



**KYRGYZ REPUBLIC
COMMUNITY DEVELOPMENT AND INVESTMENT AGENCY (ARIS)**

**REGIONAL ECONOMIC DEVELOPMENT PROJECT
IN OSH REGION AND OSH CITY**

**«Rehabilitation of the Sulaiman-Too National Historical and
Archaeological Museum Complex»**

**ENVIRONMENTAL AND
SOCIAL MANAGEMENT PLAN
(ESMP)**

August 2026

ToC

1. INTRODUCTION.....	6
2. PURPOSE, STATUS, AND SCOPE OF APPLICATION OF THE ESMP	7
2.1. Purpose of the ESMP	7
2.2. Status of the ESMP within the Tender and Contract Documentation	7
2.3. Scope of Application.....	7
2.4. Relationship with the Design and Environmental Documentation	8
2.5. Contractor's Site-Specific ESMP	9
2.6. Implementation and Verification of Compliance.....	9
3. SUBPROJECT CONDITIONS DETERMINING ENVIRONMENTAL AND SOCIAL REQUIREMENTS.....	10
3.1. General Characteristics of the Conditions for Implementation of the Works.....	10
3.2. Project Components and Nature of the Proposed Interventions	10
3.3. Site Characteristics Affecting the Organization of the Works	11
3.4. Consideration of Site Conditions in the Preparation of Contractor Documentation	12
4. ESMP IMPLEMENTATION ARRANGEMENTS AND ALLOCATION OF RESPONSIBILITIES	13
4.1. General Principles of Management	13
4.2. Contractor's Management Arrangements	13
4.3. Responsibilities of the Supervision Engineer.....	14
4.4. Responsibilities of ARIS	15
4.5. Role of the Sulaiman-Too National Historical and Archaeological Museum Complex	15
4.6. Design Supervision and Cultural Heritage Specialists	16
4.7. Government Authorities.....	17
4.8. Allocation of key functions	17
4.9. Permits, Approvals, and Internal Project Documents.....	18
4.10. Coordination and Information Exchange	19
5. REQUIREMENTS PRIOR TO MOBILIZATION AND COMMENCEMENT OF WORKS	20
5.1. General Procedure for Authorization to Commence Works.....	20
5.2. Organizational Readiness Prior to Mobilization	20
5.3. Construction Site and Individual Work Area Readiness	22
5.4. Baseline Condition Documentation.....	23
5.5. Requirements Prior to Hazardous and Sensitive Operations	23
5.6. Permit-to-Work	25
5.7. Worker Training and Authorization.....	25
5.8. Review of Documents and Resolution of Comments.....	25

5.9. Changes in Conditions and Reassessment of Readiness.....	26
5.10. Confirmation of Authorization to Commence Works	26
6. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN	27
6.1. Purpose and Principles of Application	27
6.2. Specification of Measures by the Contractor	27
6.4. Application of Additional Measures.....	41
6.5. Deviations from Established Measures	46
6.6. Link with Monitoring.....	46
7. MONITORING OF ESMP IMPLEMENTATION, NON-COMPLIANCES AND CORRECTIVE ACTIONS.....	47
7.1. Purpose of Monitoring.....	47
7.2. Levels of Control.....	47
7.3. Monitoring Procedure.....	47
7.4. Daily, Weekly and Periodic Monitoring	51
7.5. Hold Points	51
7.6. Identification and Registration of Non-Conformities.....	52
7.7. Categories of non-conformities.....	52
7.8. Corrective and Preventive Actions	52
7.9. Verification and Closure of Non-Conformities	52
7.10. Suspension of Works.....	53
7.11. Resumption of Works	53
7.12. Documentation of Monitoring Results	53
8. STAKEHOLDER ENGAGEMENT, GRIEVANCE MANAGEMENT AND REPORTING	54
8.1. General Provisions	56
8.2. Disclosure of Information Prior to Construction Commencement.....	56
8.3. Information Disclosure During Works Implementation	56
8.4. Coordination with NHA-MC and Complex Users	58
8.5. Stakeholder Grievance Mechanism.....	58
8.6. Worker Grievances	59
8.7. Confidential Complaints and SEA/SH.....	59
8.8. Immediate Notifications.....	60
8.9. Periodic Contractor Reporting.....	61
8.10. Reporting by the Technical Supervision and ARIS.....	61
8.11. Storage and Transfer of Documentation.....	62

9.....	APPENDICES:	63
APPENDIX 1. MINIMUM REQUIREMENTS FOR THE CONTRACTOR’S ESMP.....		63
APPENDIX 2. REQUIREMENTS FOR INFORMATION BOARDS AND SIGNS		67
APPENDIX 3. REGISTER OF PERMITS, APPROVALS AND MANDATORY DOCUMENTS.....		69
APPENDIX 4. CHANCE FIND PROCEDURE		71
APPENDIX 5. ASBESTOS-CONTAINING MATERIALS MANAGEMENT PLAN.....		73
APPENDIX 6. SPECIAL METHOD STATEMENT AND PERMIT-TO-WORK FOR SENSITIVE WORKS		75
APPENDIX 7. WORKING FORMS FOR MONITORING, NON-CONFORMITIES, INCIDENTS AND REPORTING.....		78
APPENDIX 8. INFORMATION ON THE ARIS FEEDBACK MECHANISM		83
Appendix 5. Results of the Public Consultation		87

Tables

Table 1. Purpose of the documents used in the implementation of the sub-project.....	8
Table 2. Main sites and nature of the planned works.....	10
Table 3. Characteristics of the site and their significance for the organization of the work	11
Table 4. Allocation of responsibility for the implementation of the ESMP	17
Table 5. Categories of permits, approvals and documents.....	18
Table 6. Stages in confirming the contractor’s readiness to carry out the work.....	20
Table 7. Documents and organizational requirements prior to mobilization.....	21
Table 8. Conditions for the site to be ready for work to commence	22
Table 9. Additional conditions prior to the commencement of hazardous and sensitive operations	23
Table 10. Environmental and Social Management Plan for the Construction Phase a	29
Table 11. Environmental and Social Management Plan for the Operational Phase.....	42
Table 12. Monitoring plan for the implementation of ESMP measures C.....	48
Table 13. Types hold points.....	51
Table 14. Categories of non-conformities and response procedures	52
Table 15. Key Areas of Training and Capacity Building	54
Table 16. Information to be disclosed during the construction phase.....	57
Table 17. General procedure for receiving and handling enquiries and complaints.....	59
Table 18. Events requiring immediate notification.....	60
Table 19. Minimum Content of the Contractor’s Monthly Report on the Implementation of the Contractor’s ESMP.....	61

ABBREVIATION

ARIS	Community Development and Investment Agency (ARIS)
ACM	Asbestos-Containing Materials (ACM)
WB	World Bank
F&L	Fuels and Lubricants
ICOMOS	International Council on Monuments and Sites
MMP	Mandatory Monitoring Point
MCP	Mandatory Control Point
KR	Kyrgyz Republic
Ministry of Culture	Ministry of Culture, Information and Youth Policy of the Kyrgyz Republic / authorized state body responsible for cultural heritage protection
GRM	Grievance Redress Mechanism
ARIS (FM)	ARIS Feedback Mechanism (AFM), the official channel for the submission, registration, and referral of grievances under the Project GRM
NHA-MC	Sulaiman-Too National Historical and Archaeological Museum Complex
CHIA	Cultural Heritage Impact Assessment
ESIA	Environmental and Social Impact Assessment
OHS	Occupational Health and Safety
WEP	Work Execution Plan
REDP-1	Regional Economic Development Project in Osh Region and Osh City
DED	Design and Estimate Documentation
ACMMP	Asbestos-Containing Materials Management Plan
CHMP	Cultural Heritage Management Plan
ESMP	Environmental and Social Management Plan
C-ESMP	Contractor's Site-Specific ESMP
PPE	Personal Protective Equipment
SEA/SH	Sexual Exploitation and Abuse / Sexual Harassment
WB ESSs	World Bank Environmental and Social Standards
ES	Emergency Situation
UNESCO	United Nations Educational, Scientific and Cultural Organization

1. INTRODUCTION

The Regional Economic Development Project in Osh Region and Osh City (REDP-1) is being implemented by the Community Development and Investment Agency (ARIS) with financial support from the World Bank. Within the framework of the Project, a subproject is envisaged for the rehabilitation of the infrastructure of the National Historical and Archaeological Museum Complex “Sulaiman-Too” in the city of Osh..

The Museum Complex possesses exceptional historical, archaeological, cultural, spiritual, and public significance. The sacred Sulaiman-Too Mountain is inscribed on the UNESCO World Heritage List and is protected by the State. At the same time, the Complex continues to function as a museum, tourist attraction, public space, and pilgrimage site. During the implementation of the Works, the site will remain accessible to museum staff, visitors, pilgrims, and other users of the Complex.

These conditions require a specific approach to the planning and implementation of construction, rehabilitation, engineering, and landscaping activities. In addition to the conventional impacts associated with waste generation, dust, noise, construction traffic, and occupational safety, consideration shall be given to the risks of damage to cultural heritage assets, disruption of the visual and spatial integrity of the site, restrictions on access for visitors and pilgrims, and potential conflicts between construction activities and the continued operation of the Complex.

As part of the Subproject preparation, an Environmental and Social Impact Assessment (ESIA) was carried out to identify the principal environmental and social risks and to define measures for their prevention, mitigation, and monitoring. Most of the anticipated impacts are expected to be localized, temporary, and manageable. Nevertheless, the overall environmental and social risk classification of the Subproject has been determined as **Substantial**, reflecting the high sensitivity of the site and its national and international cultural heritage significance.

This Environmental and Social Management Plan (ESMP) has been prepared to implement the conclusions and commitments established in the ESIA and to ensure their practical application during the preparation and execution of the Works.

The ESMP establishes mandatory organizational, environmental, social, labor, occupational health and safety, and cultural heritage protection requirements to be implemented by the Contractor and its subcontractors. It also defines the procedures for monitoring, documenting, and verifying compliance with these requirements by the Contractor, the Supervision Engineer, ARIS, and other parties involved in the implementation of the Subproject.

The document covers the period of the Contractor’s preparation for mobilization and the implementation of construction, repair, rehabilitation, and related works, restoration of the site, and handover of the completed works. It also establishes the applicable environmental and social measures for the subsequent operation of the rehabilitated facilities.

During the construction phase, the Contractors shall be responsible for complying with the requirements of this C-ESMP within the scope of their respective contracts, under the supervision of the Technical Supervision Consultant and ARIS. Upon transition to the operation phase, the Contractor shall hand over to the National Historical and Archaeological Museum Complex (NHAMC) the necessary as-built documentation, instructions, and recommendations for the safe operation and maintenance of the installed equipment and systems, and shall provide the required training to the designated responsible personnel. Following the handover of the facilities, the implementation of the C-ESMP measures applicable to the operation phase shall be carried out by the NHAMC or another designated operating organization within the scope of its functions and responsibilities.

2. PURPOSE, STATUS, AND SCOPE OF APPLICATION OF THE ESMP

2.1. Purpose of the ESMP

This Environmental and Social Management Plan (ESMP) serves as the principal document for managing environmental and social risks during the implementation of the Subproject.

Its purpose is to ensure the consistent and verifiable implementation of the measures identified through the Environmental and Social Impact Assessment (ESIA), the Cultural Heritage Impact Assessment (CHIA), the Cultural Heritage Management Plan (CHMP), the design documentation, and the applicable requirements of the World Bank.

The ESMP establishes mandatory requirements governing: conditions to be fulfilled prior to the Contractor's mobilization and before the commencement of specific activities; organization of construction sites and temporary facilities; measures for pollution prevention and the efficient use of natural resources; requirements for the management of waste and hazardous materials; occupational health and safety measures for workers; protection of visitors, pilgrims, Museum Complex personnel, and other third parties; preservation of cultural heritage and implementation of works within sensitive areas; procedures for inspections, recording of non-conformities, suspension and resumption of works; and requirements for documentation, monitoring, and reporting.

Accordingly, the ESMP links the risks identified during the environmental and social assessment process and the Project commitments with the practical implementation of the Works. Its provisions shall be incorporated into work scheduling, construction methodologies, staffing arrangements, access management, temporary facility layout, procurement of materials, engagement of subcontractors, and preparation of as-built documentation.

2.2. Status of the ESMP within the Tender and Contract Documentation

This ESMP forms an integral part of the tender and contract documentation and is mandatory for compliance by every Contractor, its subcontractors, suppliers, drivers, and all other personnel engaged in the execution of the Works or the delivery of goods and services.

Tenderers shall take the requirements of this ESMP into account when preparing their technical and financial proposals. Costs associated with the implementation of standard environmental, social, labor, occupational health and safety, and cultural heritage protection measures shall be incorporated into the bid price, implementation schedule, construction methodology, and the relevant items of the Bill of Quantities (BoQ).

Upon contract award, the requirements of the ESMP become contractual obligations of the Contractor. The absence of a specific item in the Bill of Quantities shall not relieve the Contractor of its responsibility to implement measures necessary for the proper organization and safe execution of the Works, environmental protection, cultural heritage preservation, stakeholder communication, monitoring, and reporting.

The Contractor shall remain fully responsible for compliance with the ESMP by all subcontractors, suppliers, and other entities engaged under its contract. Delegation of specific activities to subcontractors shall neither transfer nor limit the Contractor's contractual responsibility toward the Employer.

