter Stereometric/pro	1	
2.2	ADA-system for automatic DEM acquisition	1	
2.3	Dem Manager-system for processing of numerical models	1	
2.4	Masterscan-system for correction of systematic errors of the scanner	1	
2.5	Archis 2Dpro-program for 2D architectural applications	1	
2.6	OXYGEN GVX1 32MB-stereo ready graphic board	1	
2.7	Active glasses Stereo device	2	
2.8	Active screen Stereo device	1	
2.9	Track-ball	1	
III	PC for digital photogrammetry purpose (minimum configuration) Pentium IV 2,8 Ghz, RAM 512MB, Hard disk 60Gb, CD reader and writer, gr. board with 1280x1024 pixel 6400 colors, 17" monitor, fax modem, Windows XP Professional, AUTODESK Land Desktop 2005 – Autodesk Survey	1	C
IV	Aculaser C8500PS – laser printer for printing photoplans and mosaics	1	C
4.1	A3W Cassette	1	
4.2	Additional toner cassettes	2	
4.3	Copy station kit for turning a printer into photocopier	1	
V	DCR- TRVHC 1000 – digital video	1	C
VI	Lifebook FSC Amilo D8830 PentiumIV 2,8 GHz, 512 Mb RAM, 60 GB HDD, 15" SXGA+ display, CD-ROM recordable, LAN 10/100 & 56K modem, Windows XP Professional	1	C
VII	Dimage Scan Multi Pro	1	C

Photographic equipment

I	Camera Rz 67 PRO II Pack – 6x7	1	A
1.1	Lenses		
	05.4.1962	1	
	05.4.1975	1	
	90/3.5	1	
	180/4.5	1	
1.2	Filters		
	UV 77mm	1	
	Sky 77mm	1	
	Polarizer 77mm	1	
1.3	Tripod	1	
II	Cool PIX 900S – Digital camera	1	A
III	MVC – FD 91 – Digital camera	1	A
IV	Tripods for lights	4	A
V	GR-DV2000 – digital video camcorder	1	A

Equipment for the laboratory research

I	Stereoscopic Zoom Microscope	1	A
	Consisting of:		
1.1	Stereoscopic zoom microscope main body, SMZ1000(AC220V)	1	
1.2	Spare halogen lamp, 6V-30W	5	
1.3	Plastic fiber optics ring illuminator set	1	
1.4	Spare halogen lamp, 12V-100W for illuminator set	5	
1.5	Photographic system, U-III-35-PLI(AC220V)	1	
1.6	3-CCD color video camera with AC adapter(PAL version, AC220V)	1	
1.7	14-inch color video monitor (PAL/NTSC multi version, AC220V)	1	
1.8	BNC Connecting cable, 3m for the connection of video camera with video monitor	1	
1.9	C-Mount TV adapter 0.45X with built-in relay lens for the connection of video camera with microscope	1	

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Microclimatic equipment

I	Air drier KAUT 25 K	2	A
II	Air humidifier Defensor PH-14	2	A
III	Air conditioner for close control HIMOD S07 with E-heating and humidifier, Qo=8.2 KW, HCE14	4	A
IV	Ventilation devices for 500m ³ /h fresh air incl. Filter and heater	2	A
V	Reference measuring system for monitoring the microclimate consisting of:		B
5.1	Multifunction measuring instrument Testo N 0563.0353	1	
5.2	Logger N 0577.4540	1	
5.3	Lifebook E-6585 PentiumIII 800 MHz, 128 Mb RAM, 20 GB HDD, ATI Mobility-M4 with 16 Mb video RAM, 14" TFT display, CD-ROM recordable, LAN 10/100 & 56K modem, Windows 2000	1	
5.4	Aculaser C8500PS - laser printer for printing photo plans end mosaics	1	
5.5	PCMCIA with software ComSoft 3, cable and adaptor N 0554.0590	1	
5.6	Measuring device for the aW N 0628.0024	1	
5.7	Surface temperature probe N 0604.0194	1	
5.8	Probe for CO2 N 0632.1240	1	
5.9	Probe for RH N 0628.0013	1	
5.10	Multifunctional probe (T, RH, velocity) N 0635.1540	1	
5.11	Cable N 0430.0143	1	
5.12	NiMH batteries for Testo 454 N 0515.0097	1	
5.13	Charger 230V N 0554.0054	1	
5.14	Case N 0516.0410	1	
5.15	Testostor 175-2 for to and RH N 0577.1752	1	
5.16	Windows software for Testostor 175-2 N 0554.0152	1	
5.17	Cable for connecting TS 175-2 with PC N 0409.1750	1	
5.18	Starting magnet for TS 175-2 N 0554.0170	2	
5.19	HUMITEST-100	1	
5.20	Thermohigrometter Testo 608-H1 N 0560.6081	8	
VI	Mortar Moisture Tester HI-500 (Coco)	1	B



