# Heritage Impact Assessment 2020 | "Tourism Service Complex" Project

Buffer zone of Rabati Malik Caravanserai and the Sardoba Navoi Region, Republic of Uzbekistan





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#### **Executive Summary**

This report presents the Heritage Impact Assessment (HIA) carried out by the International Institute of Central Asian Studies (IICAS) for of the proposed Tourism Service Complex located in the buffer zone of Rabati Malik Caravanserai and Sardob, both on the UNESCO World Heritage Tentative List of Uzbekistan as component parts of the Silk Roads: Zarafshan-Karakum Corridor World Heritage nomination. The HIA was developed within the framework of the UNESCO/Republic of Korea Fund-in-Trust "Support for the Asian Silk Roads World Heritage Serial and Transnational Nomination(s) (Phase II)" and performed by IICAS in cooperation with the qualified international experts and heritage practitioners and in accordance with internationally accepted best practices and approaches, the provisions of the Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO 2019) and other relevant international documents, including the ICOMOS (2011) Guidance on Heritage Impact Assessments for Cultural World Heritage Properties.

The report that presents the outcome of the HIA was prepared by an interdisciplinary team of international and local experts in consultation with regional authorities and the developer. The study, which employed a number of methods and approaches, including the desk study and archival research, field study, consultations and computer-aided assessment, was aimed to ensure that the architectural design, location and the function of the proposed development respects the values of the nominated cultural heritage properties. Key consideration and the background of the project were also presented in Section 1.

In Section 2 the historic background and the development of the Caravanserai of Rabati Malik and the Sardoba, including the evolution of the function and the setting of the properties since 11<sup>th</sup> century. The values and attributes of the site as a property placed in the UNESCO World Heritage Tentative List since 2008 and a component of the Silk Roads: Zarafshan-Karakum Corridor serial transnational World Heritage Nomination were identified.

The proposed project was initiated to the regional tourism promotion campaign launched in 2017 with a Presidential Resolution No. PP-3217 dated 16 August 2017 was reviewed to see how the proposed project might support the advancement of the tourism infrastructure and promote the Navoi region as a tourism destination.









Examination of the management system of the property and the regulatory framework revealed that the property is protected by national laws and regulations, and any changes to the nominated property itself or its Buffer Zone shall be coordinated both at national and international levels.

Section 3 describes the proposed Tourism Service Complex, its design, location and key features. The draft design provided by the developer shows a relatively modest approach with primarily light structures, like pavilions, light shelters. General landscape improvement is foreseen to ensure comfort of visitors. The design also revealed that the proposed Tourism Service Complex is located within the boundaries of the Buffer Zone, approximately 30 meters to the west from Rabati Malik caravanserai. The development project was found to have been positively reviewed and approved by the Department of Cultural Heritage. This factor was taken into account by the team, but did not have any impact on the comprehensiveness of the assessment. Neither it affected the outcomes of the HIA and the suggested mitigation measures.

Further, in Section 4 potential impact as a result of proposed development project implementation was discussed and assessed with reference to the attributes and values of the Rabati Malik Caravanserai and the Sardoba. Visual assessment, the proximity of the Complex to Rabati Malik Caravanserai revealed that it is likely to have potential adverse visual impact to both the Caravanserai and the Sardoba being a disturbance for the traditional setting of the monuments. The severity of the direct impact on the Outstanding Universal Value and its attributes identified at the time of nomination of the property to the UNESCO World Heritage List has been found moderate.

Recommendations aimed to mitigate the anticipated negative impact suggested in Section 5 comprised the following:

• It is strongly recommended that the proposed Tourism Service Complex be relocated outside the Buffer Zone to ensure that the integrity and authenticity of the future World Heritage property, as well as associated values and attributes of the nominated property are maintained and the valuable cultural layers remain intact:







- More reliable communication channels between the developer, regional and national authorities, including the Department of Cultural Heritage under the Ministry of Culture shall be ensured;
- More detailed information on the construction methods, structures, mode of use, function, expected visitation rates, compliance with regional and national, including tourism-related, programs and initiatives shall be obtained before meaningful decision can be made with regard to the development project;
- Archaeological excavations shall be carried out to ensure that valuable archaeological layers are properly studied and documented.









## Acknowledgements

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Appreciation is expressed to the National Commission of the Republic of Uzbekistan for UNESCO and in particular to its Chairperson Mr. Aziz Abdukhakimov, and Acting Secretary-General Mr. Saidafzal Mallakhanov for continuous support and commitment.

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#### 1. Introduction

The Heritage Impact Assessment (HIA) in the framework of the UNESCO/Republic of Korea Fund-in-Trust "Support for the Asian Silk Roads World Heritage Serial and Transnational Nomination(s) (Phase II)" Project and in close cooperation with the UNESCO World Heritage Center was initiated to support the State Party of Uzbekistan in evaluating the impact of the proposed Tourism Service Complex within the Buffer Zone of the of Rabati Malik Caravanserai and the Sardoba, both on the national Tentative List of Uzbekistan for World Heritage listing in Navoi region, Uzbekistan.

The HIA was performed in accordance with international accepted best practices and approaches, the provisions of the Operational Guidelines for the Implementation of the World Heritage Convention (2019) and in particular the ICOMOS (2011) Guidance on Heritage Impact Assessments for Cultural World Heritage Properties.

The HIA was initiated on 22.07.2020 and the final version of the HIA report was submitted to the UNESCO World Heritage Center on 30.11.2020 to present the assessment outcomes. Continuous discussions and consultations with the UNESCO World Heritage Center, the Government of Navoi Region, Regional Department for Tourism Development and other stakeholders held both personally and online and attended by the international and local experts helped to ensure the timely implementation of the HIA.

The design set of the proposed Tourism Service Complex assessed in the framework of the HIA comprised maps and computer-aided 3D perspectives prepared by the IICAS based on the limited information provided by the developer. It showed key features and the location of the project. However, the developer showed lack of interest in supporting the assessment and disclosing details on the proposed Tourism Service Complex. This lack of awareness and







interest could be reflected in a adverse impact to the outstanding values of the cultural heritage property in the light of their nomination to the World Heritage List (see Appendix 1).

The HIA report drafted by the expert team was prepared for and is intended to be used by the UNESCO World Heritage Center, Republic of Korea Fund-in-Trust "Support for the Asian Silk Roads World Heritage Serial and Transnational Nomination(s) (Phase II)", the Ministry of Culture of the Republic of Uzbekistan and the Government of the Navoi Region as a base for taking informed decisions related to the new developments of the site.

The HIA is one of a number of measures to ensure integrity and authenticity to the properties nominated to the UNESCO World Heritage List and support their sustainable management in the long-term.

The assessment is a part of an ongoing project, which is to be further continued.

#### 1.1. Scope of the Report

The International Institute of Central Asian Studies (IICAS) was assigned by the United Nations Educational, Scientific and Cultural Organization (UNESCO) to prepare a Heritage Impact Assessment (HIA) for the proposed Tourism Service Complex located in the wider setting of Rabati Malik Caravanserai and the Sardoba, on the national Tentative List of Uzbekistan since 2008, and nominated to the World Heritage List as a component of the Silk Roads: Zarafshan-Karakum Corridor serial translational World Heritage Nomination.

The document has been prepared by an interdisciplinary, international, and local team of experts (see Appendix 2) to present the outcomes of the HIA based on site work and desk studies as well as discussions and consultations with the regional authorities and the developer. The above activities were carried out to ensure that the architectural design, location and the function of the proposed development respects the outstanding values of the nominated cultural heritage properties (see Appendix 3 for the full list of stakeholders) while supporting sustainable development for the region and local benefit.









## 1.2. Methodology

The HIA comprised an evidence-based process:

- Desk study and archival research: Literature review including World Heritage nomination dossier; historical development of the area, review of cartography, urban plans, historic and aerial photos, and satellite images; identification of public facilities and infrastructure; and applicable laws and regulations (see Bibliography);
- Field study including visual points, project area inspection, mapping of cultural assets and advanced documentation (GIS, Photogrammetry, CAD, 3D modelling);
- Meetings and site visits, subsequent discussions with the developer helped to comprehend the design and functions, and work on further mitigation strategies to reduce any risk to the property nominated to World Heritage List;
- Virtual meetings and email communication with international experts and the WHC in Paris;
- Stakeholders consultation and discussions with national, regional and local authorities; and
- Implementation of the ICOMOS (2011) HIA Guidance on Heritage Impact Assessments for Cultural World Heritage Properties.







# 2. Site History and Description. Background

#### 2.1. Regional Tourism Promotion Campaign

Navoi Region of the Republic of Uzbekistan has been in focus as a potential destination for domestic and international tourists since 2017, when a Presidential Resolution No. PP-3217 dated 16 August 2017 was issued to give a start to a massive campaign. The idea was to give a way to private capital, companies and tour guides and to let them enjoy the state support. The principle objective has been set to let the visitors explore the diversity of the region, rich for both cultural and natural heritage. The Navoi region is home to 35 archaeological sites, 71 recognized historic buildings and complexes, 32 sites of monumental art and 8 museums. *Sarmish Gorge* (better known as *Sarmishsay*) with over 4,000 petroglyphs, ancient flint quarries, mines, old settlements, burial mounds, crypts, authentic mountainous settlements, lakes and natural reserves is by far not the full list of attractions the tourists could enjoy while staying in the region.

Since the 11<sup>th</sup> century Rabati Malik Caravanserai has always been an important landmark along the way from Bukhara to Navoi. In 2010, the site was placed on the Tentative List by the National Commission of the Republic of Uzbekistan for UNESCO (No.5308) under the Silk Roads criteria (i), (ii), (iii), (iv), (v). The Sardoba, domed water reservoir, although now being separated from the caravanserai by the M37 motorway, has been an integral part of the hydraulic system of the hot and arid location. Today, both sites are currently considered for inscription as a component of the Silk Roads: Zaravshan-Karakum Corridor serial transnational World Heritage Nomination.

The proposed development aims to improve the tourism infrastructure by creating another pit-stop, where both domestic and international tourists, individual and in groups, could have a short break enjoying a full set of modern amenities.









#### 2.2. Rabati Malik Caravanserai and Sardoba

#### 2.2.1. Location and Setting

Rabati Malik Caravanserai and Sardoba are located in Navoi region along the M37 motorway, on the ancient caravan road between the settlements of Karmanah, former summer residence of the rulers of the Bukhara Emirate, and Kizil-Tepe Region, within the district of Karmanah, Malikrabod Rural Community (see Ошибка! Источник ссылки не найден.). In 2009, the process of nominating Rabati Malik Caravanserai and Sardoba to the UNESCO World Heritage List as the component sites of the Silk Roads: Zaravshan-Karakum Corridor serial transnational World Heritage nomination was launched. The nominated area comprises 1.5 ha, while the Buffer Zone identified in the course of the preparation of the nomination dossier covers an area of about 43 ha. See Map of the nominated Serial World Heritage Property in Ошибка! Источник ссылки не найден..

Rabati Malik Caravanserai was originally built as one of a set of strongholds built to support the expansion of Islam in Central Asia. Rabats, or also Ribats. It is considered to have been later used as a royal residence, fortification, which also served as a caravanserai and maybe even as a khanaka, a building aimed to host the gatherings of Sufi brotherhoods for spiritual practices. The Sardoba built approximately at the same period as the caravanserai has been an integral part of the complex serving a source of water in the hot and arid location.

At the turn of the 20-21<sup>st</sup> centuries the M37 motorway previously laid on top of Rabati Malik caravanserai was rerouted southward and now it splits the caravanserai and the Sardoba. In the beginning of 2000s following archaeological excavations at the caravanserai aimed to identify its layout, the foundations of the walls underwent partial conservation – a sacrificial layer of burnt bricks was added on top of the authentic structures. The entrance portal underwent through conservation.