2.3. Scope of Application

This ESMP constitutes the single overarching environmental and social management document for all facilities, activities, and associated works included under the Subproject "Rehabilitation of the Sulaiman-Too National Historical and Archaeological Museum Complex." It applies to the Subproject as a whole, including all facilities and categories of works listed in Table 2, and shall form part of all applicable tender and contract documents.

The requirements of this ESMP apply to preparatory and mobilization activities; establishment of temporary construction facilities; demolition and earthworks; construction, rehabilitation, restoration, and engineering works; landscaping and site reinstatement; transportation, unloading, and storage of materials; movement of construction vehicles and machinery; management of construction and domestic waste; activities undertaken in the vicinity of cultural heritage assets and other sensitive areas; interaction with visitors, pilgrims, and personnel of the Sulaiman-Too National Historical and Archaeological Museum Complex; as well as demobilization and handover of completed facilities.

The list of facilities and activities covered by this ESMP reflects the overall scope of the Subproject and does not imply that each individual Contractor will perform works at every facility identified herein. The scope of obligations of each Contractor shall be determined by the relevant tender and contract documentation, the approved design documentation, the Bill of Quantities, and the actual boundaries of the construction sites assigned under the respective contract.

Each Contractor shall determine the applicability of the requirements of this ESMP to its contractual scope of work and shall incorporate all applicable measures into its Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP). Where the Subproject is implemented under multiple contracts or procurement packages, each Contractor shall prepare an individual C-ESMP covering the facilities, work sites, and activities assigned under its contract. Where all works are awarded under a single contract, the Contractor shall prepare one integrated C-ESMP, including site-specific requirements for each facility and work area.

Measures that are not applicable to the contractual scope or actual working conditions of a particular Contractor may be identified as non-applicable. Such non-applicability shall be justified within the Contractor's C-ESMP and shall be subject to review by the Supervision Engineer and ARIS. General requirements relating to site management, cultural heritage protection, public safety, stakeholder communication, monitoring, and reporting shall apply to all Contractors within the scope of their activities.

2.4. Relationship with the Design and Environmental Documentation

The ESMP forms part of the integrated documentation governing the preparation and implementation of the Subproject. The Environmental and Social Impact Assessment (ESIA) identifies the nature and significance of environmental and social impacts, establishes the applicable standards, and defines the overall management measures. The Cultural Heritage Management Plan (CHMP) and the Cultural Heritage Impact Assessment (CHIA) establish specific requirements for the protection of cultural heritage assets, the preservation of the property's Outstanding Universal Value (OUV), supervision arrangements, and control of interventions. The design and cost estimate documentation defines the technical solutions, scope, and boundaries of the Works. The ESMP consolidates the applicable requirements of these documents into a single framework of obligations to be implemented by the Contractor at the construction site.

Table 1. Purpose of the documents used in the implementation of the sub-project

Document	Purpose
Environmental and Social Impact Assessment (ESIA)	Identifies the environmental and social risks associated with the Subproject, assesses their significance, and defines measures for the prevention, mitigation, and management of potential impacts.
Cultural Heritage Management Plan (CHMP)	Establishes the framework for managing risks to cultural heritage and sets out the requirements for specialized supervision and monitoring.
Cultural Heritage Impact Assessment (CHIA)	Assesses the potential impacts of the proposed design solutions and construction activities on the cultural heritage value of the property.
Design and Estimate Documentation (DED)	Defines the approved scope of the Works, site boundaries, materials, and technical design solutions.
This Environmental and Social Management Plan (ESMP)	Establishes the mandatory measures to be implemented by the Contractor and the procedures for monitoring and verifying compliance with these requirements.
Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP)	Specifies and adapts the requirements of this ESMP to the Contractor's actual work organization, construction methods, and site conditions.
Work Execution Plan (WEP) and Specialized Method Statements	Define the construction methodology and sequence of specific activities while incorporating the applicable environmental, social, occupational health and safety, and cultural heritage protection requirements.

The ESMP does not replace the Cultural Heritage Management Plan (CHMP), the Cultural Heritage Impact Assessment (CHIA), the Design and Estimate Documentation (DED), statutory permits and approvals, or any other mandatory project documentation. Its provisions shall be applied in conjunction with these documents.

The implementation of the Works shall be based on the latest approved versions of the ESMP, ESIA, CHMP, CHIA, design and cost estimate documentation, permits, approvals, and other mandatory documents officially provided to the Contractor as part of the tender and contract documentation or subsequently transmitted through documented procedures. The Contractor shall maintain a register of all document revisions received and shall ensure that only the current approved versions are used at the construction site.

Where inconsistencies, ambiguities, or conflicts between the requirements of different documents are identified, the Contractor shall not independently determine which requirement is applicable, modify the approved design solution, or continue the affected activity. Such matters shall be referred to the Supervision Engineer and ARIS for documented resolution. Where cultural heritage issues are involved, the review shall also include the Design Supervision Consultant, the Cultural Heritage Specialist, the Sulaiman-Too National Historical and Archaeological Museum Complex, and the Ministry of Culture, within their respective mandates and where applicable.

Until a documented decision has been issued, the affected activity shall not commence or, if already underway, shall be suspended. The adopted decision shall comply with the legislation of the Kyrgyz Republic, the approved design documentation, all applicable permits and approvals, and shall ensure the required level of protection of the environment, workers, the public, and cultural heritage.

2.4.1. Mandatory Cultural Heritage Management Principles

In implementing this ESMP, all decisions that may directly or indirectly affect cultural heritage shall be guided by the principles of minimum intervention, preservation of authenticity and integrity, respect for the sacred character of the site, compatibility of materials, reversibility where technically feasible, visual restraint, and prevention of cumulative visual clutter. Both temporary and permanent elements shall remain subordinate to the historic, natural, and spiritual context of the property.

Works within sensitive areas shall be carried out only in accordance with the approved design solutions and upon completion of the prescribed cultural heritage review procedures. Where required by the CHMP, the CHIA, permit conditions, or the nature of the proposed intervention, construction methodologies and technical solutions shall be reviewed by the Supervision Engineer, the Design Supervision Consultant, ARIS, the Sulaiman-Too National Historical and Archaeological Museum Complex, and the Ministry of Culture.

2.5. Contractor's Site-Specific ESMP

Prior to mobilization, each Contractor awarded a contract under the Subproject shall prepare a Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP) tailored to the actual scope of its contract, the facilities and work sites assigned, and the sequence and conditions of implementation.

A Contractor's C-ESMP may cover one or several facilities, depending on the scope of the respective contract. Where a single contract includes several geographically separated facilities or facilities that differ substantially in terms of work characteristics or risk level, the Contractor shall provide separate site-specific descriptions of the work boundaries, methodologies, mitigation measures, responsible personnel, control points, and monitoring arrangements for each facility or work area. Such site-specific requirements may either be incorporated into the main body of the C-ESMP or presented as separate annexes.

The Contractor's C-ESMP shall build upon the requirements of this ESMP and establish the specific procedures for implementing the prescribed measures at the construction site. It shall include, as a minimum, the work areas and site boundaries; implementation schedule and sequence of activities; construction methods and equipment; organizational structure and responsible personnel; subcontractors; locations of temporary facilities, storage areas, and waste accumulation points; routes for construction vehicles, workers, and visitors; sensitive and restricted areas; applicable permits, approvals, and work permits; internal inspection procedures; and documentation and reporting arrangements.

The Contractor's C-ESMP shall neither limit, reduce, nor replace the requirements established by this ESMP or any related project documents. Its purpose is to specify how those requirements will be implemented under the actual site conditions.

Where changes occur to work boundaries, construction methods, equipment, sequencing, or the scope of activities, the Contractor shall revise the relevant sections of the C-ESMP prior to commencing the modified activity.

2.6. Implementation and Verification of Compliance

Implementation of the measures contained in the Contractor's C-ESMP shall be fully integrated into the Contractor's day-to-day operations and shall be supported by documented evidence.

Depending on the nature of the requirement, acceptable evidence of compliance may include an approved plan or method statement; a permit or formal approval; a work permit; an inspection report; entries in site registers; completed inspection checklists; photographic records; waste disposal documentation; training records; incident reports; records of corrective actions; or documented confirmation that a non-conformity has been closed.

The existence of documented evidence constitutes an integral part of demonstrating compliance with the relevant requirement. Monitoring and inspections undertaken by the Supervision Engineer, ARIS, the Sulaiman-Too National Historical and Archaeological Museum Complex, or other authorized parties shall not relieve the Contractor of its responsibility for ensuring actual compliance with the requirements of this ESMP.

3. SUBPROJECT CONDITIONS DETERMINING ENVIRONMENTAL AND SOCIAL REQUIREMENTS

3.1. General Characteristics of the Conditions for Implementation of the Works

The scope, quantities, and technical characteristics of the proposed Works are defined in the approved Design and Estimate Documentation (DED), technical specifications, Bills of Quantities (BoQ), and the Contract. This section does not repeat the technical description of the Subproject; rather, it identifies the characteristics of the Project area and its operating conditions that shall be taken into account by the Contractor in planning and implementing the Works.

The Subproject will be implemented within the boundaries of the Sulaiman-Too National Historical and Archaeological Museum Complex and on directly associated entrance areas, pedestrian routes, access roads, and utility corridors. The sacred Sulaiman-Too Mountain is inscribed on the UNESCO World Heritage List, while the historical, cultural, and archaeological assets located within the property are protected under the legislation of the Kyrgyz Republic.

The Works will be carried out within an operational museum complex. Throughout the rehabilitation works, the site will continue to be used by personnel of the Sulaiman-Too National Historical and Archaeological Museum Complex, visitors, tourists, pilgrims, and members of the local community. Certain access routes and areas possess not only tourism value but also spiritual and ritual significance. Accordingly, rehabilitation works shall be organized in a manner that ensures compatibility with the continued operation and use of the Complex.

The principal environmental and social constraints associated with the Subproject arise not from the scale of the proposed construction activities but from the exceptional sensitivity of the Project site. Even localized interventions may result in significant adverse impacts if they affect historic structures, archaeological deposits, rock formations, petroglyphs, traditional circulation routes, the visual characteristics of the property, or visitor safety. The exceptional sensitivity of the site is therefore the primary factor underlying the Substantial environmental and social risk classification of the Subproject.

All Works shall be undertaken within the existing boundaries of the Museum Complex and the associated Project areas. The Subproject does not require acquisition of privately owned land, physical displacement of persons, or permanent restrictions on access to livelihoods. Nevertheless, temporary rerouting of pedestrian circulation, restricted access to specific areas, and short-term disruptions to visitor movement may be required during construction. Such restrictions shall be justified on safety grounds, coordinated with the Sulaiman-Too National Historical and Archaeological Museum Complex, and accompanied by appropriate public information measures and the provision of safe alternative routes.

3.2. Project Components and Nature of the Proposed Interventions

The Works envisaged under the Subproject include rehabilitation, reconstruction, selective demolition of existing elements, construction of supporting infrastructure, installation of engineering utilities, and landscape improvement works. These activities differ considerably in both their technical characteristics and their degree of sensitivity. While some interventions are confined to existing entrance and service areas, others affect locations directly associated with archaeological, architectural, geological, or sacred heritage resources.

Table 2 presents the consolidated list of Project components and categories of interventions included within the overall scope of the Subproject. The table is intended to define the overall scope of application of this ESMP and to identify the corresponding environmental, social, and cultural heritage protection requirements applicable to each category of works. The precise scope of activities assigned to an individual Contractor shall be determined by the relevant tender and contract documentation, the approved design drawings, and the applicable Bills of Quantities.

Table 2. Main sites and nature of the planned works

№	Object or block	The nature of the planned works and environmental/social considerations
1	Fire Gate	Construction of the Visitor Center, entrance facilities, parking area, canopy and charging stations for golf carts, pavements, drainage, lighting, wayfinding, and landscaping. Key considerations: visitor flow management, visual compatibility with the heritage setting, safe vehicle circulation, and electrical and fire safety during installation and commissioning of equipment.
2	Administrative Building and Pump Station	Reconstruction/rehabilitation of the administrative building, demolition of selected ancillary structures, construction or rehabilitation of the pump station and water storage tank, retaining walls, and utility networks. Key considerations: demolition safety, stability of retaining structures, water management, and maintaining access to the Cave Museum.
3	Water Gate	Entrance and service infrastructure, ticket office, kiosk, sanitary facilities, pavements, utility networks, and landscaping. Key considerations: visitor access, stormwater drainage, temporary circulation routes, and preservation of the visual integrity of the entrance area.
4	Mountain Gate	Entrance and service infrastructure, ticket office, kiosk, sanitary facilities, pavements, utility networks, and landscaping. Key considerations: connection with the mountain trail, management of pilgrimage routes, slope stability, and work within confined spaces.
5	Ethnographic Museum	Rehabilitation of façades and architectural elements, improvement of the courtyard, lighting, and visitor wayfinding. Key considerations: preservation of original historic fabric, compatibility of repair materials, and protection of museum interiors.