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Audiovisual equipment

ITEM	DESCRIPTION	QTY	Priority
A-1	DATA PROJECTOR	1	A
A-2	DATA PROJECTOR LAMP	4	A
A-3	LONG-DISTANCE PROJECTION LENS	1	A
A-4	PEDESTAL FOR PROJECTOR	1	A
A-5	DVD PLAYER	1	A
A-6	MULTI SYSTEM VHS VTR	1	A
A-7	VIDEO PRESENTATION STAND	1	A
A-8	RGB DISTRIBUTOR FORPC DATA INPUT	1	A
A-9	MONITORING SPEAKER	2	A
A-10	COLOR VIDEO MONITOR	1	A
A-11	MONITOR MOUNT BRACKET	1	A
A-12	CD/ CASSETTE PLAYER	1	A
A-13	WIRELESS MICROPHONE SYSTEM		
-1	BELTPACK TRANSMITTER W/HEADSET MICROPHONE	2	A
-2	UHF TUNER	1	A
-3	ANTENNA	2	A
A-14	DYNAMIC MICROPHONE	2	A
A-15	MICROPHONE TABLE STAND	2	A
A-16	MULTISIGNAL SWITCHER	1	A
A-17	AUDIO MIXER	1	A
A-18	DIGITAL AUDIO PROCESSOR	1	A
A-19	POWER AMPLIFIER	1	A
A-20	FRONT SPEAKER	2	A
A-21	RACK FOR EQUIPMENT	2	A
A-22	POWER SUPPLY UNIT	1	A
A-23	CONNECTING TERMINAL UNIT	1	A
A-24	170" SCREEN(FRAME MASK TYPE)16:9	1	A
A-25	INSTALLATION MATERIALS & TOOLS	1	A

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JAPAN'S GRANT AID

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

Japan's Grant Aid scheme is executed through the following procedures:

Application	(Request made by the recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by the Cabinet)
Determination of Implementation	(The Note exchanged between the Governments of Japan and recipient country)

Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study) using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

(1) Contents of the study

The aim of the Basic Design Study (hereafter referred to as "the Study") conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.
- Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of the Japan's Grant Aid scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA. The consultant firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

3. Japan's Grant Aid Scheme

(1) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

(2) "The period of the Grant Aid" means the one fiscal year, which the Cabinet approves, the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However, in case of delays in delivery, installation or construction due to unforeseen factors such as national disaster, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

(3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, consulting, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

(4) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

(5) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as the following:

- a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction,
- b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) To secure buildings prior to the procurement in case the installation of the equipment,

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- d) To ensure all the expenses and prompt excursion for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) To accord Japanese nationals, whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(6) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and the equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

(7) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

(8) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

(End)

Major undertakings to be taken by each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1.	To secure land		●
2.	To clear, level and reclaim the site when needed		●
3.	To construct gates and fences in and around the site		●
4.	To construct the parking lot	(●)	(●)
5.	To construct roads		
	1) Within the site	(●)	(●)
	2) Outside the site		●
6.	To construct the buildings	●	
7.	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm, sewer and others) to the site		(●)
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	●	
	4) Gas Supply		
	a. The city gas main to the site		(●)
	b. The gas supply system within the site	●	
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		●
	b. The MDF and the extension after the frame/panel	●	
	6) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
8.	To bear the following commissions to the Japanese foreign exchange bank for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
9.	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	
10.	To accord Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contract, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.		●
11.	To exempt Japanese nationals from any internal tax and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts.		●
12.	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant.		●
13.	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment.		●

(B/A: Banking Arrangement, A/P: Authorization to Pay)