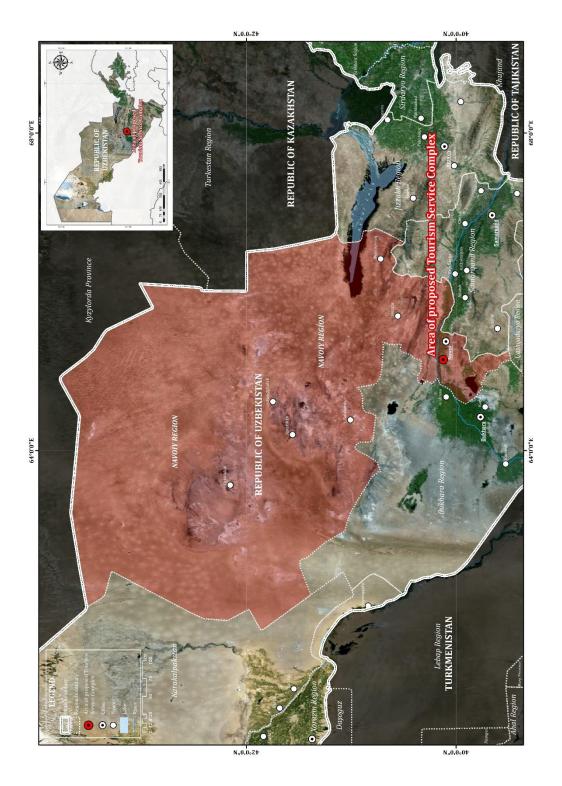


Figure 1. Location of the proposed development project on the map of Uzbekistan. Source: IICAS, 2020









Figure 2. Rabati Malik Caravanserai and Sardoba. View to south-east. Source: IICAS, 2020

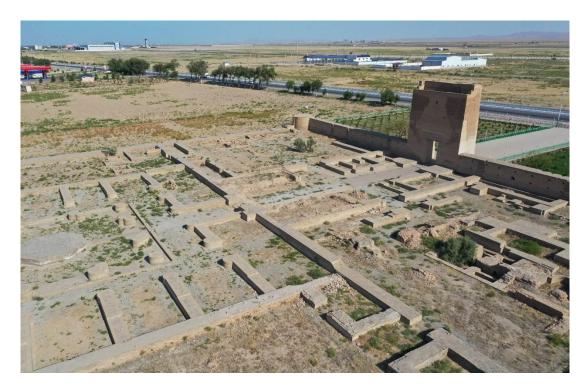


Figure 3. Rabati Malik Caravanserai. General view. Source: IICAS, 2020











Figure 4. Sardoba. Aerial photo. View to south-east. Source: IICAS, 2020

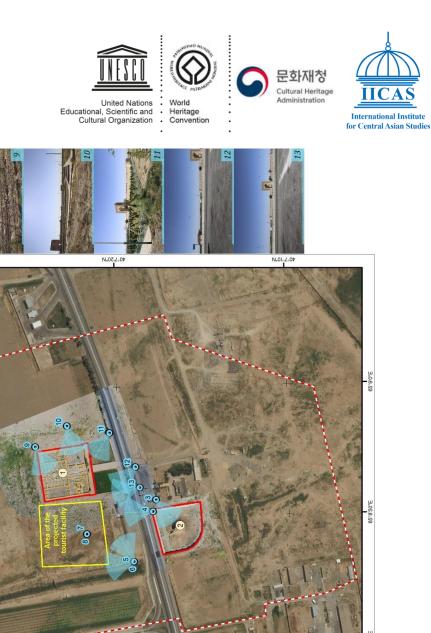


Figure 5. Visual points around Rabati Malik Caravanserai and the Sardoba. Source: IICAS, 2020











Figure 6. View to North-East toward Rabati Malik Caravanserai. Source: IICAS, 2020



Figure 7. View to South-West toward the Sardoba. Source: IICAS, 2020











Figure 8. View to the North-East toward the location of the proposed development project within the boundaries of the Buffer Zone. Source: IICAS, 2020



Figure 9. View to the North showing the entrance portal of the Rabati Malik Caravanserai and the location of the proposed development project. Source: IICAS, 2020









## 2.2.2. Heritage Values and Attributes

The **Rabati Malik Caravanserai** was built in the 1070s by a Karakhanid ruler Shams al-mulk Nasr ibn Ibrahim (1068-1080) and reconstructed in the first quarter of the 12<sup>th</sup> century by another Karakhanid ruler Arslan Khan Muhammad ibn Sulaiman (1102-1130).

The internal layout of the building, except for the main facade, was destroyed long ago and covered with earth. In the 2<sup>nd</sup> half of the 20<sup>th</sup> century a motorway was laid, dividing the site into two parts. Back in the 1930s a significant part of the main façade was in a fairly good state of conservation, with walls with flat pointed niches and corrugations on both sides of a massive entrance portal. The corners were flanked by the *guldasta* corner towers. The entrance portal was elegantly decorated. The U-shaped frame was decorated with embossed brickwork in the form of octagonal stars with inserts of carved *gunch*, and the pointed arch of the entrance niche was framed with a terracotta inscription in Arabic script.

The archaeological excavations (in 1970s and at the end of the 20<sup>th</sup> century and in the beginning of the 21<sup>st</sup> century) helped to reveal the complex layout of this unique building. It measures 91 m long and 89 m wide, and was once surrounded by strong walls and divided into two parts. In the southern (utility) section, there were two large courtyards on the sides of the through passage. At the outer wall of the southwestern courtyard, there was a mosque decorated with carved *gunch* and painted in blue and yellow, and in the courtyard itself there was a bathhouse. Household premises and a kitchen – *oshkhona* – were laid along the perimeter of the southeastern courtyard. The building was surrounded by an external wall, as shown on a sketch drawing by A. Lehman made in 1841, where the entrance gateway was located right the opposite to the surviving entrance portal (see Figure 16 for the location of the external wall).









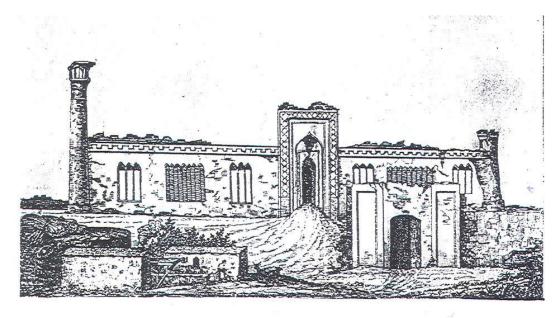


Рис. 1. РАБАТ-И МАЛИК, ОБЩИЙ ВИД С ЮГА.

Из книги Alexander Lehmann's Reise nach Buchara und Samarkand in den Jahren 1841
und 1842

Figure 10. Rabati Malik, view from the South. Drawing by Alexander Lehman (1841-1842). Source: Nemtseva, 2009

The northern residential section, comprising three parts, was distinguished by a unique floor plan and the richness of decoration. In the center there was a large hall with a set of rooms along the perimeter of the walls. In the center of the hall there was a monumental rotunda covered with a dome supported by a colonnade. On the sides of the central hall were courtyards with gardens and living rooms -hujras.

Archaeological studies revealed the remains of stables, security and storage rooms, kitchen and other premises of service and utility purpose in the southern half of the *rabat* courtyard. The northern part had a residential function with galleries and side courtyards and served to host guests.

The varying thickness of the walls was linked to the elaborate design of the southern wall of the caravanserai, where on both sides of the entrance portal the 1.5 m thick adobe brick wall was covered was covered with a decorative layer of baked brick finished with corrugations outside. Together with arcs closing the corrugations on the top the southern wall makes clear reference to the pre-Islamic fortification architecture of old *Keshks*, walled mansions once located in the suburbs of larger cities and serving homes for local landlords.











Figure 11. Rabati Malik Caravanserai and Sardoba: Rabati Malik Caravanserai: reinforcement of the foundations of the West wing in 1928. Source: Ministry of Culture of the Republic of Uzbekistan (1928).

Remains of diverse architectural décor were located as a result of archaeological studies, revealing the materials of the 11-12<sup>th</sup> centuries, also used on the other sites of the Mawara an-Nahr (Transoxiana). The findings comprised the elements of interior carving with floral, geometric and epigraphic ornaments made by carving upon *gunch* – a type of gypsumbased plaster.







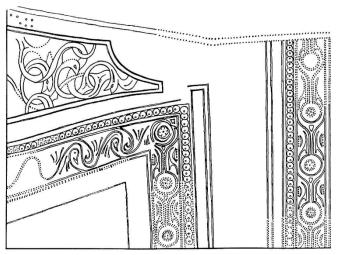


Figure 12. Fragment of painted gunch carving on top of a niche (hand drawings). Source: Nemtseva, 2009

Corner towers - guldasta - flanking the four corners of the caravarserai got its further development in the following centuries turning into a typical architectural element of courtyard mosques and madrasahs.

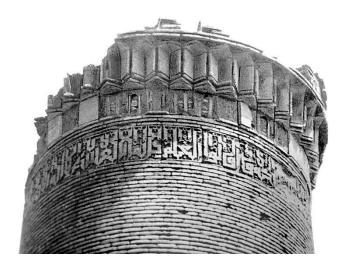


Figure 13. Top level of the guldasta - corner tower. 1970s. Source: Nemtseva, 2009









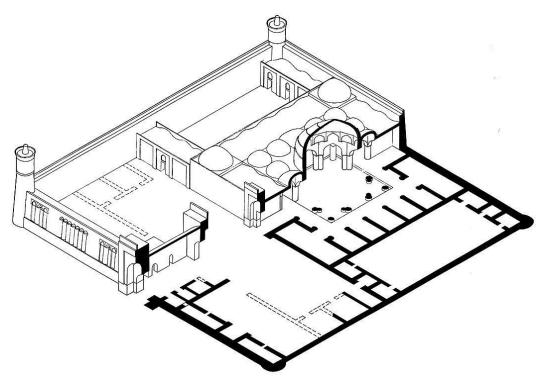


Figure 14. Visual reconstruction of Rabati Malik Caravanserai proposed by N. Nemtseva and E. Briukhovetskaya. Source: Nemtseva, 2009

**Sardoba.** Sardoba, a domed water reservoir, is located approximately 30 m to the south from the entrance portal of the Rabati Malik Caravanserai. It has a trapezoid-shape protection zone with 4 access routes and the modern tourist infrastructure facilities located around it. The internal diameter of the dome is 13 m, and the reservoir is about 6 m deep.

The above-ground part has four arched window openings that illuminate the interior. The openings are located on the cardinal points. On the north side, under the window opening, there is an arched doorway leading into the interior. An inclined corridor leads to the opening from the ground. It is decorated with a rectangular entrance portal. The walls are 1 m thick at the base, the height of the domed space is 11 m.











Figure 15. Entrance portal of the Sardoba in 1920s. Source: Nemtseva, 2009

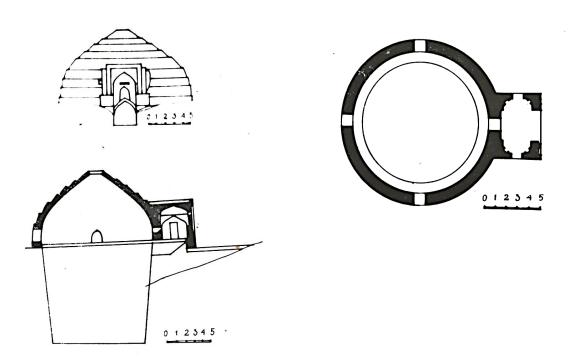


Figure 16. Sardoba. Façade, cross section and the floor plan. Source: (Khmelnitskiy, 1996)

At the end of the 20<sup>th</sup> century, Sardoba was completely restored to its original state.









## 2.2.3. History and Development: Rabati Malik Caravanserai and Sardoba

Rabati Malik – *the Royal Rabad* – was built in the desert on the ancient caravan route between Karmana and Kizil-Tepa as a khan's headquarters, a fortification that served as a caravanserai, rabat, and possibly also performing the functions of a *khanqah* (a building intended for Sufis to gather for spiritual practices).