№	Object or block	The nature of the planned works and environmental/social considerations
6	Mausoleum of Asaf ibn Burkhia	Works on adjacent open areas, steps, pedestrian routes, landscaping, and drainage without unauthorized intervention in the historic fabric. Key considerations: sacred use of the site, uninterrupted ritual access, vibration control, and visual restraint.
7	Bronze Age Settlement	Careful dismantling of the existing shelter structure, installation of protective and interpretive elements, controlled public access, and landscaping in accordance with the approved design. Key considerations: protection of archaeological deposits, continuous archaeological supervision, and prohibition of heavy machinery and material storage within sensitive areas.
8	Mountain Trail and Babur Mosque	Rehabilitation of steps, platforms, handrails, stairways, protective rockfall nets, rest areas, and prayer areas. Key considerations: preservation of the historic trail, rockfall hazards, work on steep slopes, continued pilgrimage use, and daily restoration of safe public access.
9	Golf Cart Road	Rehabilitation of road pavement, edges, drainage facilities, turning areas, and stopping points. Key considerations: separation of vehicles and pedestrians, dust and noise control, prevention of soil compaction, and preservation of the historic landscape.
10	Road to the Cave Museum	Rehabilitation and restoration of the access route, pavements, and drainage system. Key considerations: maintaining access, slope stability, surface water runoff, restrictions on heavy machinery, and protection of adjacent rock surfaces.
11	Cave Museum	Waterproofing, elimination of water infiltration, rehabilitation of internal and external surfaces, structural strengthening, mechanical, electrical, and fire protection works. Key considerations: protection of rock surfaces, petroglyphs, site hydrology, humidity control, ventilation, confined-space work, and preservation of museum assets.
12	Master Plan, External Utilities, and Landscaping	Construction and rehabilitation of external water supply, sewerage, irrigation, power supply, lighting, and CCTV networks, together with wayfinding, landscaping, and site restoration. Key considerations: excavation trenches, protection of underground utilities, drainage, prevention of light glare, avoidance of visual clutter, and phased implementation of the Works.

Inclusion of a facility or project component in Table 2 does not imply that the same level of control or management requirements applies to all work areas. The specific environmental, social, and cultural heritage protection requirements applicable to each activity shall be determined by the location of the Works, the nature of the proposed intervention, the proximity of sensitive features, and the provisions established by the Cultural Heritage Management Plan (CHMP), the Cultural Heritage Impact Assessment (CHIA), and the approved design documentation.

The list of work activities has been prepared in accordance with the terms of reference for the detailed design. The Contractor's actual contractual obligations shall be determined by the final design drawings, the Bills of Quantities (BoQ), and the Contract. Where a particular type of work is not included within an individual contract, the corresponding measures may be designated as not applicable, provided that an appropriate justification is documented. Notwithstanding such exclusions, the general requirements relating to site management, cultural heritage protection, visitor safety, and reporting shall remain applicable.

3.3. Site Characteristics Affecting the Organization of the Works

The Project site shall not be treated as a conventional construction site. Construction activities shall be organized with due consideration for the simultaneous presence of work areas, protected heritage assets, visitor circulation routes, pilgrimage areas, operational museum facilities, steep slopes, and confined spaces.

Construction work areas may be located in close proximity to historic structures, rock surfaces, archaeological sites, and landscape features that contribute to the Outstanding Universal Value (OUV) of the World Heritage property. Under such conditions, inappropriate positioning of construction equipment, storage of materials, uncontrolled drilling, the use of impact- or vibration-generating construction methods, alteration of drainage patterns, or attachment of temporary structures to existing historic surfaces may result in damage to cultural heritage resources.

At the same time, the Works involve the typical risks associated with construction activities, including dust generation, waste generation, noise, movement of construction vehicles and machinery, open excavations, work at height, use of electrical equipment, hot works, storage of hazardous materials, and temporary changes to pedestrian circulation routes. However, the continued presence of visitors and the exceptional sensitivity of the Project site require a higher level of planning, supervision, and control for all such activities.

Table 3. Characteristics of the site and their significance for the organization of the work

Site Characteristic or Operational Condition	Implications for Environmental and Social Management
UNESCO World Heritage status and statutory protection of cultural heritage assets	Changes to the approved design solutions, materials, construction methods, appearance, or limits of intervention shall not be made without the required approvals. Sensitive activities shall be subject to enhanced review and control measures.
Operational museum complex	The Works shall be implemented in phases, with clear separation between active construction areas and areas that remain accessible to visitors and museum personnel.

Site Characteristic or Operational Condition	Implications for Environmental and Social Management
Continuous presence of visitors and pilgrims	Hazardous construction activities shall be segregated from public circulation. Appropriate barriers, safe pedestrian detours, and timely public information shall be provided at all times.
Sacred and pilgrimage use of specific areas	Work schedules, site access arrangements, and workers' conduct shall respect the spiritual significance of the site, traditional pilgrimage routes, and religious events.
Archaeologically sensitive areas	Earthworks and other activities that may affect archaeological deposits shall be carried out using appropriate low-impact methods, under the required archaeological supervision, and in accordance with the Chance Finds Procedure.
Historic structures, rock surfaces, and petroglyphs	Uncontrolled anchoring, drilling, impact methods, storage of materials, diversion of water, or any other activity capable of causing mechanical or chemical damage shall be prohibited.
Mountainous terrain, steep slopes, and rockfall hazards	Work planning shall take into account slope stability, weather conditions, safe access, the use of fall protection systems, and the ability to immediately restrict access where necessary.
Caves and confined spaces	Special measures shall be implemented for ventilation, lighting, electrical safety, communications, emergency evacuation, and response to water ingress.
Limited space for storage and temporary facilities	Construction materials, waste, equipment, welfare facilities, and temporary structures may only be located within areas approved in advance.
Existing pavements, circulation routes, and utility networks	Their location and condition shall be verified before the commencement of the Works. Any damaged areas shall be reinstated following completion of the relevant activities.
Requirement to maintain emergency access	Barriers, construction equipment, materials, and temporary traffic arrangements shall not obstruct access for emergency response and rescue services.
High visual sensitivity of the site	Temporary structures, fencing, lighting, storage areas, and information signage shall be designed, located, and maintained so as to minimize visual impacts on the World Heritage property.

The site characteristics described above do not constitute a standalone list of mitigation measures. Rather, they define the conditions that the Contractor shall take into account when selecting construction methodologies, determining the sequence of activities, and organizing the execution of the Works. The detailed mandatory mitigation and management measures are set out in the Environmental and Social Management Plan (ESMP) presented in Section 6 of this document.

3.4. Consideration of Site Conditions in the Preparation of Contractor Documentation

Prior to mobilization, the Contractor shall assess the conditions of each work area and incorporate the findings into its Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP), Work Execution Plan (WEP), implementation schedule, and Construction Site Organization Plan.

The Contractor's documentation shall be based on the actual layout of work areas and sensitive locations rather than solely on the general description of the Subproject. The documentation shall identify, as applicable: the boundaries of work areas and areas where access is prohibited or restricted; the location of cultural heritage assets and other sensitive features; routes for construction vehicles, workers, visitors, and emergency services; locations for material storage and temporary waste accumulation; the layout of temporary facilities and welfare infrastructure; the sequence for opening and closing work areas; activities requiring specialized construction methodologies and work permits; the need for the presence of specialized personnel; procedures for the temporary rerouting of visitor circulation and public information; and measures to prevent damage to pavements, structures, rock surfaces, vegetation, and existing utility networks.

Where construction methods, equipment, work area boundaries, sequencing, or actual site conditions change, the Contractor shall revise the relevant sections of its documentation before resuming or commencing the affected activity.

Accordingly, this section provides the basis for the subsequent requirements of the ESMP by defining the site-specific conditions that shall be taken into account in the allocation of responsibilities, preparation of pre-construction documentation, development of specialized method statements, and selection of appropriate environmental and social management measures.

4. ESMP IMPLEMENTATION ARRANGEMENTS AND ALLOCATION OF RESPONSIBILITIES

4.1. General Principles of Management

This section defines the roles and responsibilities of the parties involved in the implementation of the requirements of this Environmental and Social Management Plan (ESMP). It does not replace the allocation of responsibilities established under the Project documentation, the tender documents, or the Contract.

Implementation of the requirements of this ESMP forms an integral part of the overall management of construction works. Environmental and social requirements, together with occupational health and safety, community health and safety, and cultural heritage protection requirements, shall be incorporated into work scheduling, selection of construction methodologies, construction site organization, engagement of subcontractors, procurement of materials, quality control, and acceptance of completed Works.

Each Contractor bears primary responsibility for compliance with the requirements of this ESMP within the scope of its respective Contract. The Contractor shall organize the Works in such a manner that impact prevention and mitigation measures are implemented as an integral part of each applicable activity rather than being verified only after the activity has been completed.

The management system is based on the sequential allocation of responsibilities among the parties involved in the Subproject, within the limits of their respective mandates. The Contractor is responsible for planning, implementing, and documenting the required measures. The Supervision Engineer is responsible for verifying readiness prior to the commencement of the Works and for monitoring compliance during implementation. ARIS, as the implementing agency, is responsible for the overall management and coordination of the Subproject and, for the purposes of this ESMP, for incorporating the applicable requirements into the tender and contract documentation, overseeing overall compliance, coordinating the participating parties, reviewing significant implementation issues, and organizing Project reporting. The Sulaiman-Too National Historical and Archaeological Museum Complex is responsible for coordinating construction activities with the operational requirements of the Museum Complex and participates in matters relating to site access, use of the property, and the condition of heritage assets. The Design Supervision Consultant and other specialized experts review technical and specialized matters within their respective areas of competence. Government authorities make decisions and exercise regulatory oversight in cases provided for under the legislation of the Kyrgyz Republic.

Inspections and oversight carried out by the Supervision Engineer, ARIS, the Sulaiman-Too National Historical and Archaeological Museum Complex, the Design Supervision Consultant, specialized experts, or competent government authorities shall not relieve the Contractor of its responsibility for the safe execution of the Works or for compliance with environmental, social, labor, occupational health and safety, and cultural heritage protection requirements.

The Contractor shall not regard the absence of comments or observations from the supervising parties as confirmation of compliance where actual site conditions do not conform to this ESMP, the Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP), approved method statements, the design documentation, or applicable permits and approvals.

Any decisions affecting the boundaries of the Works, construction methodologies, equipment, materials, access arrangements, the condition of sensitive heritage assets, or the resumption of suspended activities shall be made and documented by the competent parties within the scope of their respective authority. Oral instructions that affect compliance with the requirements of this ESMP shall subsequently be confirmed in writing.

4.2. Contractor's Management Arrangements

Each Contractor shall establish and maintain, throughout the implementation of the Works, an effective management system for environmental and social matters, occupational health and safety, community health and safety, and risks to cultural heritage.

The management system shall be commensurate with the scope and level of risk of the Works and shall ensure the continuous presence on site of personnel possessing the necessary authority, qualifications, and resources to perform their assigned responsibilities.

Prior to mobilization, the Contractor shall establish its management structure and formally appoint, through written orders, responsible personnel, including: the Site Manager; the Environmental and Social Specialist; the Occupational Health and Safety (OHS) Specialist; the Community Liaison and Grievance Focal Point responsible for engagement with local communities, visitors, the Sulaiman-Too National Historical and Archaeological Museum Complex, and the Grievance Redress Mechanism (GRM); the Cultural Heritage Focal Point; personnel responsible for waste management, hazardous materials management, fire safety, first aid, and emergency preparedness and response; and supervisors responsible for individual work areas and specific categories of activities.

Several functions may be assigned to a single qualified individual, provided that the person possesses the necessary competence and that the workload allows all assigned responsibilities to be performed effectively. The combination of functions shall not result in inadequate site supervision or conflicts of responsibility.

The Contractor's designated Cultural Heritage Focal Point shall ensure implementation of the established procedures, maintenance of the required documentation, and coordination with the Supervision Engineer and the Sulaiman-Too National Historical and Archaeological Museum Complex. Such designation shall not replace the engagement of a qualified archaeologist, conservation specialist, architect, engineer, or other relevant expert where their

¹For the purposes of this C-ESMP, the term "construction works" is used in a general sense and encompasses all preparatory, dismantling, construction, repair, reconstruction, rehabilitation, engineering, and site improvement works предусмотренные under the Subproject, unless otherwise indicated by the context.

involvement is required under the Cultural Heritage Management Plan (CHMP), the Cultural Heritage Impact Assessment (CHIA), the design documentation, approved method statements, work permits, or decisions of the competent authorities.

The Contractor shall ensure that environmental and social requirements are fully incorporated into the Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP), the Work Execution Plan (WEP), specialized method statements, the implementation schedule, the Construction Site Organization Plan, subcontract agreements, work instructions, training and induction programs, work permit procedures, internal inspection forms, and monthly progress reports.

The Contractor's C-ESMP shall not exist as a standalone document separate from the operational construction documentation. The measures established therein shall be reflected in the sequence of construction activities, the layout of temporary facilities, the selection of equipment, access arrangements, the duration of activities, and the allocation of responsibilities among personnel.

The Contractor shall ensure that all applicable environmental and social requirements are communicated to and complied with by all subcontractors, suppliers, drivers, and temporary personnel. The relevant provisions shall be incorporated into subcontract agreements and purchase orders. Delegation of individual activities to subcontractors shall not relieve the Contractor of responsibility for their performance.

The Contractor shall also:

- ensure the availability of adequate resources, equipment, and materials required to implement the ESMP measures;
- prohibit any person who has not completed the required training and site induction from undertaking work;
- conduct routine internal inspections and daily site supervision;
- maintain all required site registers, logs, and inspection checklists;
- respond immediately to hazardous conditions, damage, chance finds, grievances, and incidents;
- record non-conformities and implement corrective actions;
- submit all required records and evidence of compliance to the Supervision Engineer and ARIS;
- update project documentation whenever works conditions or construction methodologies change; and
- maintain all required documentation throughout the construction period and include it in the final project documentation package upon completion of the Works.

Every employee of the Contractor shall have both the authority and the obligation to stop any work activity whenever an immediate threat to life or health exists, where there is a risk of damage to cultural heritage, in the event of a spill, fire, slope instability, or any other hazardous condition, or upon the discovery of a chance find.

A formal decision to continue or resume the affected activity may only be made after the cause of the work stoppage has been eliminated, the required inspections have been completed, and all necessary authorizations have been obtained.

4.3. Responsibilities of the Supervision Engineer

Supervision of compliance with the requirements of this Environmental and Social Management Plan (ESMP) shall be carried out not by a single individual but by the Supervision Engineer's multidisciplinary team, with each specialist acting within the scope of their respective competence.

Inspections may involve the Team Leader or Resident Engineer, discipline-specific engineers, the Environmental and Social Specialist, the Occupational Health and Safety (OHS) Specialist, the Design Supervision Consultant, the Cultural Heritage Specialist, and any other specialists whose participation is required by the nature of the Works.

The Supervision Engineer's team shall conduct regular verification of the Contractor's compliance with environmental, social, labor, occupational health and safety, and cultural heritage protection requirements. Such verification shall be fully integrated into the overall supervision of the Works and shall not be limited to periodic reviews of the Contractor's reports.

For hazardous and sensitive activities, Mandatory Control Points (MCPs) shall be established, after which the relevant activity may proceed only following inspection and documented confirmation of readiness. In addition, Mandatory Monitoring Points (MMPs) shall be established for activities requiring advance notification by the Contractor to the designated participants to enable their presence during the execution of the activity. Detailed procedures for the application of MCPs and MMPs are provided in Section 7.5 of this ESMP.

Prior to commencement of the Works, the Supervision Engineer shall verify:

- the completeness and applicability of the Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP) and any supplementary management plans;
 - the appointment of responsible personnel;
 - the availability of all required permits and approvals;
 - the readiness of the construction site and the adequacy of site zoning;
 - the installation of barriers and safe access routes;
 - the results of the baseline condition survey and documentation;
 - the availability of approved Work Execution Plans (WEPs) and specialized method statements;
 - the readiness of equipment, personal protective equipment (PPE), and emergency response arrangements; and
 - readiness to pass the Mandatory Control Points established under Section 7.5 of this ESMP.
- During implementation of the Works, the Supervision Engineer shall:
- conduct scheduled and unscheduled site inspections;

- verify that the Works are being carried out in accordance with the approved documentation;
- monitor implementation of the measures contained in the main compliance matrix of the Contractor's C-ESMP;
- participate in the control points established under Section 7.5 of this ESMP;
- inspect the condition of sensitive heritage assets and protective measures;
- review the Contractor's site registers, logs, and inspection checklists;
- record observations and non-conformities, establish deadlines for corrective actions, and verify their close-out;
- review the Contractor's monthly reports; and
- promptly communicate significant issues to ARIS.

Where an immediate threat to life or health, a risk of damage to cultural heritage, the absence of a mandatory permit or approval, a significant deviation from an approved construction methodology, or any other circumstance identified in this ESMP is observed, the Supervision Engineer shall require suspension of the affected activity.

Confirmation by the Supervision Engineer that a work area is ready for commencement or that a control point has been successfully closed signifies only that the applicable requirements were verified at the time of inspection. Such confirmation shall not transfer to the Supervision Engineer the Contractor's responsibility for continued compliance or for changes in site conditions occurring thereafter.

The Supervision Engineer shall not, by internal decision, substitute mandatory statutory permits, approve unapproved changes to the design documentation, or authorize deviations from the Cultural Heritage Management Plan (CHMP), the Cultural Heritage Impact Assessment (CHIA), or the approved design documentation beyond the limits of its contractual authority.

The results of inspections shall be documented using the prescribed project documentation, including inspection checklists, site registers, inspection reports, instructions, the non-conformity register, minutes of meetings, and other applicable project records.

4.4. Responsibilities of ARIS

ARIS serves as the Project Implementing Agency and is responsible for the overall management of the Subproject's environmental and social commitments through its Environmental and Social Specialists.

ARIS does not replace the Contractor in implementing site-specific mitigation measures and does not provide day-to-day supervision of the Contractor's personnel. Its role is to ensure that contractual, environmental, and social requirements are appropriately incorporated into the implementation of the Subproject, effectively monitored, and adequately reflected in Project reporting.

For the purposes of implementation of this ESMP, ARIS shall:

- ensure that the ESMP and all related environmental and social requirements are incorporated into the tender and contract documentation;
- organize the review of the Contractor's key management documents in accordance with the established procedures;
- oversee the performance of the Supervision Engineer with respect to its environmental and social responsibilities;
- conduct its own site inspections and participate in joint inspections;
- review significant and recurring non-conformities;
- monitor the implementation and close-out of corrective actions;
- coordinate the review of serious incidents and significant grievances;
- ensure effective coordination with the Sulaiman-Too National Historical and Archaeological Museum Complex, the Supervision Engineer, design consultants, specialized experts, and the relevant government authorities;
- oversee compliance with information disclosure requirements and the operation of the Grievance Redress Mechanism (GRM);
- review the periodic reports submitted by the Contractor and the Supervision Engineer;
- submit the Project information and reports required under the financing arrangements to the World Bank; and
- ensure the escalation of issues that cannot be resolved at the construction site level.

ARIS Environmental and Social Specialists shall participate in the review of the Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP), site inspections, and the investigation of incidents, grievances, and non-conformities. Where necessary, ARIS may require additional assessments, engagement of specialized experts, revision of construction methodologies, or the implementation of enhanced supervision and control measures.

Any decisions issued by ARIS that affect contractual obligations, approved design solutions, or the execution of the Works shall be documented and processed in accordance with the procedures established under the Contract.

4.5. Role of the Sulaiman-Too National Historical and Archaeological Museum Complex

The **Sulaiman-Too National Historical and Archaeological Museum Complex** (Museum Complex) is the beneficiary of the Subproject and the operator of the site where the Works are carried out. Its participation is required to ensure that construction activities are coordinated with the operational requirements of the Museum Complex, visitor access, and the cultural and pilgrimage functions of the property.

For the purposes of implementation of this ESMP, the Museum Complex shall:

- provide available information regarding the operational use of the site and the location of sensitive heritage assets;

- notify the Contractor and other relevant parties of planned museum, tourism, cultural, and religious events;
- participate in the coordination of temporary changes to site access and visitor circulation routes;
- participate in identifying areas requiring enhanced protection or restricted access;
- participate in the baseline condition survey and documentation of heritage assets and adjacent areas;
- participate in joint inspections of sensitive areas;
- report observed changes in the condition of heritage assets, visitor grievances, and violations of the established site-use regime;
- participate in the final inspection and acceptance of reinstated areas; and
- receive the documentation required for the subsequent operation and maintenance of the completed facilities.

Participation of the Museum Complex in inspections and coordination activities shall not replace or diminish the authority of the Supervision Engineer, the Design Supervision Consultant, or the competent government authorities.

The Museum Complex shall not independently approve changes to the approved design documentation, authorize the use of unapproved materials, permit interventions affecting cultural heritage assets, or authorize the resumption of activities following an event that requires a decision by a competent government authority or a qualified specialist.

Operational observations or comments made by the Museum Complex concerning visitor safety, access arrangements, or the cultural or pilgrimage use of the site shall be promptly considered by the Contractor and the Supervision Engineer. Any decisions taken and measures implemented in response shall be documented in accordance with the established project procedures.

4.6. Design Supervision and Cultural Heritage Specialists

The Design Supervision Consultant shall verify that the Works are carried out in accordance with the approved design documentation, within the scope of its contractual responsibilities and professional authority.

Where a modification to an approved design solution, material, structural element, detail, appearance, or construction methodology is considered necessary, the Contractor shall not implement such a change unilaterally. Any proposed modification shall be submitted for review by the Designer, the Design Supervision Consultant, and other authorized parties in accordance with the established approval procedures.

Qualified cultural heritage specialists shall be engaged for activities that may affect archaeological deposits and sites; historic structures and pavements; rock surfaces and petroglyphs; authentic architectural elements; mausoleums, cave structures, and sacred areas; the visual and landscape attributes of the property; and any other sensitive heritage features identified in the Cultural Heritage Management Plan (CHMP) and the Cultural Heritage Impact Assessment (CHIA).

Depending on the nature of the Works, the required specialists may include archaeologists, conservation specialists, architects, engineers, materials specialists, geologists, and other relevant experts.

Their responsibilities may include:

- participation in the baseline condition survey;
- review of specialized method statements;
- determination of required protective measures and work restrictions;
- participation in Mandatory Control Points;
- monitoring of sensitive construction activities;
- assessment of observed changes or damage to cultural heritage assets;
- development of recommendations for stabilization and conservation;
- participation in the implementation of the Chance Finds Procedure; and
- confirmation, within the limits of their authority, that the requirements for proceeding to the next stage of the Works have been satisfied.

The opinion or presence of a qualified specialist shall not substitute for any statutory permit, approval, or decision of a competent government authority where such authorization is required under the legislation of the Kyrgyz Republic.

4.6.1. Ministry of Culture and Cultural Heritage-Related Decisions

The Ministry of Culture, Information and Youth Policy of the Kyrgyz Republic participates in the review and decision-making process related to interventions affecting historical and cultural heritage assets within the scope of its authority established by legislation and applicable permits.

For sensitive activities, the Ministry's involvement may include the review of specialized methodologies, approval of deviations from approved solutions, receipt of notifications regarding incidents and chance finds, determination of required protective or investigative measures, and issuance of written decisions regarding the permissibility of resuming the Works.

Internal approvals or decisions issued by ARIS, the Supervision Engineer, or the Sulaiman-Too National Historical and Archaeological Museum Complex shall not substitute for a decision by the Ministry of Culture where such decision is required.

Prior to commencement of the relevant activity, the Contractor shall verify through the permit and approval register that all required review procedures and authorization processes have been completed.

4.7. Government Authorities

Government authorities shall perform permitting, regulatory supervision, and control functions in accordance with the legislation of the Kyrgyz Republic.

Depending on the nature and location of the Works, the responsibilities of relevant authorities may include oversight of: protection and use of historical and cultural heritage assets; construction and architectural compliance; environmental protection requirements; occupational health and safety and technical safety; fire safety and emergency response; sanitary and public health requirements; waste management; traffic management; protection of green spaces; and other regulated matters.

The requirement to obtain specific permits, approvals, or expert conclusions shall be determined by applicable legislation, approved design documentation, and the allocation of responsibilities established under the Contract.

Instructions, prescriptions, and mandatory decisions issued by government authorities shall be complied with by all parties involved in the Subproject within the scope of their respective responsibilities.

The Contractor shall ensure access to the site for authorized representatives of government authorities, provide requested documentation, and rectify identified non-compliances within the established timeframes.

4.8. Allocation of key functions

Table 4. Allocation of responsibility for the implementation of the ESMP

Party	Role in ESMP Implementation	Main Functions and Responsibilities	Key Documents and Records
Contractor under the relevant Contract	Primary party responsible for implementation of ESMP requirements	Plans, implements, and documents mitigation and management measures; manages subcontractors; ensures internal supervision, training, suspension of unsafe activities, incident notification, corrective actions, and reporting.	Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP), Work Execution Plans (WEPS), specialized method statements, appointment orders, site logs, inspection checklists, work permits, records of acceptance, photo documentation, and reports.
Subcontractors and Suppliers	Implementation of applicable requirements within assigned activities	Comply with the Contract, Contractor's C-ESMP, work instructions, and site restrictions; promptly report identified risks and incidents.	Training and induction records, access permits, delivery documentation, and waste transfer records.
Supervision Engineer	Independent verification of compliance	Reviews documentation and readiness for works; participates in Mandatory Control Points (MCPs) and Mandatory Monitoring Points (MMPs); conducts daily and regular inspections; issues non-conformity notices; requires suspension of activities where necessary; verifies close-out of corrective actions; coordinates cultural heritage matters with ARIS, the Museum Complex, and the Ministry of Culture.	Inspection checklists, inspection reports, instructions, non-conformity register, control point records, and technical conclusions.
ARIS	Overall oversight of Project commitments	Reviews key Contractor documents; supervises the performance of the Contractor and Supervision Engineer; coordinates significant incidents and grievances; ensures reporting to the World Bank and coordination with competent authorities.	Decisions, meeting minutes, official correspondence, reports, and corrective action plans.
Sulaiman-Too National Historical and Archaeological Museum Complex	Site operator and key local stakeholder	Coordinates access arrangements and operational activities; provides information on sensitive areas; participates in baseline surveys, inspections, monitoring of sacred and pilgrimage use, and handover of completed facilities.	Approved access arrangements, baseline and final condition assessment records, and joint inspection records.
Design Supervision Consultant	Verification of compliance with approved design solutions	Reviews technical deviations, materials, construction details, and proposed modifications; prevents unauthorized changes to approved design solutions.	Design supervision records, approved modifications, and revised design solutions.
Cultural Heritage Specialists	Specialized cultural heritage supervision	Conduct surveys; review construction methodologies; monitor sensitive activities; assess changes or damage; participate in chance finds procedures; and confirm progression between work stages within their competence.	Inspection reports, expert opinions, monitoring records, photographic archives, and signatures on work permits.