Prof. Nemtseva identified the building as the steppe residence of the Karakhanid rulers (Nemtseva, 2009). The building was proved to have served as a caravanserai until the 18<sup>th</sup> century (Khmelnitskiy, 1996). Amir Temur, the heads of the ruling dynasties of the Bukhara Khanate, embassies, trade caravans and travellers stayed there. In the 19<sup>th</sup> – early 20<sup>th</sup> centuries a rural settlement known as Rabad existed close to the caravanserai.

Rabats (or Ribats) – stations for mounted guards in border zones, fortresses for *ghazis* (fighters for the faith), appeared during the Islamization of the East and Central Asia by the Arabs. The Umayyad governor in Khurasan Ashras ibn Abdallah al-Sulami (727-729) was the first to have started building rabats in the first quarter of the 7<sup>th</sup> century.

These fortresses designed to ensure safety at the caravan routes, in fact, existed before: they were being erected along the borders by the Romans and the Sassanids in the Near and Middle East. Under the Arabs, these fortresses received a special term "rabat" and an additional function associated with the spread of a new religion – Islam.

Rabats, undoubtedly, existed in Mawara an-Nahr (Transoxiana) already in the 7<sup>th</sup> century. However, by the 10<sup>th</sup> century, with the establishment of Islam throughout Central Asia, the significance of the rabats in their original sense (fortresses for the ghazis) was gradually lost. The original function of the rabats, their military significance was forgotten, and these fortresses were converted to hotels, caravanserais, or turned into the monastery of religious ascetics - khanqah. The term "Rabat" continues to exist in caravanserais in some places up to the developed (Rabat-i-Sharif, Rabat-i-Sultan in the 11<sup>th</sup> century in Khurasan) and the late Middle Ages (Abdullakhan's rabat of the 16<sup>th</sup> century).







In this regard the 11<sup>th</sup> century Rabati Malik was a typical road caravanserai in its essence and could hardly be identified as a fortress. Nevertheless, not only the term "rabat" is inherited from earlier structures, but also many architectural and planning techniques and approaches.



Figure 17. Rabati Malik during the archaeological excavations of 1970s.

View from the North. Source: Nemtseva. 2009

The lands where Rabati Malik is located share the same name – *Chuli Malik* (the Royal Steppe). The same term was used for the Malik settlement that existed here in the 19<sup>th</sup> century. It was located, based on the location of the remains and a small cemetery, opposite the caravanserai, on the southern side of the road. Apparently, this rural settlement near Rabati









Malik was founded somewhere at the end of the 17-18<sup>th</sup> centuries (possibly on the site of an older one), when the monument, according to archaeological data, began to deteriorate and gradually fell into disrepair. Both processes – the destruction of Rabati Malik and the development of a new settlement – were interconnected and proceeded simultaneously. Maintaining the monument in good condition required considerable efforts and investments, as it was built mainly of mud bricks. Natural erosion and deterioration of the adobe masonry caused by soil salinity were irreversible, and at a certain stage, further repairs were found unreasonable. By that time, apparently, the first buildings of the Malik settlement appeared, erected, as travellers of the 19<sup>th</sup> century note, largely from the building material of the caravanserai. Thus, the Malik settlement gradually took over the functions of Rabati Malik.

The Sardoba. The genesis and development of this architectural type, as Prof. Masson believed, are most likely associated with the experience of using natural depressions in the desert, where the sediments flowed. This prompted the creation of artificial rain pits with the primitive structures covering them. This gradually evolved into an empirically developed type of sardobas that exist today. Therefore, these reservoirs were built in places with a low relief to collect melt and rainwater by gravity through special water intake holes at the base of the dome.

Sardoba is a cylinder shape water tank covered with a dome, where a staircase led to the corridor led through a small portal. Such reservoirs were mainly arranged along caravan routes, at rabats or caravanserais, and less often in cities. The Sardoba was filled mainly with melt and rainwater, sometimes fed with water supplied to them from a nearby source.

To ventilate the sardoba, a round oculus was left at the top of the dome. To collect the flowing water and ensure additional ventilation and lighting of the structure, several more openings were arranged at the base of the dome. Prevention of water seepage from the tank into the ground in its masonry and in the plaster of the inner surface of the tank, a hydraulic mortar – *kyr* was used, prepared by adding ash. Sardobas were normally covered with a shallow dome, of which the thickness reached 1.5 m at the base and at least one brick (25–27 cm) at the top. A small portal entrance, attached directly to the dome or standing much in front of it,









led along a staircase in the corridor in the interior of the sardoba, where the water was stored. Sardobas were often fenced to protect it from animals and keep the reservoir clean.

The aforementioned sardobas were typical for the Bukhara oasis, of which the one dated  $11-12^{th}$  century next to Rabati Malik is most significant. A bypass platform was erected around the reservoir in the interior for travelers to rest in the coolness of the dome space. The sardoba had the same structure, as the one presented on a  $16^{th}$  century drawing produced by a local master builder. The reservoir was designed to be filled up with a melt water and through the underground canal – kyariz, the Narpay canal and the network of minor gutters, which supplied water from the Zarafshan river from 30 km away. It was also supplying water to Rabati Malik caravanserai through the underground network of ceramic pipes – kuburs.









# 2.3. Management System for the Nominated Property

#### 2.3.1. Regulatory Framework

According to Annex 1 of the Resolution of the Cabinet of Ministers No. 846 dated 04.10.2019 both Rabati Malik Caravanserai and Sardoba are listed on the national registry of cultural heritage properties and are under protection in accordance with the Laws of the Republic of Uzbekistan "On the preservation and utilization of cultural heritage properties" (No.269-II dated 20.08.2001), the Law "On the protection and use of archaeological properties" (No.42 dated 16.06.2009) and the Resolutions of the Cabinet of Ministers (hereinafter Resolution of the CM) "On measures for the further improvement of the protection and utilization of cultural heritage properties" (No.269 dated 29.07.2002) and "On additional measures to improve protection and usage of the cultural and archaeological heritage (No.200 dated 21.07.2014), along with other laws, resolutions and regulations.

According to the Resolution No. 846 Rabati Malik Caravanserai and Sardoba are classified to be architectural monuments.

The Law "On the preservation and utilization of cultural heritage properties" introduces the key definitions and sets up the framework for the conservation, maintenance, reuse and management of built heritage. According to Article 2, if an international treaty of the Republic of Uzbekistan establishes other rules than those stipulated by the legislation of the Republic of Uzbekistan on the protection and use of cultural heritage, then the rules of the international treaty shall apply. The law defines a variety of types of heritage ranging from individual monuments and ensembles to intangible heritage. It stipulates the responsibilities of state authorities in conservation and heritage management.

The Cabinet of Ministers is the authority in charge of implementing state policy related to preservation and use of cultural heritage, whereas the Ministry of Culture exercises state control over the use of cultural heritage properties by legal entities and individuals, and contributes to elaboration and implementation of heritage-related state programs. The law defines the state protection of cultural heritage as a system of legal, institutional, financial, informational, technical, and other measures implemented by corresponding heritage authorities. At a local level, routine inventory and condition assessment of built heritage, performing assessments, and issuing permits for conservation, research, construction,







landscaping and other types of activities in historic areas are among the major control tools. The law specifies the cases when a historic-cultural assessment shall be performed. The procedure is further explained in the Annex 4 to the Resolution of the Cabinet of Ministers "On measures for the further improvement of the protection and utilization of cultural heritage properties" (No.269 of 29.07.2002). The law determines the following zones to ensure protection of built heritage:

- 1. Protective zone
- 2. Zone of regulated development and economic activities
- 3. Zone of protected natural landscape

Basic instructions are stipulated regarding the assessment and nomination of selected heritage properties to the UNESCO World Heritage List (article added in 2009). The Resolution of the Cabinet of Ministers "On protection of properties inscribed in the UNESCO World Heritage List" (No. 435 dated 09.06.2018) explicitly requires the national heritage regulatory framework to critically reassess, in accordance with the UNESCO 2011 Recommendation on Historic Urban Landscapes, master plans of historic cities.

According to Para 7 of the Resolution of the Cabinet of Ministers "On improving the activities of the National Commission of the Republic of Uzbekistan for UNESCO" (No. 957 dated 26.11.2018), all the scheduled development and landscaping (beautification) projects within the boundaries of the properties inscribed in the UNESCO World Heritage List shall be coordinated with the National Commission for UNESCO.

The desire to increase the tourist flow and, as a result, the growth of profit in the tourism sector led to the development of a program for the accelerated development of the tourism potential of the city of Samarkand and the Samarkand region for 2017 - 2019, approved by the Resolution of the Cabinet of Ministers No. 450 dated 30.06.2017. It aimed to develop, in both the city of Samarkand and in the entire region, tourism and transport infrastructure, new accommodation and recreational facilities, more cultural events and attractions. The same Resolution provided for amendments to the draft detailed planning of the historical part of Samarkand, implementation of construction and improvement works in the historical part of the city.









More severe penalties have been foreseen by the Law of the Republic of Uzbekistan "On introducing amendments and additions to specific legislative acts of the Republic of Uzbekistan in connection with strengthening the protection of objects of material cultural heritage" (No. ZRU-560 dated 30.08.2019). In particular, Article 64 of the Administrative Code was revised as follows: "Construction or demolition of buildings, structures and other facilities not recognized as cultural heritage and located within the boundaries of protected areas of state-protected tangible cultural heritage properties, also within specially protected historical and cultural areas, including those inscribed in the World Heritage List, without obtaining required permits shall be punishable with a fine amounting to 50-100 times the minimum wage for individuals and 100-150 times minimum wage for legal entities, or with administrative arrest for up to 15 days". Amendments to Criminal Code of the Republic of Uzbekistan introduced within the framework of the same law foresee more severe penalties, including a fine of 100-300 times the minimum wage or compulsory community service for up to three hundred and sixty hours, or correctional labour for up to three years in case of repeated offense.

Both sites were included on the Tentative List in 2010 by the National Commission of the Republic of Uzbekistan for UNESCO under the Silk Roads criteria (i), (ii), (iii), (iv), (v). However, national regulations do not provide any special treatment regime for properties placed on the UNESCO Tentative List.

In 2020 Rabati Malik Caravanserai and Sardoba along with three more properties in the Navoi region (the total of 15 across the Republic of Uzbekistan) have been nominated as a single component of the Silk Roads: Zarafshan-Karakum Corridor serial transnational World Heritage nomination, which embraces 31 sites in Tajikistan, Turkmenistan and Uzbekistan. In Uzbekistan the nomination was officially supported by regional governments and the National Commission of the Republic of Uzbekistan for UNESCO. The draft version of the nomination dossier was submitted to the World Heritage Center (WHC) for review in September 2020.

## 2.3.2. Managerial Framework

Currently, the management of the Rabati Malik Caravanserai and Sardoba is performed by the Ministry of Culture of the Republic of Uzbekistan with the Department of Cultural Heritage being the focal unit to handle the matters related to preservation and management of







cultural heritage. The Department of Cultural Heritage (under the Ministry of Culture), which in accordance with the Presidential Resolution No. PP-4068 dated 19.12.2018 took over the functions and responsibilities of the Principle Scientific-Production Department for the preservation and utilization of objects of cultural heritage (Board of Monuments), is in charge of cultural heritage at the national level, with special focus on UNESCO World Heritage properties. Furthermore, the Resolution stipulated that every planned development project construction and landscaping- within the World Heritage property areas must be coordinated with the Department of Cultural Heritage and UNESCO World Heritage Centre. The Department of Cultural Heritage and its regional office in Navoi, collectively act as a site manager, and oversee routine activities related to monitoring, supervision of conservation and restoration activities, and overall management.

The recent Presidential Resolution No. PP-4068 dated 19.12.2018 managed to diversify the sources of income for the Department of Cultural Heritage and its regional offices. Thus, the extrabudgetary Cultural Heritage Fund with sources of funding including rent payments (leasing of cultural heritage properties), earnings from historic and cultural expertise, fees and fines is also intended to be used to equip the Department of Cultural Heritage and regional offices, hire international experts whenever necessary, and for incentive schemes. The Presidential Resolution No. PP-4068 further stipulated that all development projects within the boundaries of the World Heritage properties and their buffer zones to be coordinated with Department of Cultural Heritage and UNESCO World Heritage Centre. In addition, paragraph 6 of the abovementioned Resolution specified that a Scientific and Expert Council heritage shall be established under the Department. It consists of 11 highly qualified experts and heritage practitioners with significant practical experience in history, architecture and tangible cultural. The members of the Council are appointed by the Cabinet of Ministers.

The national legal framework does not recognize the sites *nominated* to the World Heritage List (with no regard to the type of nomination) as a separate category and does not provide for management similar to the one identified by the Presidential Resolution No. PP-4068 dated 19.12.2018.









Nevertheless, both Rabati Malik and Sardoba have been in focus of the relevant authorities and precise measures have been undertaken to ensure adequate management of the property in view of its nomination and prospective inscription to the World Heritage List.

In particular, the boundaries and buffer zones of the sites have been mapped as an outcome of a comprehensive study performed by local and international researchers under the overall coordination of the International Institute for Central Asian Studies (IICAS). The total area within the boundaries of the nominated property was determined to be 1.5 ha.

In accordance with the provisions of Annex 9 to the Resolution of the Cabinet of Ministers No. 265 dated 30.03.2019 the protective zone was identified for both monuments with the total area of 9.28 ha.

In view of the nomination of Rabati Malik and the Sardoba as a single component of the Silk Roads: Zarafshan-Karakum Corridor serial transnational World Heritage Nomination the buffer zone have a total area of 43.08 ha. The buffer zone was identified based on a comprehensive study and in accordance with the Article 104 of the Operational Guidelines for the Implementation of the World Heritage Convention (2019) to become a tool for the nominated property's sustainable management

The boundaries of the protective and buffer zones were positively reviewed in due manner by the Department of Cultural heritage under the Ministry of Culture in September 2020. The data containing the coordinates of the identified boundaries according to Annex 9 to the Resolution of the Cabinet of Ministers No. 265 dated 30.03.2019 have been forwarded to the Navoi Regional Office of the Department of Cultural Heritage, municipal Department for Construction and to the Cadastral Office to have the boundaries reflected in the relevant cadastral maps for further use.







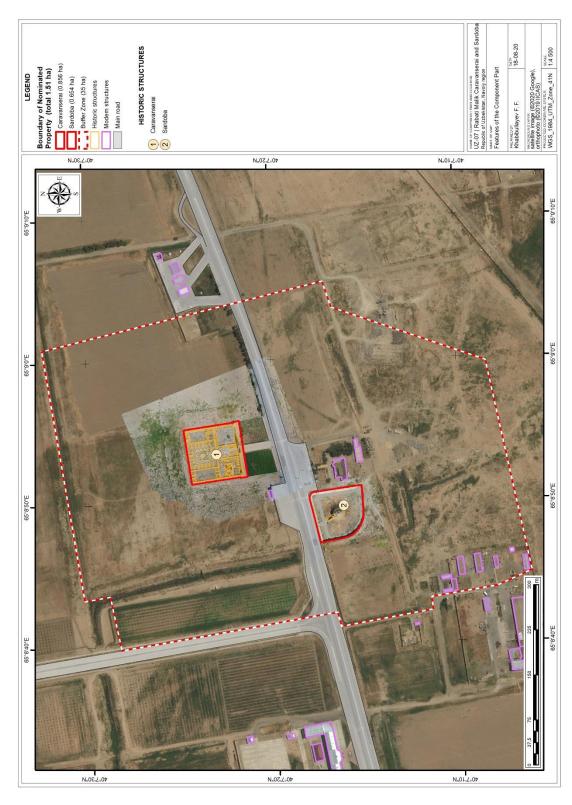


Figure 18. Boundaries of the Buffer Zone for Rabati Malik Caravanserai and the Sardoba. Source: IICAS, 2020









### 3. Status and Description of the Proposed Development and Design

The Tourism Service Complex project is within the framework of a larger national campaign aimed to stimulate private investments and launched a Presidential Resolution No. PP-3217 dated 16 August 2017. The project has been already approved by the Department of Cultural Heritage under the Ministry of Culture of the Republic of Uzbekistan (see Fig. 19).

The project is planned to be implemented by "Navoi Tour" LLC with the aim to improve the tourism infrastructure of the location and serve a pit-stop for the domestic and international tourists while travelling across Navoi region.

The proposed Tourism Service Complex planned on an area of approx. 1.3 ha is designed comprise a set of lightweight structures and related infrastructure:

- Yurts copies of traditional tents traditionally used by nomads in Central Asia and Mongolia.
- Pavilions timber structures designed for relaxation, light snacks
- Sheltered terrace (ivan) a lightweight structure with a roof supported by a colonnade. Intended to host larger groups of visitors. Summer kitchen is attached.



Figure 19. Tourism Service Complex. Title page of the design proposal approved by the Department of Cultural Heritage under the Ministry of Culture. Source: "Navoi Tour" LLC







The Complex is designed to be fenced and has an open space parking to the South, between the entrance and the M37 motorway.

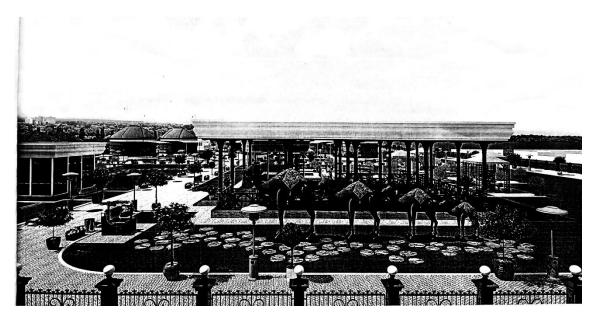


Figure 20. Landscape of the Tourism Service Complex: paths, vegetation, lighting. Design proposal. 3D rendering. Source: "Navoi Tour" LLC

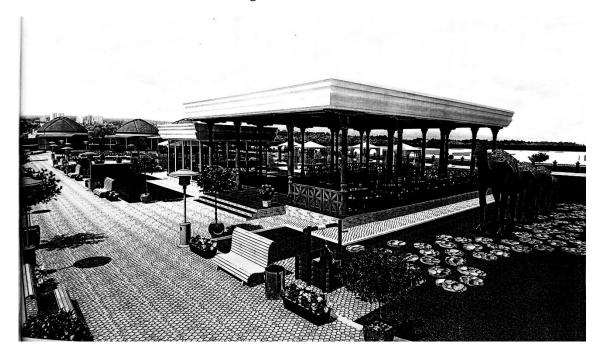


Figure 21. Sheltered summer terrace in the Southern part of the Tourism Service Complex. Design proposal. 3D rendering. Source: "Navoi Tour" LLC









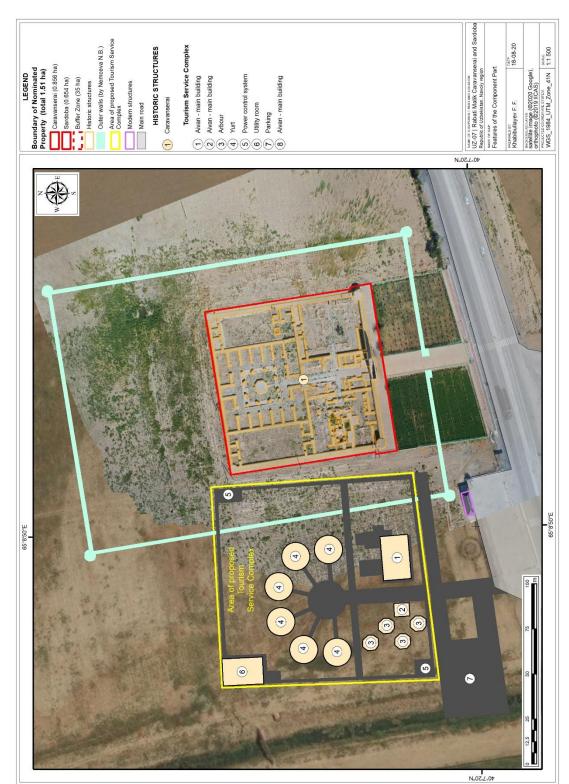


Figure 22. Master plan of the proposed Tourism Service Complex. The area displayed in this figure is all within the buffer zone (see Figure 18 for reference). Source: IICAS, 2020







### 4. Assessment and Evaluation of Potential Impact of the Proposed Changes

The Tourism Service Complex, once implemented can potentially benefit the overall improvement of the tourism infrastructure in the region. With accommodation and other amenities located primarily in major cities, the region obviously lacks highway service points, which could be used by both regular travellers, and tourists while visiting the historic sites nearby.

The preliminary design of the Complex shows a relatively modest approach with primarily light structures, like pavilions, light shelters. General landscape improvement is foreseen to ensure comfort of visitors. Building the structures foreseen by the design, in turn, will not require extensive use of heavy machinery and massive earthwork. With that, certain physical impact (vibration, etc.) is anticipated. However, the complex is designed to be placed on the location of the outer walls and other archaeological layers. Thus, building lightweight structures might damage underground archaeological structures. No archaeological reports were submitted for the HIA review.

The project, if implemented with due regard to norms and regulations, is likely to have minimum environmental impact, including the groundwater table, which is among the crucial factors behind the damp, salinization, erosion and overall deterioration of historic structures. Due consideration in this regard shall be given to proper treatment of waste water, as being located remotely from regional or municipal sewage system, the Complex will have to run its own one autonomously. However, the proposed Tourism Service Complex being only 30 m to the West from Rabati Malik Caravanserai is located within both, the Buffer Zone (see Figure 5), identified in the framework of nominating both sites as the component part of the Silk Road: Zarafshan-Karakum Corridor serial transnational World Heritage nomination. The boundaries were approved by the Department of Cultural Heritage under the Ministry of Culture.

Based on the visual assessment, the proximity of the Complex to Rabati Malik Caravanserai will have potential adverse visual impact to both the Caravanserai and the Sardoba being a disturbance for the traditional setting of the monuments. Visual analysis revealed that the height of the proposed structures might exceed 6 meters with the main building being approx. 6.25 m, and the octagonal pavilions and the yurts reaching 5.4 and 6.15 m correspondingly. Considering that the height of the entrance portal of the Rabati Malik measures approx. 14 m









in height, the proposed facilities make up half of the height of the neighboring historic structures. Flat landscape with little vegetation might make the potential adverse visual impact even more severe. Outcomes of the computer-aided visual analysis are presented below.

A summary table of the potential impact can be found on pages 48-49.