Party	Role in ESMP Implementation	Main Functions and Responsibilities	Key Documents and Records
Ministry of Culture, Information and Youth Policy of the Kyrgyz Republic	Competent authority for cultural heritage decisions	Reviews and approves methodologies and modifications where applicable; receives notifications; makes decisions regarding chance finds and incidents; determines conditions for resumption of Works.	Permits, written approvals, official instructions, and decisions authorizing resumption of Works.
Other Government Authorities	State regulation and supervision	Perform permitting and regulatory control functions related to construction, environmental protection, occupational health and safety, fire and sanitary safety, waste management, traffic management, and other regulated matters.	Permits, expert conclusions, inspection reports, and official instructions.

4.9. Permits, Approvals, and Internal Project Documents

During implementation of the Subproject, documents with different legal and contractual statuses shall apply. To avoid ambiguity in interpretation, a distinction shall be maintained between statutory permits, approvals, and expert conclusions issued by government authorities; permits and documents related to the Contractor's activities; design and contractual approvals; Contractor's plans and method statements; and internal work permits and control documentation.

A statutory permit, approval, or official conclusion issued by a competent authority shall not be replaced by any decision of the Contractor, the Supervision Engineer, ARIS, or the Sulaiman-Too National Historical and Archaeological Museum Complex.

An internal work permit confirms readiness to perform a specific activity within the Project management system. It does not substitute for a statutory permit, license, approval of design documentation, or any other mandatory authorization required under applicable legislation.

Prior to mobilization, the Contractor shall prepare and maintain a Permit, Approval, and Mandatory Documentation Register. The Register shall include: the title and type of document; the type of activity and work area to which the document applies; the party responsible for obtaining or preparing the document; the authority or person issuing or approving the document; the date of issue; the validity period; applicable conditions and restrictions; document storage location; status of compliance with applicable conditions; and requirements for renewal, extension, or updating.

Activities for which a required document is unavailable, expired, withdrawn, or does not correspond to the actual work area, construction methodology, or site conditions shall not commence or continue.

Table 5. Categories of permits, approvals and documents

Document Category	Purpose and Examples	Primary Responsibility	Review and Verification Procedure
Statutory permits, approvals, and conclusions related to the Subproject	Documents required for implementation of approved design solutions and interventions affecting regulated assets.	The responsible party shall be determined in accordance with the legislation of the Kyrgyz Republic and the provisions of the relevant Contract. Prior to commencement of the Works, the Contractor shall verify the availability and applicability of all required documents.	Verification by ARIS and the Supervision Engineer; where applicable, with participation of the Museum Complex, the Design Supervision Consultant, and relevant cultural heritage specialists.
Documents related to the Contractor's activities	Licenses, equipment and personnel documentation, waste transfer agreements, permits for special transportation, and other documents related to the Contractor's organization of the Works.	Contractor	Review by the Supervision Engineer and ARIS.
Design and contractual approvals	Approval of materials, construction methods, schedules, temporary arrangements, and modifications in accordance with the procedures established under the Contract.	The Contractor prepares the relevant submissions; decisions are made by the authorized party.	Documented approval shall be obtained prior to implementation of the relevant decision.
Contractor's C-ESMP and supplementary management plans	Environmental and social management plans covering OHS, waste management, traffic management, emergency response, access arrangements, and other applicable aspects.	Contractor	Review by the Supervision Engineer and ARIS; participation of the Museum Complex and specialized experts where applicable.

Document Category	Purpose and Examples	Primary Responsibility	Review and Verification Procedure
Work Execution Plans (WEPs) and specialized method statements	Define the sequence of activities and safe methodologies for performing specific operations.	Contractor	Review by the Supervision Engineer, Design Supervision Consultant, and relevant specialists within their respective areas of competence.
Work permits / Permit-to-Work documents	Confirmation that all required conditions have been fulfilled prior to commencement of hazardous or sensitive activities.	Prepared by the Contractor; reviewed and signed by the parties specified in the applicable permit form.	Required prior to commencement of each activity requiring a permit-to-work. Re-issuance or updating shall be required in case of changes to the location, methodology, equipment, personnel, or working conditions.
Control and verification records	Readiness certificates, inspection checklists, site registers, control point records, and stage completion certificates.	Contractor and Supervision Engineer within their respective responsibilities.	During execution of the Works, following completion of the controlled activity, and prior to closure of concealed works or commencement of the next construction stage.

4.10. Coordination and Information Exchange

Effective implementation of this ESMP requires regular exchange of information among the Contractor, the Supervision Engineer, ARIS, the Sulaiman-Too National Historical and Archaeological Museum Complex, and relevant specialized experts.

Prior to commencement of the Works, an initial coordination meeting shall be conducted to review and agree upon: the organizational structure of the participating parties; allocation of roles and responsibilities; the list of documents required prior to mobilization; work area boundaries and the sequence for opening construction zones; sensitive areas and restricted zones; procedures for approval of construction methodologies; Mandatory Control Points and Mandatory Monitoring Points; procedures for notification of incidents and chance finds; the grievance management procedure; inspection, monitoring, and reporting formats; and contact details of responsible personnel.

During the construction period, ESMP implementation matters shall be addressed through regular progress and coordination meetings. The Contractor shall provide information on: planned activities for the following reporting period; sensitive and high-risk operations; changes to the approved schedule or construction methodologies; status of permits, approvals, and method statements; identified non-conformities; incidents and grievances; implementation of corrective actions; and the need for involvement of specialized experts.

Information concerning an immediate threat, damage to cultural heritage, a chance find, a serious incident, fire, spill, slope instability, or a significant conflict shall be communicated without delay and shall not be postponed until the next scheduled meeting or monthly report.

Where an issue cannot be resolved at the construction site level or falls outside the authority of the personnel present, it shall be referred to ARIS for coordination and further review. Until a decision is reached, activities affected by the unresolved issue shall not proceed where there is a risk of adverse impacts or non-compliance with mandatory requirements.

The responsibility framework established in this section provides the basis for verification of the Contractor's readiness to commence the Works. The following section establishes the documentation, organizational measures, and conditions that shall be fulfilled prior to mobilization and before commencement of specific categories of activities.

5. REQUIREMENTS PRIOR TO MOBILIZATION AND COMMENCEMENT OF WORKS

5.1. General Procedure for Authorization to Commence Works

Implementation of the requirements of this ESMP begins before the Contractor mobilizes to the construction site. At this stage, the Contractor shall establish its management structure, identify applicable permits and approvals, define risk management procedures, establish internal control arrangements, and provide the resources required to implement the prescribed environmental and social management measures.

The Contractor's readiness shall not be assessed solely based on the availability of individual documents. Submitted plans, layouts, and methodologies shall correspond to the actual scope of Works, intervention areas, equipment to be used, sequence of activities, and the operational conditions of the Museum Complex. Prior to commencement of the Works, the Contractor shall also demonstrate practical site readiness, including establishment of work area boundaries, installation of fencing and signage, organization of safe access routes, preparation of emergency response equipment and arrangements, and completion of required worker training.

Taking into account the differences between general Contract requirements and the specific conditions of individual work areas, authorization to commence Works shall be implemented through a staged process. First, the Contractor's organizational readiness for mobilization shall be confirmed. Subsequently, readiness of each individual work area shall be verified. Prior to execution of hazardous or sensitive activities, the Contractor shall demonstrate availability of specialized methodologies, protective measures, and the required work permit.

Works shall not commence where any applicable requirement is absent or where the relevant document or measure does not correspond to the actual conditions of the activity, including the Contractor's applicable Site-Specific Environmental and Social Management Plan (C-ESMP), Occupational Health and Safety Plan, Work Execution Plan (WEP), specialized method statement, work permit, mandatory statutory permit, or required protective measure.

Table 6. Stages in confirming the contractor's readiness to carry out the work

Stage	Subject of Verification	Verification Outcome
Organizational readiness prior to mobilization	Contractor's management system, appointed responsible personnel, key management plans, permits and approvals register, control procedures, training arrangements, and reporting system.	Written confirmation of the Contractor's readiness to mobilize within the approved scope of Works.
Readiness of an individual work area	Work boundaries, baseline condition, fencing, access routes, temporary infrastructure, emergency access arrangements, required documents, and protective measures.	Approved site readiness certificate or completed inspection checklist.
Readiness for a specific hazardous or sensitive activity	Work Execution Plan (WEP) or specialized method statement, risk assessment, personnel qualifications, equipment readiness, applicable control points, and presence of required specialists.	Work permit or other approved authorization form confirming permission to commence the activity.
Readiness to proceed to the next stage of Works	Condition of the work area after completion of the activity, absence of damage, fulfillment of control requirements, and closure of identified non-conformities.	Documented confirmation authorizing continuation of Works.

A positive outcome of a particular verification does not constitute an unlimited authorization to perform all subsequent Works. Where there is any change in the work area, methodology, equipment, sequence of activities, personnel composition, or site conditions, readiness shall be reassessed to the extent affected by such changes.

5.2. Organizational Readiness Prior to Mobilization

Prior to physical mobilization, the Contractor shall establish the management system required for implementation of this ESMP. The structure and scope of this system shall be proportionate to the nature and level of risks associated with the Works; however, in all cases it shall ensure the availability of responsible personnel, applicable management plans, operational procedures, necessary resources, and monitoring and control arrangements.

The Contractor's primary management document is the Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP). It shall adapt the requirements of this ESMP to the actual scope of the Contract and demonstrate how the required measures will be implemented at specific work locations. A simple reproduction of this document without reference to the actual site conditions, work schedule, construction methods, equipment, and assigned responsibilities shall not be considered sufficient.

The Contractor's C-ESMP shall be developed in conjunction with the Contractor's construction documentation. Its provisions shall be coordinated with the construction schedule, Work Execution Plan (WEP), site layout plan, traffic and access management arrangements, occupational health and safety plans, emergency response procedures, and waste management plans. Environmental and social measures shall not be presented as separate commitments that are not incorporated into the actual methods of carrying out the Works.

Prior to mobilization, the Contractor shall also identify all documents for which preparation or obtaining is assigned to the Contractor. Permits and approvals falling under the responsibility of the Employer shall be provided to the Contractor, or their availability shall be confirmed before commencement of the relevant activities. The Contractor

shall verify that such documents are valid, applicable to the actual work area, and do not contain conditions that have not been reflected in the Contractor's plans and methodologies.

Table 7. Documents and organizational requirements prior to mobilization

Document or Requirement	Minimum Requirements
Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP)	Adaptation of the requirements of this ESMP to the actual facilities, work areas, schedule, construction methods, equipment, personnel, and subcontractors; description of internal control, documentation, reporting, and corrective action procedures.
Organizational Structure and Appointments	Appointment orders designating the Site Manager and responsible persons for environmental and social issues, Occupational Health and Safety (OHS), cultural heritage, community relations, first aid, fire safety, waste management, and emergency response.
Register of Permits, Approvals, and Mandatory Documents	List of Employer's and Contractor's documents indicating the responsible party, scope of applicability, validity period, conditions, and current status.
Construction Schedule and Work Sequence	Division of Works by facilities and work areas; identification of sensitive, hazardous, and noisy activities; consideration of time required for surveys, approvals, control points, and public information activities.
Construction Site Organization and Zoning Plan	Identification of work zones, prohibited and restricted access areas, sensitive locations, routes for equipment, workers, and visitors; unloading areas; storage areas; temporary waste accumulation locations; welfare facilities; and emergency access routes.
Occupational Health and Safety Plan	Risk management system for workers, risk assessment procedures, work permit and authorization procedures, use of Personal Protective Equipment (PPE), training and briefing requirements, medical arrangements, and control of hazardous activities.
Emergency Preparedness and Response Plan	Procedures for response to fire, earthquake, rockfall, collapse, spill, injury, water ingress, damage to cultural heritage, chance finds, and other relevant emergency scenarios.
Waste and Hazardous Materials Management Plan	Classification, segregation, temporary storage, recording, and transfer of waste; procedures for handling paints, solvents, contaminated materials, and suspected asbestos-containing materials (ACM); prohibition of fuel storage and equipment refueling within the Museum Complex territory; measures for prevention and response to fuel and oil leaks from equipment; availability of Safety Data Sheets (SDS) for applied materials and spill containment equipment.
Traffic and Access Management Plan	Supply and construction traffic routes, speed restrictions, unloading locations, use of flagmen, safe pedestrian detours, accessibility for visitors with reduced mobility, and access for emergency services.
Contractor's Labor Management Procedures	Formal employment of workers, age verification, prohibition of child and forced labor, non-discrimination, Code of Conduct, worker grievance mechanism, and confidential complaint submission procedure.
Information Disclosure and Grievance Management Plan	Contact persons, grievance submission channels, procedures for registration and referral of complaints, installation of information boards, and notification of temporary access restrictions.
Training Program and Competency Matrix	List of induction, periodic, and task-specific training; qualification requirements for workers and equipment operators; training on ESMP requirements, OHS, cultural heritage protection, chance finds, conduct requirements, and emergency response.
Subcontractor Management Procedure	Inclusion of applicable requirements in subcontract agreements; verification of qualifications and documentation; training of subcontractor personnel; internal monitoring and retention of Contractor responsibility.
Internal Monitoring and Reporting Forms	Daily inspection checklists, logs, registers for waste, training, permits-to-work, non-conformities, grievances, and incidents, as well as the monthly reporting format.
Construction Vibration Management Plan	Prepared and submitted for review in advance and, in all cases, prior to commencement of Works capable of causing significant vibration impacts. The Plan shall include baseline surveys of potentially affected assets, monitoring points and measurement methods, trial operations, equipment and calibration records, monitoring frequency, warning and threshold values, procedures for immediate notification, and alternative construction methods.
Cultural Heritage Risk Management System	Sensitivity and zoning maps; list of specialized method statements; permit-to-work system; daily condition and protection logs for cultural heritage assets; documentation archiving procedures; schedule for involvement of specialized experts and the Ministry of Culture.
Object-Specific Plans and Registers	For the Cave Museum — water, humidity, and rock surface monitoring plan; for the Mountain Trail — control of authentic elements, slopes, and access; for the Bronze Age Settlement — archaeological supervision; for the Asaf ibn Burhiya Mausoleum — sacred access management regime.