Figure 23. Visual assessment: view along the M37 motorway (1). Source: IICAS, 2020

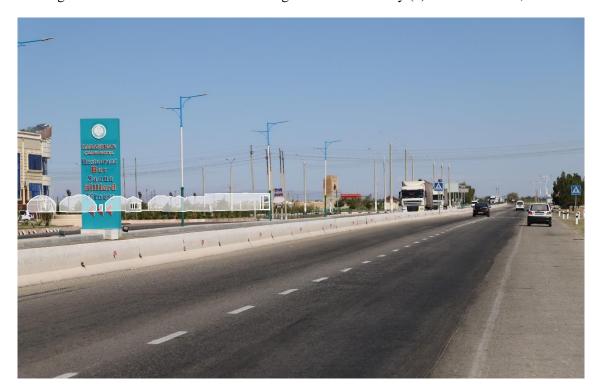


Figure 24. Visual assessment: view along the M37 motorway (2). Source: IICAS, 2020











Figure 25. Visual assessment: view across the M37 motorway to the North (1). Source: IICAS, 2020



Figure 26. Visual assessment: view across the M37 motorway to the North (2). Source: IICAS, 2020











Figure 27. Visual assessment: Buffer Zone, view to the North-East (1). Source: IICAS, 2020



Figure 28. Visual assessment: Buffer Zone, view to the North-East (2). Source: IICAS, 2020











Figure 29. Visual assessment: Buffer Zone, view to the West (1). Source: IICAS, 2020



Figure 30. Visual assessment: Buffer Zone, view to the West (2). Source: IICAS, 2020











Figure 31. Visual assessment: Buffer Zone, view to the North-West (1). Source: IICAS, 2020



Figure 32. Visual assessment: Buffer Zone, view to the North-West (2). Source: IICAS, 2020











Figure 33. Visual assessment: Buffer Zone, view to the North (1). Source: IICAS, 2020



Figure 34. Visual assessment: Buffer Zone, view to the North (2). Source: IICAS, 2020









Potential Impact Negative Positive

### CONTRIBUTION TO THE OUTSTANDING UNIVERSAL VALUE On the attributes as per the Close proximity to the No impact criteria of nomination\* property might negatively affect the immediate surrounding of the property by amending the historic landscape On authenticity and integrity The project might distort the No impact immediate surrounding of the property and potentially damage the cultural layers beneath. immediate No physical impact on the World heritage property anticipated. On protection and The implementation of the No impact project is inconsistent with management system the management system for the protection of the site proposed by the State Party at the time of nomination and is not in line with national regulations WIDER VALUES The spirit of place No impact The project can contribute to the continuity of use of the place (temporary traveller accommodation similar to the function of a caravanserai). Spiritual values associated Although being No impact not with the WH property religious site increased visitation rates and added









Potential Impact	Negative	Positive
1 Otential Impact	110541110	1 001011

1 otentiai Impact	reguire		
	facilities might distor		
Other sites of cultural heritage significance	No impact	No impact	
Overall impact	implemented within the in contradiction with the the State Party for the nowith the provisions of significant physical improject implies light certain visual impact du World Heritage proper	The assessment identified that the development project being implemented within the boundaries of the Buffer Zone comes in contradiction with the management system proposed by the State Party for the nominated property. It does not comply with the provisions of the national law. Although no significant physical impact is anticipated as the development project implies light structures, the project might exert certain visual impact due to its close proximity to the future World Heritage property. The project contributing to the continuity of use of the place might amend the perception of the spirit of the place.	

VALUE OF	SCALE AND SEVERITY OF CHANGE/IMPACT				
HERITAGE ASSET	No Change	Negligible Change	Minor Change	Moderate Change	Major Change
For WH properties	SIGNIFICANCE OR EFFECT OR OVERALL IMPACT ADVERSE				
Very High – attributes, which convey to OUV	Neutral	Slight	Moderate / Large	Large / Very Large	Very Large







### 5. Measures to avoid, reduce or compensate for impacts – Mitigation Measures

With reference to the information presented in the previous sections the following measures might be suggested to mitigate the impact of the proposed development project on the Rabati Malik caravanserai and Sardoba, nominated to the World Heritage List as a component part of the Silk Roads: Zarafshan-Karakum Corridor serial transnational nomination.

Considering reluctance of the developer to cooperate in the framework of the HIA, it is strongly suggested to ensure more reliable communication channels between the developer, regional and national authorities, including the Department of Cultural Heritage under the Ministry of Culture, defined by law as the only authority in charge of heritage safeguarding and management, and the UNESCO World Heritage Centre as well as other stakeholders. More detailed information on the construction methods, structures, mode of use, function, expected visitation rates, compliance with regional and national, including tourism-related, programs and initiatives shall be obtained before meaningful decision can be made with regard to the development project.

Proposed within the boundaries of the Buffer Zone, reviewed and approved by the Department of Cultural Heritage, intended to protect the OUV of the nominated property, the development project shall be reviewed in the manner as stipulated by relevant national regulations. Due coordination shall be exercised with the UNESCO World Heritage Centre to ensure compliance with the Operational Guidelines (UNESCO 2019).

Keeping in mind the age of the property, and as a result the value of the cultural layers beneath the area proposed for the development activities, archaeological excavations shall be carried out. In case valuable archaeological structures are revealed, those shall be preserved by any means for further presentation and interpretation in accordance with the ICOMOS (2017) Salalah Guidelines for the Management of Public Archaeological Sites, and ICOMOS Charter on the Interpretation and Presentation of Cultural Heritage Sites (2008) as well as conservation principles based on the Venice Charter (ICOMOS 1964), and Charter for the Protection and Management of the Archaeological Heritage (ICOMOS 1990).

With reference to the above, the proposed Tourism Service Complex is strongly recommended to be relocated outside the Buffer Zone to ensure that the integrity and Rabati Malik Caravanserai and the Sardoba | HIA 2020 51









authenticity of the future World Heritage property, as well as associated values and attributes of the nominated property are maintained and the valuable cultural layers remain intact. Further, consideration as to the methods and approaches for the management of the archaeological site shall be ensured.







### 6. Conclusion and Recommendations

As a result of the assessment performed to identify the impact of the proposed Tourism Service Complex located in the Buffer Zone of the Rabati Malik caravanserai and the Sardoba, component part of the Silk Roads: Zarafshan-Karakum Corridor serial transnational World Heritage nomination, the following conclusions have been drawn:

The severity of the direct impact on the Outstanding Universal Value and its attributes identified at the time of nomination of the property to the UNESCO World Heritage List has been found moderate;

The implementation of the development project within the World Heritage buffer zone without the approval of UNESCO and review of the advisory bodies, might violate the provisions of the management system identified for the World Heritage property. This in turn might potentially will jeopardize the status of the Rabati Malik caravanserai and Sardoba as the component part of the nomination to the UNESCO World Heritage List.

Based on the conclusions and the detailed analysis presented in this report. IICAS recommends:

- Complete data, including a complete set of architectural drawings, should be
  provided by the developer undertake a new comprehensive analysis of the
  construction methods, structures, function and mode of use of the proposed Tourism
  Service Facility. With the new information it would be possible to identify the longterm development perspective and the ability of the project to respond to the needs
  of sustainable development.
- 2. It is highly recommended the relocation of the proposed project to mitigate the adverse impact on the OUV and its attributes as well as to ensure safeguarding of the valuable cultural layers of the ancient Silk Roads.
- 3. New studies such as archaeological survey should be conducted. The results will help to understand the context of the project. If relevant archaeological structures are identified, further strategies for the presentation and interpretation shall be considered.
- 4. A new HIA should be conducted after a new proposal based on the recommendations and complete information is submitted.



















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### **List of Laws and Resolutions**

Laws of the Republic of Uzbekistan









Law No. 269-II "On the preservation and utilization of cultural heritage properties", 20.08.2001

Law No. 42 "On the protection and use of archaeological properties", 16.06.2009

Law No. ZRU-560 "On introducing amendments and additions to some legislative acts of the Republic of Uzbekistan in connection with strengthening the protection of objects of material cultural heritage", 30.08.2019

#### Resolutions

Resolution of the Cabinet of Ministers No. 828 "On additional measures for the effective use and development of the tourist capacity of Samarkand region", 30.09.2019

Decree of the President No. 5781 "On measures for further development of the sphere of tourism in the Republic of Uzbekistan", 13.08.2019

Resolution of the Cabinet of Ministers No. 957 "On improving the activities of the National Commission of the Republic of Uzbekistan for UNESCO", 26.11.2018

Resolution of the President No. PP-4068 "On measures for radical improvement of activity in the field of protection of objects of tangible cultural heritage", 19.12.2018

Resolution of the Cabinet of Ministers No. 435 "On protection of properties inscribed in the UNESCO World Heritage List", 09.06.2018

Resolution of the Cabinet of Ministers No. 450 "On measures for the accelerated development of the tourist capacity of the city of Samarkand and the Samarkand region for 2017 - 2019", 30.06.2017

Resolutions of the Cabinet of Ministers No. 200 "On additional measures to improve protection and usage of the cultural and archaeological heritage", 21.07.2014

Resolutions of the Cabinet of Ministers No. 269 "On measures for the further improvement of the protection and utilization of cultural heritage properties", 29.07.2002









# **Appendices**

## Appendix 1 – Rabati Malik Caravanserai and Sardoba

(Extract from the Draft of the "Silk Roads: Zarafshan-Karakum Corridor" Serial Transnational World Heritage Nomination Dossier, 2020)

## **UZ-07** Rabati Malik Caravanserai and Sardoba

Compo- nent part	Contribution	Attributes
UZ-07 Rabati Malik Caravanserai and Sardoba	Architectural and functional design solutions, as an integral part of infrastructure and the only local water source, reflect the impact of the integration process with active cultural and commercial exchanges on the Silk Roads. The caravanserai with its function as a royal place (residence) marks a significant development from the original caravanserais as stations for fighters for faiths to fortifications serving as hotels and caravanserais. The structure of both, the Sardoba and Caravanserai, is an outstanding example of human creativity to find sophisticated architectural and planning solutions in land-use allowing the necessary living conditions in the dry-steppe environment (criterion ii).  Rabati Malik complex is an outstanding example of the type of structures that appeared only to maintain communication on the caravan trade routes, illustrating an important stage in the development of human history (criterion iv).  The complex planning solutions of Raboti Malik, functioned for the protection of convoys in the extreme climatic conditions is a unique example human relationship with the environment. The Sardoba contributed to the full functioning of the caravan connections on the road in extreme climatic conditions (criterion v).	Remains of the residential royal palace, portal of caravanserai with decorations, Continuity of use of the sardoba as a water supply system; sardoba adapted to the geographical and climatic conditions; relationship to the Zarafshan river

## **Description**

### (1) Contribution to the OUV of the Silk Roads

Architectural and functional design solutions, as an integral part of infrastructure and the only local water source, reflect the impact of the integration process with active cultural and commercial exchanges on the Silk Roads. The caravanserai with its function as a royal place (residence) marks a significant development from the original caravanserais as stations for fighters for faiths to fortifications serving as hotels and caravanserais. The structure of both, the Caravanserai and the Sardoba, is an outstanding example of human creativity to find sophisticated architectural and planning solutions in land-use allowing the necessary living conditions in the dry-steppe environment.

Rabati Malik Caravanserai and Sardoba is an outstanding example of the type of structures that appeared only to maintain communication on the caravan trade routes, illustrating an important stage in the development of human history.

The complex planning solutions of Raboti Malik, functioned for the protection of convoys in the extreme climatic conditions is a unique example human relationship with the environment. The Sardoba contributed to the full functioning of the caravan connections on the road in extreme climatic conditions.

## (2) General Information

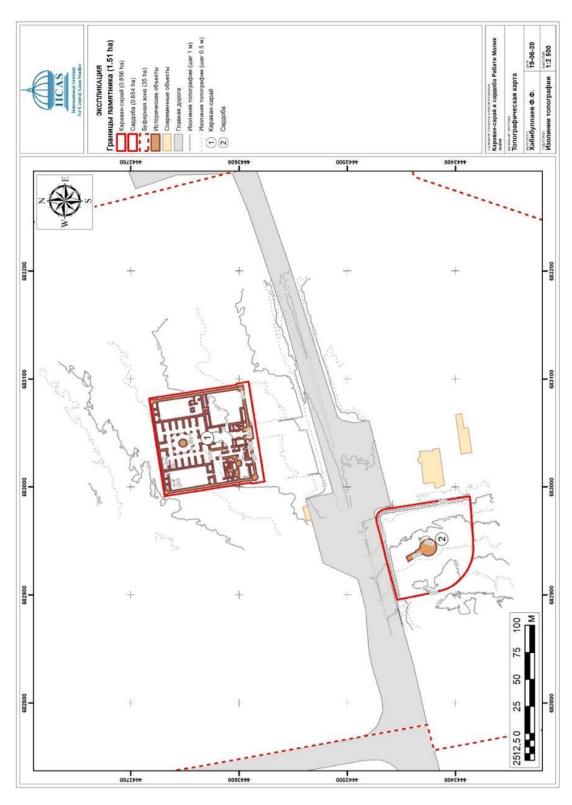
The Rabati Malik Caravanserai and Sardoba are in the Navoi region on the Navoi-Bukhara highway, former historic section of the Silk Roads connecting Kermine and Kizil-Tepe. Raboti Malik Caravanserai is one of the largest structures of civil architecture of pre-Mongol Central Asia. The main structure is in ruins except for the main entrance portal which has been preserved. Raboti Malik Sardoba is one of the largest and oldest domed sardoba. It supplied water to the caravanserai of Raboti Malik throughout its whole lifespan. It is located 150 meters behind the old road to the south-west of the caravanserai.