The content of individual documents may be combined within the Contractor's Site-Specific Environmental and Social Management Plan (C-ESMP), provided that all applicable issues are addressed in sufficient detail and the information can be directly used for the organization and control of the Works.

Review of Contractor's documents shall not be limited to verification of their availability. Within their respective functions, the Supervision Engineer and ARIS shall assess their compliance with this ESMP, related documents, and the actual conditions of the Subproject. Any comments or deficiencies identified shall be addressed before commencement of the Works to which they relate.

Review or approval of any document shall not transfer the Contractor's responsibility for the completeness, technical justification, and practical implementation of the proposed measures to the Supervision Engineer, ARIS, or the Museum Complex.

5.3. Construction Site and Individual Work Area Readiness

Following confirmation of overall organizational readiness, the Contractor may proceed with preparation of the construction site within the approved scope. Prior to commencement of major demolition, earthworks, construction, repair, or engineering activities, readiness shall be confirmed separately for each work area.

Phased verification is particularly important for this Subproject, as Works may be carried out simultaneously at several geographically separated facilities that differ in terms of access conditions, sensitivity, and nature of intervention. Readiness of one entrance zone does not constitute readiness of the Mountain Trail, the Cave Museum, or an archaeologically sensitive area.

Prior to opening a work area, the Contractor shall verify its boundaries on site and ensure clear separation between the active work zone, restricted access areas, and areas that continue to be used by the Museum Complex and visitors. Fencing shall correspond to the level and nature of the identified risk and shall prevent accidental access to hazardous areas. The use of warning tape alone shall not be considered an adequate control measure for open excavations, work at height, equipment movement zones, or other areas presenting a direct risk.

Particular importance shall be given to baseline documentation of site conditions prior to commencement of intervention. Such documentation is required to establish the initial condition of cultural heritage assets, surfaces, structures, rock formations, utility networks, vegetation, and property located within the potential impact area. The baseline record shall enable an objective comparison of the condition of assets before, during, and after the Works.

Table 8. Conditions for the site to be ready for work to commence

Readiness Condition	Required Outcome
Definition of boundaries and zoning	Work boundaries are established on site; sensitive areas, prohibited zones, areas with restricted equipment use, and locations accessible to visitors are identified and clearly marked.
Baseline condition survey	Photo and, where necessary, video documentation is completed; the condition of assets is described and existing cracks, damages, deformations, and other relevant features are mapped.
Verification of utilities and concealed structures	The location of existing utilities, drainage systems, cables, pipelines, foundations, and other elements that may be affected by the Works is verified.
Pre-construction biodiversity survey	Prior to demolition, clearing, earthworks, and building interventions, trees, shrubs, roofs, niches, and other potential animal habitats are inspected.
Fencing and access management	Stable fencing, warning signs, and information boards are installed; safe pedestrian detours and controlled access points are established.
Traffic movement and unloading arrangements	Equipment routes, unloading areas, and parking locations are defined; flagmen and protection measures for public movement are provided where required.
Temporary infrastructure	Offices, welfare facilities, toilets, storage areas, eating facilities, and other temporary structures are located only in approved areas.
Waste management readiness	Clearly marked waste containers are provided; temporary storage areas are established; contracts and procedures for documented waste transfer are in place.
Chemical materials management readiness	Protected storage areas, secondary containment, Safety Data Sheets (SDS), labeling, and spill containment equipment are provided.
Occupational health and safety and emergency preparedness	Personal Protective Equipment (PPE), first aid kits, fire extinguishing equipment, communication systems, lighting, evacuation routes, and applicable rescue equipment are available.
Personnel preparation	Workers have completed induction and relevant task-specific training; qualifications and required authorizations are confirmed.
Construction documentation	Current Work Execution Plans (WEPs), risk assessments, work instructions, and specialized method statements are available for planned activities.
Information disclosure	The Museum Complex and affected users are informed about the schedule, restrictions, safe routes, and grievance submission channels.

Readiness Condition	Required Outcome
Readiness documentation	The work area is inspected by the Contractor and the Supervision Engineer; results are documented through a readiness certificate or inspection checklist.
Baseline survey for vibration-related Works	Prior to commencement of vibration-generating activities, all potentially affected buildings, structures, rock surfaces, and historical elements are jointly surveyed; drawings, photographs, and high-resolution video records are prepared.
Readiness to implement cultural heritage protection requirements	For sensitive areas, an approved specialized method statement and work permit are available; Mandatory Control Points (MCPs) / Mandatory Monitoring Points (MMPs), stop-work criteria, supervising specialists, and the applicable coordination route with the Ministry of Culture are defined.
Visual and sacred compatibility	Placement of temporary facilities, fencing, lighting, signage, generators, and storage areas is reviewed to ensure that views are not obstructed, visual clutter is minimized, and sacred/pilgrimage use is not disrupted.

The pre-construction biodiversity survey shall be conducted shortly before the actual commencement of Works to ensure that its findings reflect the current condition of the site. If an active nest, bat roost, other wildlife shelter currently in use, or sensitive plant species is identified, Works in the relevant area shall not commence until the appropriate course of action has been determined by a qualified specialist.

If a work area has remained closed for an extended period after the initial inspection, or if conditions have significantly changed due to rainfall, rockfall, damage to fencing, visitor activities, or other factors, a repeated inspection shall be carried out prior to recommencement of Works.

5.4. Baseline Condition Documentation

Baseline condition documentation shall be completed prior to demolition, earthworks, installation of scaffolding and temporary structures, movement of heavy equipment, and other activities that may affect surrounding structures, surfaces, or cultural heritage assets.

The scope of baseline documentation shall be determined based on the nature and potential impact zone of the planned Works. It may include: general views of the work area and its surroundings; condition of façades, walls, retaining structures, stairs, and surface coverings; existing cracks, spalling, deformations, signs of moisture penetration, and settlement; condition of rock surfaces, petroglyphs, and archaeological areas; condition of utilities and drainage systems;

- condition of vegetation; condition of routes, fencing, landscaping elements, and property belonging to the Museum Complex; locations intended for equipment movement, unloading, and material storage.

Photographs shall be dated, referenced to a plan or layout, and taken from positions that allow the same views to be repeated during and after completion of the Works. Where cracks or other localized defects are identified, they shall be marked and described in sufficient detail to allow assessment of any potential changes.

Baseline documentation shall be reviewed by the Contractor, the Supervision Engineer, and, for sensitive areas, representatives of the Museum Complex, the Designer's Supervision, or a cultural heritage specialist. The results shall be documented through a formal record and retained as part of the work area documentation.

Baseline documentation shall not be treated as a formal photographic inventory only. It shall be used for subsequent monitoring, review of grievances, assessment of potential damage, and acceptance of restored areas.

5.5. Requirements Prior to Hazardous and Sensitive Operations

Certain types of Works shall not be authorized solely based on general site readiness. Prior to their commencement, a safe and acceptable work methodology shall be established, specific protective measures shall be defined, and the readiness of personnel and equipment shall be confirmed.

Such operations include activities: carried out near cultural heritage assets, archaeological areas, historical structures, or rock surfaces; involving demolition, drilling, anchoring, cutting, impact, or vibration-generating activities; capable of affecting drainage conditions, moisture regimes, or structural stability; performed at height, on slopes, along mountain trails, or in areas with potential rockfall hazards; conducted in caves, confined spaces, or restricted-access areas; involving hot works, electrical works, or lifting operations; involving opening existing structures and potential contact with asbestos-containing materials (ACM) or other hazardous materials; requiring temporary closure of routes or significant changes to visitor access; associated with any other increased environmental, social, technical, or cultural heritage risks.

The list of such operations shall be further defined by the Contractor in the Contractor's C-ESMP and construction schedule. The Supervision Engineer, ARIS, Designer's Supervision, or relevant specialist may require application of a special approval procedure for other activities where actual site conditions indicate an increased level of risk.

Table 9. Additional conditions prior to the commencement of hazardous and sensitive operations

Type of operation or condition	Documents and measures required prior to commencement
Demolition works near preserved structures and assets	Method Statement or special procedure, demolition sequence, baseline documentation, protection measures for preserved elements, material removal procedure, and work permit.
Earthworks in archaeologically sensitive areas	Approved methodology, defined boundaries and excavation depth, gentle excavation methods, chance finds procedure, required archaeological supervision, and work permit.

Type of operation or condition	Documents and measures required prior to commencement
Drilling, anchoring, cutting, impact and vibration works	Justification of the method and equipment, impact assessment, limitations, condition and vibration monitoring where applicable, stop-work criteria, and written authorization.
Works near historic and rock surfaces, petroglyphs and authentic elements	Baseline documentation, physical protection measures, prevention of contact with equipment and materials, special methodology, and involvement of a heritage specialist.
Waterproofing, drainage and works affecting water movement	Existing and temporary drainage scheme, protection measures for assets, procedure for responding to leaks and water ingress, and monitoring before and after the operation.
Works at height, on slopes and mountain trails	Risk assessment, safe access arrangements, scaffolding or working platforms, fall protection systems, rescue plan, weather and slope stability monitoring, and work permit.
Works in caves and confined spaces	Atmospheric testing where applicable, ventilation, lighting, communication arrangements, standby personnel, access control, rescue plan, and special work permit.
Hot works	Area preparation and protection, fire extinguishing equipment, control of combustible materials, post-work fire watch, and hot work permit.
Lifting operations	Lifting plan, inspection of equipment and lifting accessories, qualified personnel, exclusion zone arrangement, and approved movement routes.
Works involving suspected ACM or hazardous materials	Suspension of disturbance activities, material assessment, special removal procedure, required PPE, packaging, labeling, and documented transfer.
Temporary changes to visitor and pilgrim access	Approved diversion scheme, accessibility assessment, barriers, signage, prior notification, and preservation of emergency access.
Night works or other non-standard works	Justification of necessity, assessment of noise, lighting, safety and impacts on the museum complex operation, and coordination with NIAHC and Technical Supervision.
Temporary structures and scaffolding in sensitive areas	Separate placement scheme, fixing methods preventing damage to historic/rock surfaces, visual impact assessment, stability protection measures, and coordination with NIAHC, Technical Supervision, Designer's Supervision and the Ministry of Culture where applicable.
Transport routes and material storage within cultural heritage areas	Special methodology defining equipment weight and dimension restrictions, protection of surfaces, prohibited zones, unloading areas, manual transportation requirements in sensitive areas, and prohibition of storage near historic and rock elements.
Emergency stabilization of a cultural heritage asset or slope	Pre-approved emergency protection procedure, authority for stopping works, temporary reversible measures, notification of heritage specialists and the Ministry of Culture, and continuous documentation until a final decision is made.
Works during religious events, peak visitation periods or quiet hours	Approved schedule, separation of visitor flows, noise and vibration restrictions, alternative routes, and presence of responsible persons for access and safety management.

The special methodology shall describe not only the technology and sequence of the operation, but also the conditions for its safe commencement and completion. It shall specify the exact location and boundaries; scope and sequence of works; equipment and materials; composition and qualifications of personnel; environmental, social, labor, and cultural heritage risks; protective measures; hold points and witness points; required presence of specialists; monitoring parameters; immediate stop-work criteria; response procedures; documents confirming completion; and conditions for transition to the next stage.

For works in sensitive areas, the methodology shall be prepared taking into account the CHMP (Cultural Heritage Management Plan), HIA (Heritage Impact Assessment), and approved design documentation.

5.5.1. Construction Vibration Planning and Control

Prior to commencement of such works, a baseline technical condition survey shall be carried out for potentially affected buildings, structures, rock surfaces, and cultural heritage assets, including mapping of existing defects and photographic and, where necessary, video documentation. The survey shall be completed sufficiently in advance to allow its results to be reviewed prior to the start of vibration-generating works.

A Construction Vibration Management Plan shall be submitted for review and approval in all cases before the commencement of works capable of generating significant vibration impacts. The Plan shall define monitoring locations, equipment and calibration requirements, trial operations, recording frequency, warning and limit values, immediate notification procedures, and alternative construction methods.