UZ-07. Rabati Malik Caravanserai and Sardoba: topographic map. Source: IICAS (2019).



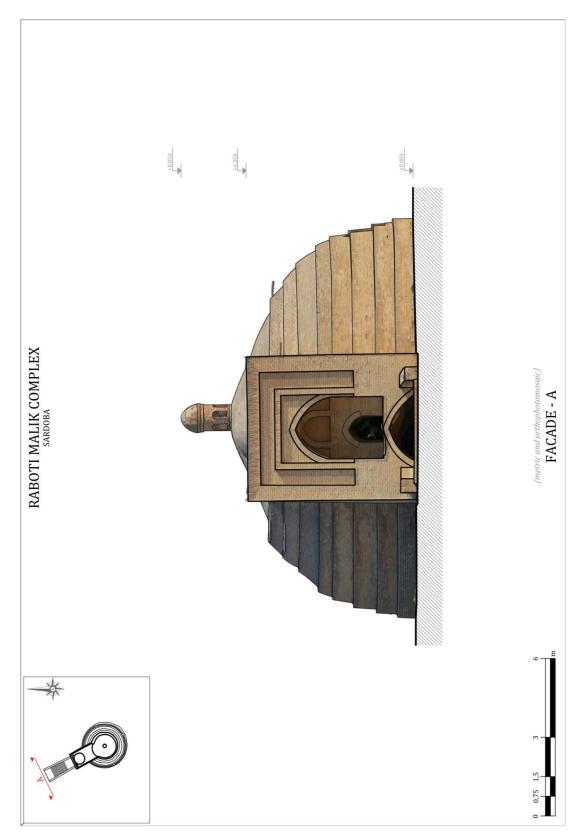




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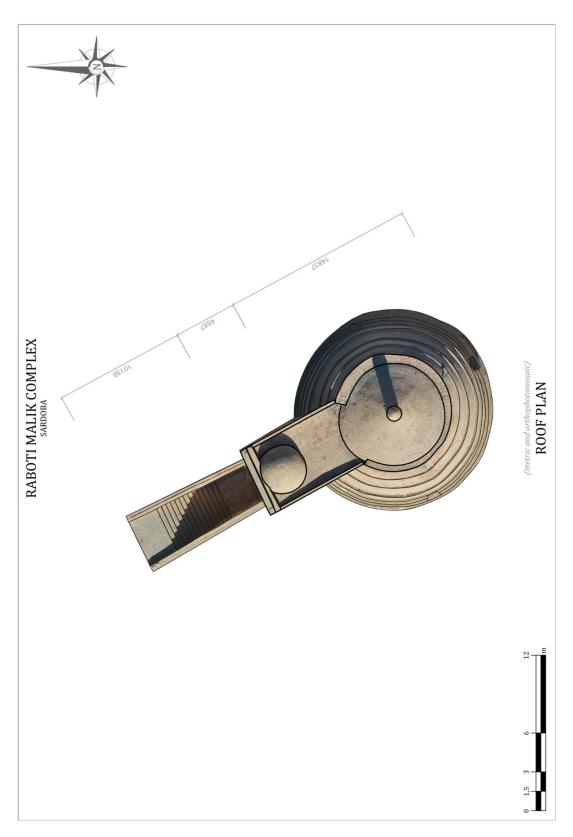


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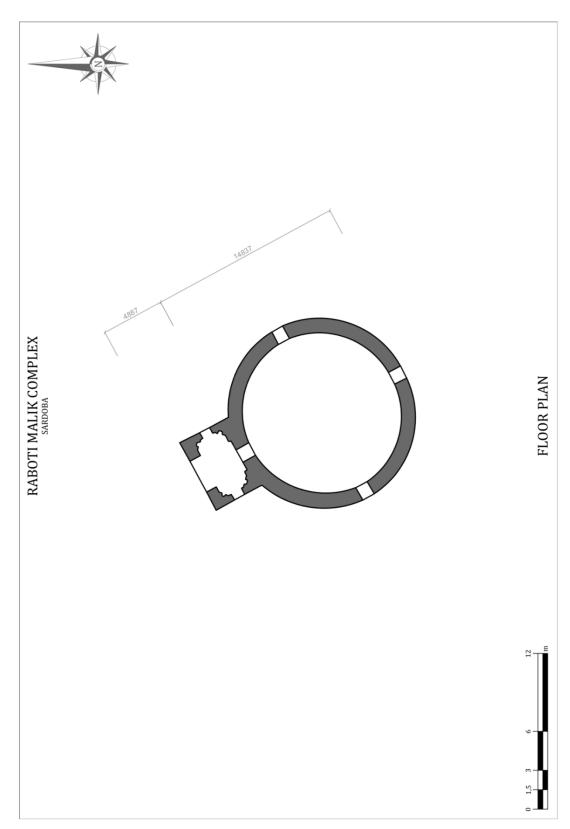
United Nations Educational, Scientific and Cultural Organization



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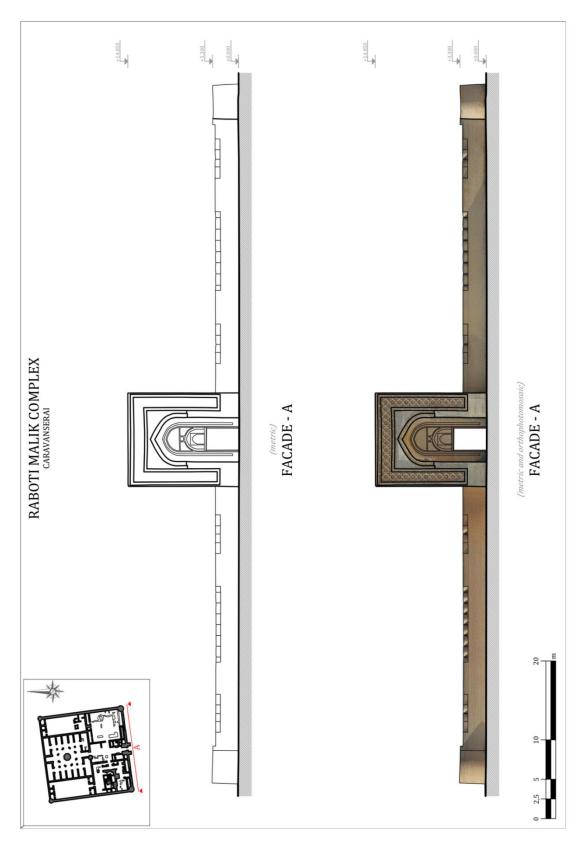


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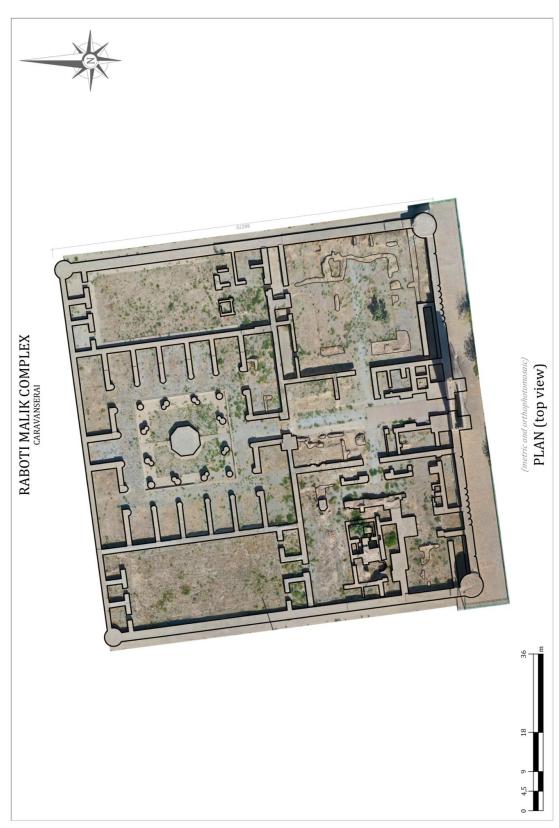




World Heritage Convention















### (3) Attributes

The **Rabati Malik Caravanserai** was built in the 1070s by the Karakhanid Shams al-Mulk Nasr Ibn Ibrahim (1068-1080) and reconstructed in the first quarter of the 12<sup>th</sup> century by the Karakhanid Arslan Khan Muhammad Ibn Sulayman (1102-1130). Rabats (Rabots or Ribats) are the stations for mounted escort in frontier zones, fortresses for Ghazis (fighters for faith), appeared during the Islamization of the East by the Arabs.

Archaeological studies of the 1970s and 2000s allowed to identify the layout of the caravanserai. The overall composition is strictly symmetrical, square in layout, with 91 m x 89 m from outside, and a complex multi-yard arrangement. It is clearly divided into two parts with different design, the southern half with the system of parallel premises concentrated around courtyards, and the northern half which housed covered multi-columned gallery with round brick pillars with octagonal rotunda in the center. The northern gallery (46x46.5 m inside and 38.5x50.5 m outside) was the most complex space planning unit in the general composition of the caravanserai and occupied more than half of the whole north side of the caravanserai and almost one-third of its total area. On the sides the gallery adjoined rectangular courtyards (36.5x18.7 m) with *hujras* along north and south lines.

There were stables, security and storage rooms, kitchen and other premises of service and utility purpose in the southern half of the *rabat* courtyard. The northern half of the caravanserai with a gallery and side courtyards was the front part and served as residence of invited guests. The whole complicated internal planning layout was enclosed by thick walls of 2.35 m from the south and the north, and 1.5 m from the west and east.

Different thickness of the walls was related to the decorative design of the southern wall of the rabat, where the main mass of adobe brick wall (1.5 m) adjoined decorative *shirt* of baked brick finished with corrugations outside. There were *guldasta* towers on all four corners of Rabati Malik with a portal, 12 m wide, the estimated original height - 18, on the axis of the southern facade of 12 m high.









Diverse architectural decor was found on the territory of the *rabat* including various kinds of facing and decorative material known in the 11<sup>th</sup>-12<sup>th</sup> centuries according by other sites in Maverannahr. The findings include carvings of interior, conditional floral, geometric and epigraphic ornament of which is made through unified *ganch* carving pattern. Interiors of individual rooms of the caravanserai were plastered and covered with polychrome painting. Outside the main façade with brick on adobe wall with closed semi-columns and small arcs above them, revives the spirit of old Keshks. Also, towers minarets in the corners of the facade and the grand portal of the entrance gate was a further development of architecture of Maverannahr.

Wall decor is presented by corrugations with the arcs which close them, its frieze with alternate facing diamond-shaped and front edgewise tiles. There are high and low false loopholes outlined by brick above them. Arrow-shaped slits in the surface of the brick walls that imitate the shape of the loopholes are an element of decoration and they are made from brick masonry. Relation to the traditions of ornamental art of VI-VII centuries is shown primarily in the portal frame, notably in the U-shaped frame made of boldly protruding star octagons and twists connecting them into one. They are framed with prominent belt chain of closed links. The outer edge of the portal is marked off by the border facing brick with a bevel inside. There are discs in the middle of the stars, and *ganch* carving of low relief around them. Motives are represented by heart-shaped palmettes and semi-palmettes depending on the form of the star and framing lines.