For operations generating significant vibration, continuous recording of the maximum peak particle velocity shall be provided at approved monitoring points, with a recording interval not exceeding one minute. Numerical threshold values shall not be established independently by the Contractor but shall be determined based on an assessment by a structural engineer and a cultural heritage specialist and approved through the established procedure.

When the warning threshold is approached, the intensity of vibration impact shall be reduced or the work method shall be modified. Upon reaching the limit threshold, identification of new cracks, enlargement of existing cracks, spalling, deformation, or receipt of a complaint indicating possible vibration impact, the relevant operation shall be immediately suspended.

Resumption of works shall only be permitted after analysis of monitoring results, inspection of potentially affected assets, implementation of required corrective measures, re-verification of readiness, and documented closure of the relevant mandatory hold point.

5.6. Permit-to-Work

A Permit-to-Work is an internal management document confirming that the established conditions required for the commencement of a specific hazardous or sensitive operation have been fulfilled.

A Permit-to-Work shall be issued after verification of: availability of applicable governmental and project approvals; approved methodology or Method Statement; completed baseline documentation; readiness of the work area and protective measures; qualification and briefing of personnel; proper condition of equipment; availability of PPE and emergency response resources; presence of specialists required by the methodology; readiness for monitoring and documentation.

The Permit-to-Work form shall include a description of the operation, location and validity period, a checklist of verified conditions, applicable restrictions, hold points, stop-work criteria, and signatures of authorized participants.

The Permit-to-Work shall be valid only for the specified operation, work area, method, equipment, responsible personnel, and period. A new permit or documented re-issuance shall be required in case of: changes to work boundaries or scope; changes in technology or equipment; replacement of the responsible supervisor; significant interruption of works; changes in weather or site conditions; identification of a new risk; an incident, damage, or work stoppage; expiration of the established validity period.

The Permit-to-Work does not replace governmental permits, approval of design changes, licenses, or any other mandatory documents.

5.7. Worker Training and Authorization

Prior to being permitted to access the site, each worker shall undergo an induction briefing covering the applicable requirements of this ESMP and the Contractor's ESMP (C-ESMP).

The induction training content shall take into account the specific characteristics of the Suleiman-Too site and shall include: permitted access boundaries; the significance and protection regime of cultural heritage assets; prohibition of unauthorized intervention, removal or relocation of objects, and graffiti; chance finds procedure; rules of interaction with visitors, pilgrims, and NIAHC personnel; Code of Conduct; key environmental requirements; waste management and spill prevention; occupational health and safety requirements and use of PPE; fire safety and emergency response procedures; procedures for reporting hazards, incidents, complaints, or damage; the right and obligation to stop work in case of an immediate threat.

Prior to commencing hazardous or sensitive operations, targeted training shall be conducted based on the approved methodology, identified risks, hold points, stop-work criteria, and response actions in case of deviations.

Only workers whose qualifications and required certificates have been verified and documented shall be permitted to perform specialized works. Transfer of a worker to another operation, changes in the work method, or involvement of a new subcontractor shall require relevant additional training.

Records of training and briefings shall be maintained, including the topic, date, instructor, participants, and results of understanding verification.

5.8. Review of Documents and Resolution of Comments

The Contractor shall submit documents for review sufficiently in advance, taking into account the time required for review, correction of comments, and involvement of relevant specialists.

Documents shall not be submitted immediately before the planned commencement of an operation if their content requires comprehensive technical, environmental, social, or cultural heritage review.

Comments received shall be incorporated into the updated version of the document. Upon resubmission, the Contractor shall demonstrate how each comment has been addressed or provide justification for the proposed solution.

Commencement of works before completion of the review of an applicable document shall not be permitted. Conditional approval may only be applied to minor issues that do not affect safety, cultural heritage, mandatory permits, or the acceptability of the proposed method. Conditions of such approval shall be clearly specified and completed within the established timeframe.

Documents shall be maintained in their current approved versions. Obsolete versions shall be removed from use or clearly marked as invalid.

5.9. Changes in Conditions and Reassessment of Readiness

The Contractor's readiness and the readiness of work areas shall be maintained throughout the entire construction period. Initial approval does not relieve the Contractor from the obligation to reassess measures when conditions change.

A repeated readiness assessment shall be conducted if: design solutions are modified; site boundaries or work sequences are changed; another method, material, or equipment is proposed; a new subcontractor is engaged; the composition of responsible specialists changes; previously unknown utilities, structures, or sensitive elements are identified; an incident, damage, chance find, or significant non-compliance occurs; a complaint is received indicating that the existing measures are insufficient; weather conditions, slope stability, water ingress, or other factors change the level of risk; works resume after a prolonged interruption.

Until completion of the reassessment, the relevant operation shall be suspended if the change may affect human safety, the environment, access conditions, or the condition of cultural heritage assets.

The results of the repeated assessment shall be reflected in updated documents, a readiness checklist, or a new Permit-to-Work.

5.10. Confirmation of Authorization to Commence Works

The decision on readiness shall be documented prior to the commencement of the relevant stage or operation. Depending on the subject of verification, the following forms may be used: letter of approval of the Contractor's ESMP (C-ESMP); construction site readiness certificate; work area readiness checklist; joint inspection report; record confirming completion of a mandatory hold point; Permit-to-Work; permit or conclusion issued by an authorized government authority; other forms specified by the Contract. The result of the verification shall be clearly stated: the work area or operation is ready to commence; commencement is permitted after completion of specifically identified conditions; the work area or operation is not ready to commence.

Absence of a response, comments, or a representative of an individual participant shall not be considered an automatic authorization to commence works.

The Contractor shall ensure the retention of all readiness documentation and include information on issued permits, identified restrictions, and changes in the monthly reports.

Completion of the preconditions establishes the basis for implementation of specific construction-stage measures. These measures, their implementation procedures, and verification requirements are established in the following section.

6. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

6.1. Purpose and Principles of Application

This section establishes mandatory measures for managing environmental and social risks during the construction phase and the subsequent operation of the rehabilitated facilities. Construction-phase measures shall be implemented by the Contractor within the scope of its contractual obligations, while operation-phase measures shall be implemented by the NHAMC or another designated operating organization within the scope of its functions and responsibilities.

During the construction phase, the measures set out in this section shall be implemented in conjunction with the access conditions established under Section 5; the Contractor's C-ESMP; the Cultural Heritage Management Plan; the Cultural Heritage Impact Assessment; the approved design and cost-estimate documentation; method statements; the Occupational Health and Safety Plan; and other applicable plans, permits, and approvals.

During the operation phase, the measures shall be implemented in conjunction with the as-built and operational documentation handed over upon completion, instructions and recommendations for the operation and maintenance of equipment and engineering systems, maintenance schedules, emergency preparedness and response procedures, the Cultural Heritage Management Plan, and other documents applicable to the operation and maintenance of the respective facilities.

The measures set out in this section are based on a sequential approach to impact management: prevention of impacts through the selection of appropriate boundaries, methods, and sequencing of works; minimization of impacts that cannot be fully prevented; restoration of disturbed areas and elimination of consequences; and also, application of additional and correctional measures when unforeseen conditions are identified or when initially provided solutions prove insufficient.

Priority shall be given to impact avoidance. Compensation or restoration shall not be used as justification for carrying out works or operating facilities in a manner where a less risky alternative is available.

Table 10 establishes the mandatory management measures for the construction phase and defines the requirements for their implementation, responsibilities, oversight, and coverage of associated costs. Table 11 establishes the mandatory environmental and social risk management measures for the operation phase following the handover of the facilities to the NHAMC or another designated operating organization.

All standard costs associated with implementation of the measures included in Table 10, including personnel, temporary barriers and signage, cleaning, protective equipment, training, documentation, waste management, spill prevention, monitoring, and site restoration, shall be included in the Contract price unless otherwise explicitly provided in the tender and contractual documentation.

6.2. Specification of Measures by the Contractor

Prior to commencement of works at each site, the Contractor shall determine the applicability of the measures included in Table 10 and incorporate them into the Contractor's ESMP (C-ESMP), Method Statements, work instructions, and control forms.

For each applicable measure, the Contractor shall specify: the asset and work area where the measure applies; the type and sequence of works; the actual method of implementation; the equipment and machinery to be used; the responsible person; the timeframe and frequency of implementation; required resources; the form of documentary evidence; work stoppage conditions; the procedure for verification and closure of the relevant stage.

A measure may be considered non-applicable only where justification is provided based on the actual absence of the relevant type of work or risk. The justification for non-applicability shall be recorded in the Contractor's ESMP (C-ESMP) and reviewed by the Technical Supervision.

If the work location, method, equipment, materials, sequence of activities, or site conditions change, the applicability and content of the measures shall be reassessed prior to continuation of the affected operation.

6.3. Mandatory control measures

The mandatory management measures applicable during the construction phase are set out in Table 10. For each measure, the key risks and impacts, mandatory actions, implementation period, institutional responsibility, means of coverage, and the procedure for verification and monitoring of implementation are defined.

The "Measure Coverage" column specifies how the respective measure is to be implemented. Permanent physical measures provided for in the approved design documentation and the Bill of Quantities (BoQ) are identified as "included in the BoQ." Temporary, organizational, protective, monitoring, and other measures required for the proper and safe organization of works shall be implemented by the Contractor as part of the contract price, regardless of whether a separate item is included in the BoQ.

Where specific functions are performed by technical, design, or other specialized supervision personnel or by specialized experts under separate Project contracts, such functions shall be carried out in accordance with the terms and conditions of the respective contracts.

The specified means of coverage of a measure shall not alter the allocation of responsibility for its actual implementation. The Contractor remains responsible for fulfilling all applicable requirements set out in Table 10 within the scope of its contract, unless the relevant function is expressly assigned to another Project participant by the design or contractual documentation.