Finding of fragments of polychromatic majolica with a planar epigraphic ornament which refers to the 14<sup>th</sup>-15<sup>th</sup> centuries proves that in the times of Timurids or Abdullakhan some overhaul and repair reworks were conducted in the caravanserai.

**Sardoba**, a water reservoir of the 14<sup>th</sup> century, is a large domed sardoba that supplied water to the caravanserai of Raboti Malik throughout its whole lifespan. It is located 150 meters southwest of the caravanserai and has a diameter of 12.8 meters and a height of 20m.









The Sardoba has a traditional cylindrical base covered with a spherical dome. Two-thirds of the sardoba is underground, 6 mts. Deep, and it is made of baked brick of the same size as the walls of the caravanserai, 24-27 cm x 4,5 cm. The above-ground parts have four arched window openings illuminating the interior. The Sardoba was clearly built later than the caravanserai, dating back to the XI century, most likely some of the bricks of the caravanserai were reused.

From the north, the cylinder-like Sardoba has descending stairs to the water and its entrance has a small portal *chortak*. Three light holes are located at the foot of the stepped dome, 8 meters high. A half of the dome was destroyed and the entrance *chortak* disappeared. The Sardoba received water from Zarafshan river from the East, through a canal that was nearly 30 km long. Traces of this canal are still visible near Rabati Malik. A door archway leading to the interior is located on the north side under the window opening. It features a rectangular entrance portal. The inner diameter of the Sardoba is 12.3 m, wall thickness at the base is 1m, the height of the room is 11 m. The inner area of the caravanserai was supplied with water through a ceramic pipeline system. In the late 20<sup>th</sup> century, the Sardoba was restored based on its original space-plan.

**Artefacts** obtained during the archaeological excavations are of great scientific interest and include ceramics, toreutics, jewelry, and numismatic material. In this context, the mass ceramic finds are important as the indicator of the level of development of Rabati Malik Caravanserai and Sardoba in a large chronological range. For instance, the mass ceramic finds include the earliest dining and kitchen items in the Bukhara oasis that are dated to the end of the  $11^{th} - 18^{th}$  centuries.





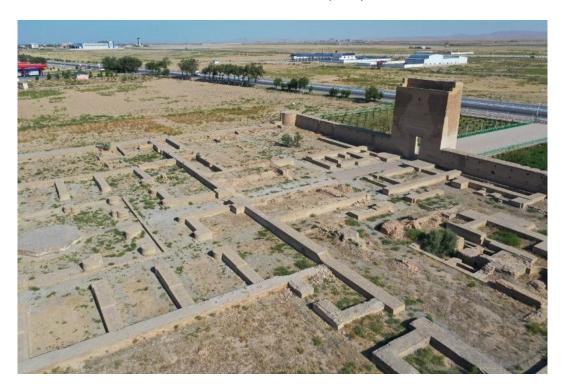








UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Caravanserai, general view to the south. Source: IICAS (2019).







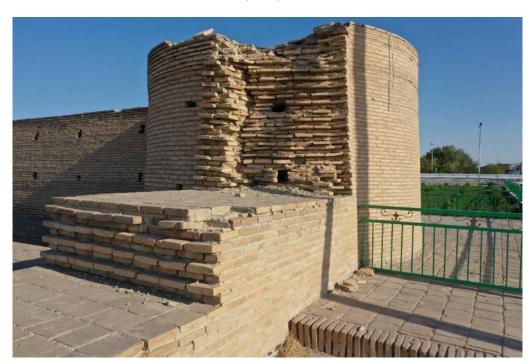




UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Caravanserai view to the south-east. Source: IICAS (2019).



UZ-07. Rabati Malik Caravanserai and Sardoba: fragment of the portal, view to the north. Source: IICAS (2019).











UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Caravanserai: south-western corner tower, view to south-east. Source: IICAS (2019).



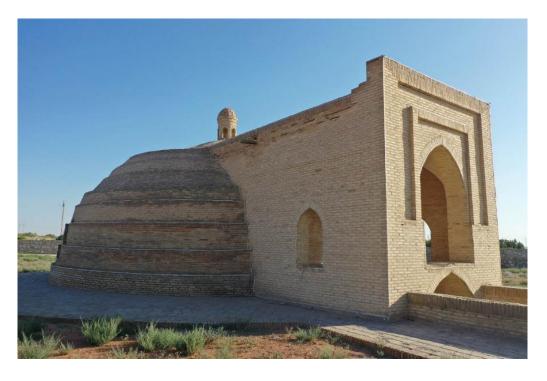
UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Sardoba, view to south-east. Source: IICAS (2019).











UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Sardoba, view to south. Source: IICAS (2019).

# **History and Development**

Ashras ibn Abdullah being Umayyad's governor in Khorasan was the first to estanlish *rabats* in the first quarter of the 8<sup>th</sup> century (727-729 years). In fact, these fortresses for roads protection were there before, established in the frontier zones by the Romans and Sassanids in the Middle East. During the Arab time these fortresses acquired a special term *rabat* and an additional function associated with the spread of the new religion, Islam.

There is no doubt that already in 8<sup>th</sup> century, there were *rabats* in Maverannahr. However, by the 10<sup>th</sup> century, with the adoption of Islam throughout Central Asia, the importance of *rabats* in their original function of rabats and their military values, was gradually lost. These fortresses were used then as hotels, *caravanserais*, or turned into *khanakas*.

The term *rabat* continued to exist in the caravanserai in some places until developed Middle Ages (Rabot-i-Sharif, Rabot-i-Sultan in Khorasan in the 11<sup>th</sup> century). In this respect Rabati Malik is highly representative.









The land, where Rabati Malik Caravanserai and Sardoba is located, has the same name as the name given to Malik village, which was there in the 19<sup>th</sup> century. It was located, according to the ruins and a small cemetery, on the opposite of the caravanserai, on the southern side of the road. Apparently, this village near Rabati Malik was established in the end of 17<sup>th</sup>-18<sup>th</sup> centuries, possibly on the site of the old one, when the monument, according to the findings of our archaeological work began to break down and gradually fell into disrepair.

Both processes, the destruction of Rabati Malik and the composition of a new settlement, were interrelated and simultaneous. Maintenance of the monument in good condition required great efforts and material costs, especially since it was built mainly of adobe brick. Natural amortization and destruction of adobe brick by soil salts were irreversible and at a certain point repairs became uneconomic. By this time, the first buildings of the Malik village were built, as noted by travelers of the 19<sup>th</sup> century largely from the construction material of the caravanserai. Thus, Malik settlement, gradually took over the functions from Rabati Malik and left it deteriorate. Today, only one single portal remained from Raboti Malik Caravanserai, which the locals call not Rabati Malik but Bukhara gate, and the caravanserai is an archaeological site.

Rabati Malik Caravanserai was formed during several periods. The inner layout changed repeatedly within a rectangular plan surrounded by a fortified wall. Its northern half was completely renovated in the pre-Mongol period. Instead of the covered gallery with domed rotunda, originally there was a square courtyard occupying the area of 22.5 m x 22.5 m (slightly more than rotunda), with a single row gallery-portico along inner perimeter. The gallery in five spans consisted of twenty-five round brick columns with a diameter of 1.25 m, six on each side. The columns were dismantled during the reconstruction. Under the floors remained only square bases made of adobe brick (28 cm x 17 cm x 7 cm) at the size of 1.85 cm x 1.85 cm and 43 cm high, 6 rows of masonry. Upper platform of the adobe "cushions" in the foot of columns is reinforced with several rows of crushed baked brick. The space between the abobe brick was filled after their construction with dense clay with the presence of cultural remains, fragments







of adobe and baked brick, household ceramics of the 10<sup>th</sup>-11<sup>th</sup> centuries. This indicates that the area was made habitable before the construction of the monument.

Common in medieval monuments step *dandana* went along the inner edge of the courtyard; adjoining the floor adobe bricks and separating the open space of the courtyard from the built-up perimeter part. This step was also preserved in the second period, when the courtyard was occupied by domed rotunda with a different rhythm of columns, thus breaking in the most inconvenient way the level of floors inside the bypass gallery.

Having existed for some time, the northern courtyard of Rabati Malik was completely reconstructed. It is difficult to say what caused it. Perhaps, the destruction. The opening revealed that the reconstruction of the first period was accompanied by significant layers of burnt wood. This suggests that there were some kind of wooden parts in the structure, such as doors and partitions.

According to the geometric analysis, the first construction phase also includes Raboti Malik outer wall outline with towers in the corners and portal along the southern facade. The existence of courtyard composition in the northern half of Raboti Malik in the first phase implies also the existence of side rectangular courtyards adjacent from the east and the west recorded for the second period. The structure of their inner layout in the first phase is unknown. We can only note that near the northern ends of these courtyards a foundation of earlier adobe walls was found (thickness of 1.44 m), the masonry method is different from the walls of the second period, formed from baked brick in the foundation. Moreover, in the north-western corner of Raboti Malik (in the first room from the corner) the adobe wall is offset relative to hujras walls from baked brick of the second period, and can be attributed, no doubt, only to an earlier construction phase.

A courtyard with a gallery-portico along the perimeter, fit-in square of the axis, grouping of columns according to the axes for a wider step stipulating four-aivan composition of the courtyard that have been preserved in the northern half: all these remains allow reconstructing common in the Middle East courtyard-aivan type of building with a gallery along the inner bypass.









The northern courtyard of Raboti Malik, in miniature, provides the same layout plan – square of walls, aivans on the axes, and the gallery along the perimeter of the inner courtyard, so far the only monument of such kind in central Maverannahr for the first quarter of the 11<sup>th</sup> century. In the end of 11<sup>th</sup> or 12<sup>th</sup> centuries the middle part of Rabati Malik burned down, it apparently became completely irreparable and was rebuilt according to a different space and layout design. In the place of the northern open courtyard there appeared a covered multidome gallery with octagonal rotunda in the center. The plan of covered gallery of the second period, which was also built on a system of columns including twin (rotunda) and long antis walls, finished with half-columns, included remains of the courtyard walls of the 1st period. In the second period, the southern half of Rabati Malik had three commercial courtyards (two side and one center) surrounded by a system of parallel, perpendicular to the outer walls of the monument premises of various sizes, design and purpose.

As regards, Rabati Malik Sardoba, this type of hydraulic constructions was commonly built in desert and steppe zones because of the strong evaporation, where the otherwise typical *hauz* system, water pools, was not sufficient. This type of Sardoba is mainly supplied by underground water, and its water was used for drinking, it mainly supplied the caravanserai, but also caravans could refill their containers, when traveling through.

The construction time of the sardoba was determined based on the architectural and archaeological research and dates to the 14<sup>th</sup> century. It was built as a water intake structure along the Silk Road, every about 30 kilometers a sardoba existed along this route, but this is one of the very few that have survived to present times. In addition, this monument is an integral part of the Rabati Malik Caravanserai and Sardoba.

The further development of the complex is related with the architectural and archaeological studies:

**1841-1842** the complex was first described by the participants of the expedition of mining engineers. They mention that the ruins were abandoned. A naturalist Lehman left a







schematic sketch of its main facade and, most importantly, a detailed description of the interiors of Rabati Malik Caravanserai.

- **1870**-s the complex was visited by Khanykov, Mayev, Sityanakovsky and Ereshchenko.
- 1920-1925 the complex was examined by Central Asian Committee for Ancient Culture Studies (Sredazkomstaris, an engineer Krasilnikov and an archaeologist Charitra).
- **1926** the complex was examined by Bukhara Committee for Ancient culture Studies (Bukharkomstaris, a photographer Saidzhanov and Kostko, an architect Loginov).
- **1927** the complex was studied by Umnyakov, who dated the caravanserai to the 11<sup>th</sup> century (Umnyakov, 1927, P. 179-192)
- **1928** the walls of the main façade were strengthened (Krasilnikov, Zasypkin, Saidzhanov, Chilytko, Loginov, Kostko and others, Zasypkin, 1928, P. 8-23).
- 1937 the photo-documentation of the complex was conducted by Zasypkin. One of the first repair and restoration works on the complex was conducted: weathered and destroyed fragments of the bottom of the facade walls and the portal of the caravanserai were repositioned and supplemented.
  - **1940** the complex was studied by Yakubovsky.
- **1944-1951** the complex was studied by Semenov and Mankovskaya for the inclusion to the State Register of architectural monuments of Uzbekistan.
- **1971-79** the first archaeological excavations were conducted at the complex by the Uzbekistan Art Studies Expedition (under the supervision of Nemtsova).
  - 1980-1981, 1997 engineering studies of the complex by Vyaltseva.









1999 AOOT Tamirshunoslik conducted the large-scale archaeological studies of the complex (under the supervision of Nemtsova, Wulfert and Nekrasova): the southern part of the caravanserai and south-east line of the premises of its northern half part were excavated.

**2000-s** archaeological studies were conducted by Nemtseva.

In parallel with the archaeological studies of the complex, in early 2000-s large conservation and restoration works were undertaken. The highway crossing the Raboti Malik Caravanserai was moved along the site. it is currently passing in from of the main façade between the caravanserai and the Sardoba. After archaeological research on the caravanserai and more complete identification of its layout, the discovered wall bases were increased with burnt bricks to a common unified mark.



UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Caravanserai: the repair works in 1937. Source: Ministry of Culture of the Republic of Uzbekistan (1937).



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Rabati Malik Caravanserai and Sardoba: Raboti Malik Caravanserai: the repair works in 1937. Source: Ministry of Culture of the Republic of Uzbekistan (1937).



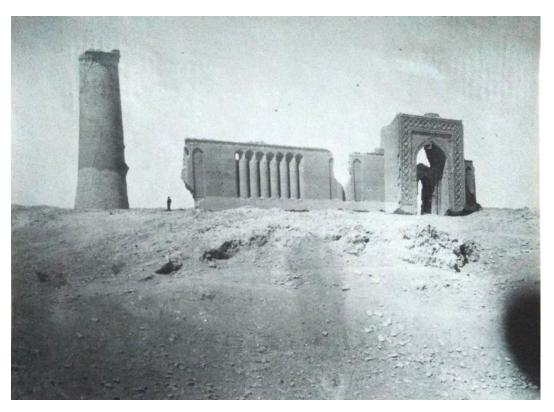








. UZ-07. Rabati Malik Caravanserai and Sardoba in 1937. Source: Ministry of Culture of the Republic of Uzbekistan (1937).

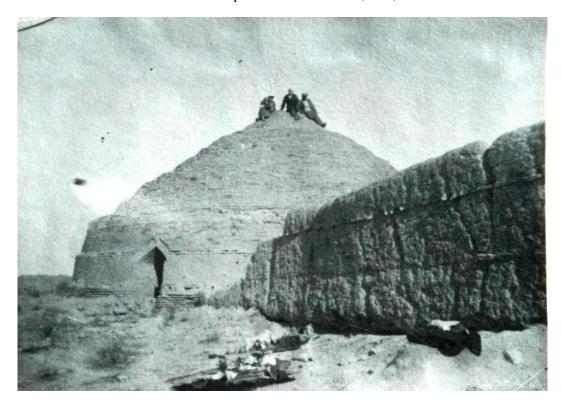








UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Caravanserai in 1937. Source: Ministry of Culture of the Republic of Uzbekistan (1937).



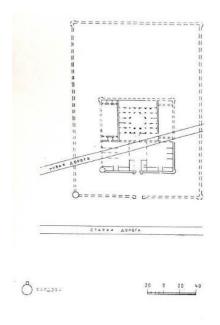
UZ-07. Rabati Malik Caravanserai and Sardoba: Raboti Malik Sardoba in 1937. Source: Ministry of Culture of the Republic of Uzbekistan (1937).

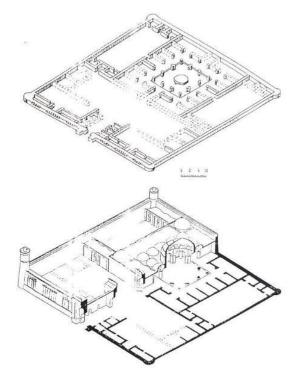












UZ-07. Rabati Malik Caravanserai and Sardoba: the location of the highway in the caravanserai.







## Appendix 2 – The Team

**Prof. Yukio Nishmura** is an expert in conservation planning, physical urban design and public participation in planning. He is a Professor of Kokugakuin University since April 2020 and a Professor Emeritus of the University of Tokyo. He was appointed as Vice President of the University of Tokyo in April 2011. He had taught urban planning, urban design and urban conservation planning at the Department of Urban Engineering, University of Tokyo as Professor until March 2018 and moved to Kobe Design University as Executive Director of Kobe DU Comprehensive Research Organization (April 2018 to March 2020). Prof. Nishimura has been actively involved in drafting conservation plans for a number of historic cities throughout Asia. He also served as Vice President of the International Council of Monuments and Sites (ICOMOS), whose function includes evaluation of World Cultural Heritage nominations as a consultative body of UNESCO and former President of ICOMOS Japan.

He has published 12 books as single author, including two award-wining "Urban Conservation Planning" (Japanese, Tokyo University Press, 2005, in Japanese) and "Urban Conservation and Urban Design" (Kajima Shuppankai, 1997, in Japanese), edited 36 books including "Urban Landscape Planning" (Gakugei Shuppansha, 2000, in Japanese, Korean translation in 2003), and contributed more than 100 books as co-author.

Dr. Arch. Ona Vileikis is an architect and heritage specialist, currently a researcher at the Institute of Archaeology, University College London (UCL), UK and the Central Asian Archaeological Landscapes (CAAL) project. She is also a researcher at Carleton Immersive Media Studio (CIMS) at Carleton University, Canada. Previously, she worked at the University of Leuven as researcher for the BELSPO/UNESCO Silk Roads project in Central Asia. Dr. Vileikis has collaborated with local professionals, government officials, UNESCO, ICCROM, WMF and IICAS in the fields of capacity building and consulting with regard to the UNESCO 1972 World Heritage Convention, large-scale mapping, inventories, documentation and digital technology, monitoring, risk management, heritage policies and conservation practices. Ona holds a PhD in Civil Engineering of the Raymond Lemaire International Centre for Conservation (RLICC), University of Leuven, and a MA in World Heritage Studies, BTU Cottbus-Senftenberg. Ona co-authored over 50 peer reviewed publications and received two best paper awards at international conferences. Dr. Vileikis was appointed as the ICOMOS









GA2020 and 2023 Scientific Symposia International Co-chair in Sydney, she is Executive Committee Member of the ICOMOS ISC CIPA Heritage Documentation and member of the SDG Working Group. Since 2010, Ona has been actively serving as advisor to the UNESCO Silk Roads World Heritage nomination.

Dr. Dmitriy Voyakin is Research Scientist (1997), Senior Research Scientist, Head of the department of Documentation and Archaeological Conservation at the Institute of Archaeology MES, Almaty, Kazakhstan (since 2005). M.A. (1999) from the Al-Faraby Kazakh State University (Honors), Ph.D. (2010) from the Institute of Archaeology MES Republic of Kazakhstan. General Director of the NGO "Archaeological Expertise" (since 2006). Director of the International Institute for Central Asian Studies (since 2018). Delegate to the World Heritage Committee from the Republic of Kazakhstan (2014-2017). UNESCO international expert. Secretary-General of the National World Heritage Committee of the Republic of Kazakhstan (2014-2018). Member of the National Commission of the Republic of Kazakhstan for UNESCO and ISESCO (since 2018). Field director of the more than ten archaeological expeditions (among them permanent archaeological missions at Otrar, Kayalyk, Akyrtas, Taraz, Sygnak, Dzhan kala, Dzhankent, Dzhuvara, Christian site Ilibalyk and Investigation of archaeological sites on the dry bottom of Aral Sea), several international expeditions. Published 7 books, 7 albums, over 180 scientific papers, edited several monographs, 9 volumes of Heritage Sites of Zhambyl Region. One of the authors and main executor of "Kone Taraz" (Ancient Taraz) and "Almaty 1000 years' anniversary" projects. Silk Road serial transnational nomination UNESCO national facilitator.

**Sukhrob Babaev** is an archaeologist, heritage lawyer and management specialist. 2010-2013 was a postgraduate student of Institute of Archaeology of Academy of Sciences of Uzbekistan and is still working on his PhD in archaeology. 2013-2015 contributed to creation of GIS database for World Heritage properties in Uzbekistan. Participated in series of UNESCO projects in heritage protection. He took part as a member of core group in UNESCO MAPAUZ program aimed do develop Management Plans for World Heritage cities such as Shakhrisabz, Bukhara and Khiva in 2015-2017. In 2018-2019 was leading Board of Monuments Bukhara branch. Holds master's degree in source studying and documentation in







scientific research. Currently working in International Institute for Central Asian Studies as Director for Strategic Development. He also holds the position of a Co-Director of the International Scientific Research Center for Study and Preservation of Central Asian Historic and Cultural Heritage.

Alim Feyzulayev is an architect, specializes in conservation and heritage management. He is a Leading Researcher at the International Institute for Central Asian Studies (IICAS) since June 2019. He was a part of the expert team in charge of preparing a SoC and HIA report for the Mausoleum of Khoja Ahmed Yasawi, Kazakhstan in April 2019. In February 2019 he was commissioned to perform a Heritage Impact Assessment (HIA) for the project of a new market "Shakhristan" in the Historic Center of Bukhara, Uzbekistan. He has been contributing to the preparation of the Management Plan for the Historic Center of Bukhara between 2015 and 2016. He holds a Master of Arts in Monumental Heritage degree from Anhalt University of Applied Sciences in Dessau, Germany and a bachelor's degree in architecture from Tashkent Institute for Architecture and Civil Engineering (TACI). Alim is member of ICOMOS International since 2018.

Farukh Khabibullayev holds a Bachelor of Arts degree in Architecture (with honors) and a documentation expert. He is currently researcher at the International Institute of Central Asian Studies where he is supporting projects in cultural heritage such as the Central Asian Archaeological Landscapes (CAAL) in collaboration with UCL and the UNESCO Silk Roads nomination. Before this, Farukh was researcher at Archeological Expertise LLP and at the Institute of Archeology named after Margulan. He has participated in different project in Central Asia such as the Heritage Impact Assessment (HIA) for the new market "Shakhristan" and the condition assessment in the Historic Center of Bukhara. Farukh participated in The Newton - Al-Farabi Partnership Program as a GIS expert (2016, Aberystwyth, UK). Since 2015 he has been a member of numerous archaeological expeditions in Kazakhstan also as the head of the expeditions.









## Appendix 3 – List of Stakeholders

## **Government representatives**

## **Navoi Region**

Deputy Governor – Kamoliddin Khasanov

## Navoi Regional Department for Tourism Development

Head of Department – Dzhavlon Khasanov

#### Ministry of Culture of the Republic of Uzbekistan

Minister – Ozodbek Nazarbekov

## **Department of Cultural Heritage**

Head / Deputy Minister of Culture - Kamola Akilova

#### **UNESCO Office in Tashkent**

Head of Office – Jan Hladík

Culture Office – Sanjar Allayarov

### National Commission of the Republic of Uzbekistan for UNESCO

Chairperson – Aziz Abdukhakimov Acting Secretary-General – Saidafzal Mallakhanov

## Permanent Delegation of the Republic of Uzbekistan to UNESCO

Ambassador, Permanent Delegate – Umid Shadiev First Secretary – Sherzod Narzullaev

Developer

"Navoi Tour" LLC

Director - Vokhid Pirmatov