Table 10. Environmental and Social Management Plan for the Construction Phase a

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-01	Organization and maintenance of the construction site	Unauthorized access, littering, damage to surfaces and sensitive areas	Work areas, equipment, materials, waste and temporary structures must be located only within the approved boundaries. Install stable barriers and signs; keep passageways and emergency access routes clear; and clear the site daily. It is prohibited to place any of these near historic structures, rock surfaces, petroglyphs, trees or on visitor routes.	Before the site opens and on an ongoing basis	For the purposes of this C-ESMP, the term “construction works” is used in a general sense and encompasses all preparatory, dismantling, construction, repair, reconstruction, rehabilitation, engineering, and site improvement works предусмотренные under the	At the Contractor’s expense, as part of the contract price.	Site plan, readiness certificate, daily log, photographs; inspection by technical supervision and NHA-MC regarding access.
M-02	Delivery of materials and vehicle traffic	Traffic accidents, injuries, dust, exhaust fumes, noise, damage to surfaces and obstruction of access	Use agreed routes and unloading points; observe speed limits; use signalmen; monitor reversing maneuvers; schedule deliveries outside peak hours. Cover loads containing loose materials. Vehicles must have valid roadworthiness certificates and fully functional exhaust systems; prolonged idling is prohibited.	With every delivery and movement of materials	Contractor — implementation; Technical Supervision — oversight; NHAMC — access coordination; ARIS — overall supervision.	At the Contractor’s expense, as part of the contract price. и транспортных расходов	Traffic plan, delivery log, equipment documentation, daily log, photographs.
M-03	Demolition works	Collapse, dust, noise, waste, damage to original features and hazardous materials	Carry out the work in accordance with the approved maintenance programme/special methodology and step-by-step sequence. De-energise/secure the networks; physically protect the elements to be preserved; use manual/low-vibration methods in sensitive areas; prevent uncontrolled collapse and the discharge of materials. Before commencing excavation, inspect the archaeological site and the cultural heritage elements to be preserved.	Before and during dismantling	Contractor — implementation; Technical and Author’s Supervision — oversight; Relevant Specialist — as applicable; ARIS — overall supervision.	Dismantling works — included in the BoQ; protective and organizational measures — at the Contractor’s expense as part of the contract price.	Procedures, approval, initial condition report, log, photographs; technical/design and specialist supervision.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-04	Earthworks and trenches	Damage to archaeological strata, utility networks, falls, erosion, dust	Specify the extent, boundaries and depth of the works; in sensitive areas, use manual/minimally invasive methods and ensure archaeological supervision. Fence off, illuminate and provide access routes to trenches; deposit excavated material in agreed locations; protect drainage and tree roots; follow the procedure for handling chance finds; and reinstate surface coverings.	Before and during earthworks	Contractor — implementation; Technical Supervision — oversight; Archaeologist/Cultural Heritage Specialist — as applicable; ARIS — overall supervision.	Major earthworks and restoration works as per the project are included in the total cost of the works; temporary protective measures are to be borne by the contractor	Maintenance plan/procedures, approval, utility network diagrams, concealed works certificates, photographs.
M-05	Dust and air quality	Impact of dust and emissions on staff, visitors, exhibits and sites	Moisten surfaces to prevent contaminated runoff; cover loose materials and waste; use localized dust extraction during cutting; limit speed; clear roads; use equipment in good working order; prohibit burning. In windy conditions, in the event of complaints or if dust is visibly spreading, step up measures or halt operations.	During dust-generating works	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision	At the Contractor's expense, as part of the contract price.	Daily log, photographs, complaints log, measurements as required.
M-06	Noise	Discomfort, disruption to museum/pilgrimage activities, impact on wildlife	Noisy work should be carried out between 07:00 and 18:00 and in accordance with the agreed schedule; take into account quiet hours, religious events and peak visitor times. Use equipment in good working order and noise barriers in sensitive areas, and avoid noisy work at night. In the event of complaints, carry out an assessment and adjust the method or schedule accordingly.	During noisy works	Contractor — execution; technical supervision — monitoring; NHAMC — coordination of operations; ARIS — overall supervision	At the Contractor's expense, as part of the contract price.	Schedule, notifications, log, complaints, measurements as required.
M-07	Water, drainage and wastewater	Flooding, erosion, contamination, and dampness affecting cultural heritage and caves	Repair any leaks; protect temporary pipelines; organize drainage until the sites are excavated. Do not direct water towards historical, rocky or archaeological sites. Prohibit the discharge of cement slurry and wash water onto the ground, into irrigation channels or into the stormwater drainage system. Gradually maintain the existing water diversion system and enclose open channels. Test the networks before backfilling.	On an ongoing basis and until the utility networks are connected	Contractor — execution; technical supervision — monitoring; specialist — for sensitive sites; ARIS — general supervision	Permanent networks, water disposal, irrigation and drainage are included in the total cost of the project; temporary water disposal and pollution prevention are to be borne by the contractor	Diagrams, inspection log, test reports, photographs.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-08	Fuel, lubricants and chemicals	Spills, fire, soil/water contamination, vapors	The stockpiling and storage of fuel on site is prohibited; refuelling, washing and maintenance must be carried out off-site at specialised facilities. Other chemical materials must be stored in the minimum quantities required for operations, in sealed, labelled containers with secondary containment and accompanied by safety data sheets. Spills must be contained and documented immediately.	During delivery, storage and use	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision	At the Contractor's expense, as part of the contract price.	Register of materials and data sheets, inspection/spillage log, handover documents for contaminated materials.
M-09	Construction and household waste	Contamination, blocked drainage, fire, visual impact	Before work commences, identify waste streams and recipients. Separate mineral, household, organic, liquid, chemical and hazardous waste; use labelled/colored containers; ensure temporary storage areas are fenced off and protected against being washed away. Clear up daily. Incineration and unauthorized disposal are prohibited. Confirm the transfer with documentation; reuse safe inert materials only after approval has been granted.	At all times; removal as waste accumulates	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision; government bodies — within their remit	At the Contractor's expense, as part of the contract price.	Plan, waste log, contracts, vouchers/delivery notes/certificates, photographs.
M-10	Asbestos and other hazardous waste materials	Hazardous dust and contamination	Inspect any suspicious materials prior to removal. If suspicion arises, halt work and cordon off the area. Cutting, crushing, dry cleaning and reuse are prohibited. If contamination is confirmed, follow the approved procedure, including wetting, appropriate PPE, manual removal, packaging, labelling and documented handover. ACM must be packed in sturdy, airtight packaging that prevents the dispersal of fibers; where bags are used, double packaging or another equivalent method specified in the approved procedure must be applied.	Before and during dismantling	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision; specialist organisations/government bodies — where applicable	Handling, packaging and handover within the scope of the works shall be at the contractor's expense; laboratory or other specific specialist services shall be in accordance with the relevant Project contract, if procured separately	Monitoring plan of ACM, checklist, assessment/analysis results, photographs, handover documents.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-11	Green spaces and biodiversity	Damage to trees, nests and shelters; fires	Three to five days prior to clearing, earthworks and any work involving buildings, carry out a visual inspection of trees, roofs, recesses and shelters. Protect trees to be retained and their root zones; prohibit hunting, trapping and damage to vegetation. If an active nest or roost is present, suspend work until a specialist has made a decision; minimize noise during the critical breeding period. Tree felling is not permitted; if it is authorized on a case-by-case basis, draw up a plan and carry out compensatory planting at a ratio of 1:5 using native species.	Before the start of and during works	Contractor — execution; environmentalist/specialist — as required; technical supervision and ARIS — monitoring	The landscaping and irrigation system provided for in the project are included in the total cost of the works; the inspection and protection of existing plantings are to be borne by the contractor	Survey report, diagram, photographs, expert's report, planting plan where applicable.
M-12	General requirements for work in cultural heritage areas	Damage to attributes of the site's outstanding universal value; loss of authentic materials; disruption to the visual and sacred integrity of the area.	Adhere to the principles of minimal intervention, authenticity, compatibility, reversibility, visual restraint and respect for the sacred nature of the site. Work only in accordance with the approved methodology and authorization; carry out initial documentation; install protective measures; and prohibit unauthorized drilling, anchoring, the use of heavy machinery and storage. Keep a daily log of the condition and protection of cultural heritage sites and undergo technical and cultural inspections. Methodologies are reviewed by technical/author supervision bodies, ARIS, NHA-MC and the Ministry of Culture for applicability.	Before, during and after a sensitive operation	Contractor — execution; technical/design supervision and specialist consultants — supervision; NHAMC — participation; ARIS — overall supervision; Ministry of Culture — where applicable	The contractor's safety and organisational measures are included in the contract price; the services of external supervisors/specialists are to be provided under the relevant Project contracts	Methodology, authorization, condition report, daily log of the condition and protection of cultural heritage sites, photo archive, MMP/MCP records.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-13	Chance finds and cultural heritage incidents	Loss of archaeological sites, remains or other assets	Work must be halted immediately; the site must be cordoned off and secured; the find must not be moved or cleaned. The site manager, the technical supervisor, ARIS and NHA-MC must be notified without delay. ARIS shall ensure that written notification is provided to the Ministry of Culture and, where applicable, the relevant local authorities in accordance with the procedures and timeframes established by legislation, authorization documents and the PUKN. An assessment shall be carried out with the involvement of a specialist in the relevant field, and the materials shall be archived. Work may only resume after a written decision has been received from the competent authority.	Upon detection/incident	Contractor — initial response; technical supervision, ARIS, NHAMC — coordination; relevant specialist and the Ministry of Culture — within the scope of their remit	Primary protective measures — to be borne by the contractor; specialist studies/solutions — in accordance with the allocation of responsibilities and the relevant Project contracts	Find report form, notifications, photographs, expert opinion, written permission.
M-14	Safety of visitors, pilgrims and NHA-MC staff	Injuries; conflict between visitor flows; inaccessibility of routes	Physically separate traffic flows; securely cordon off and illuminate hazardous areas; provide safe and accessible diversions, bilingual signage and traffic marshals; maintain emergency access. Check routes before each shift, following any changes and prior to events. In the event of crowding or conflicting traffic flows, halt traffic and suspend hazardous work.	At all times	Contractor — execution; NHAMC — coordination of access; technical supervision — monitoring; ARIS — overall supervision	Temporary measures are to be borne by the contractor; permanent accessibility and safety features specified in the project are included in the Bill of Quantities	Access diagram, daily sheet, access/gathering log, notifications and photographs.
M-15	Working conditions, Code of Conduct and HSE/SD	Informal labor, discrimination, harassment and conflicts	Register workers, verify their age, and prohibit child labor, forced labor and discrimination. Ensure that there is a mechanism for workers to lodge complaints, as well as time recording, sanitary conditions and access to first aid. Every employee must sign the Code of Conduct; sexual harassment, alcohol, drugs, vandalism, disrespectful behavior and unauthorized handling of cultural artefacts are prohibited.	Before access is granted and at all times	Contractor — execution; technical supervision and ARIS — monitoring	At the Contractor's expense, as part of the contract price.	Personnel records, codes of practice, training and complaints logs; supervision checks/ARIS.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-16	General health and safety	Injuries and occupational hazards	Carry out risk assessments, use safe working practices and personal protective equipment (PPE); cordon off hazardous areas; inspect tools, scaffolding, access platforms, electrical and lifting equipment. Provide first-aid kits, staff trained in first aid, drinking water, toilets, hand-washing facilities, communication equipment, lighting and the right to stop unsafe work.	At all times	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision; government bodies — oversight	At the Contractor's expense, as part of the contract price.	Health and safety plan, risk assessments, logs, authorizations, issue of PPE and first aid.
M-17	Work at height, on slopes and on the mountain trail	Falls, rockfalls, landslides, falling materials	Assess stability and weather conditions; use certified scaffolding/platforms, safety harnesses and tool retention systems; cordon off the area below; draw up a rescue plan. Cease work in the event of wind, precipitation, reduced visibility, rockfall or landslides.	Before and during works	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision	Temporary safety measures for the trail and slopes are to be paid for by the contractor; permanent structural safety features for the trail and slopes are included in the total cost of the project	Procedures, authorization, inspection log, rescue plan, photographs.
M-18	Caves and confined spaces	Inadequate ventilation, impeded evacuation, water, electrical hazards	Work in accordance with the specified methodology and authorization; monitor access/egress, the atmosphere (where applicable), ventilation, lighting, communications and the presence of a supervisor; protect cables from moisture; have a rescue plan in place. In the event of water ingress or a failure of ventilation, communications or lighting, evacuate workers immediately.	On each entry	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision	At the Contractor's expense, as part of the contract price.	Procedures, authorizations, entry log, inspection results, rescue plan.
M-19	Fire, electrical and lifting operations	Fire, electric shock, falling loads	Fire work — in accordance with the work order, including the protection of flammable materials, the use of fire extinguishers and fire surveillance. Temporary electrical installations — with earthing, residual current devices (RCDs) and cable protection. Lifting operations — carried out in accordance with the plan by qualified personnel, with barriers in place and a ban on standing beneath the load.	Before and during operations	Contractor — execution; technical supervision — monitoring; ARIS — overall supervision	The contractor is responsible for ensuring that work is carried out safely; permanent electrical systems and equipment specified in the project are included in the scope of works	Work orders, inspection logs, qualification documents, lifting plan.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-20	Emergencies and emergency response	Fire, earthquakes, rockfalls, collapses, flooding, damage to cultural heritage	Keep the contingency plan, contact details, evacuation procedures, fire extinguishers, first-aid equipment and training up to date. Following an earthquake, rockfall, fire, collapse or flooding, do not resume work until an inspection has been carried out. Include a separate protocol for emergency response regarding cultural heritage and temporary, reversible stabilization.	At all times and in the event of an incident	Contractor — initial preparedness and response; technical supervision and ARIS — monitoring/coordination; NHAMC and emergency services — where applicable	At the contractor's expense in respect of the construction site; permanent fire and emergency safety systems — included in the final account	Plan, diagrams, inspection/training logs, reports and inspection certificates.
M-21	Information and complaints	Lack of information, conflicts, delayed identification of impacts	Put up up-to-date information boards setting out the complaint's procedure and the contact details for AFM ARIS; notify NHA-MC and users in advance of any restrictions, noisy works and changes to routes. Record all enquiries, ensure confidentiality and immediately investigate complaints relating to threats to cultural heritage, obstruction of access or damage to property.	Before commencement and at all times	Contractor — site level; ARIS — Project MRP and overall supervision; NHAMC — liaison with users; technical supervision — monitoring	To be funded by the contractor in respect of on-site information provision; the operation of the ARIS MOS/MRZ is to be funded by the Project	Signs, notices, complaints register, responses and corrective actions.
M-22	Resource efficiency and materials	Excessive water/energy consumption, waste and incompatible materials	Supply materials according to schedule; prevent leaks; switch off unused equipment; implement water-saving measures. All visible materials, colors and textures must comply with the approved design requirements and cultural heritage protection requirements; reuse is permitted only after inspection and approval.	At all times	Contractor — execution; technical/design supervision — inspection of materials; ARIS — overall supervision	Materials and standard design solutions — included in the cost estimate; resource-efficient organisation of works — to be provided by the contractor	Delivery logs, material approval certificates, records of leaks/reuse.
M-23	Demobilization and handover	Residual waste, damage, unfulfilled obligations	Remove temporary structures, materials and waste; restore surfacing, drainage, access routes and landscaping; carry out a final photographic record and joint inspection; resolve any non-conformities and complaints. Hand over the as-built documentation, the cultural heritage documentation archive, logs, reports, test results and instructions.	Upon completion of a section and until handover	Contractor — execution; technical supervision — inspection; NHAMC — participation in acceptance; ARIS — general supervision	The final restoration provided for in the project is included in the total cost of the project; rectification of the consequences of the contractor's activities and demobilisation are to be borne by the contractor	Final checklist, before-and-after photographs, waste documentation, certificates and archive.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-24	Cave museum, rock surfaces and hydrology	Moisture, leaks, changes in water flow, damage to rock/natural surfaces, petroglyphs, museum artefacts	Develop a separate, specialized methodology for the protection of cultural heritage and OHS; carry out baseline and ongoing monitoring of water levels, moisture content, cracks and rock surfaces. Protect exhibits and natural features; do not carry out drilling, anchoring, shotcrete/sprayed concrete, the use of sealants or any other intervention in the rock without a specifically approved project design and a formal permit for sensitive operations. Monitor drainage before, during and after works, as well as following rainfall; ensure the presence of a specialist in the field during sensitive operations and regular monitoring at other key stages.	Before, during and after works	Contractor — execution; technical/design supervision and specialist consultants — supervision; NHAMC — involvement; ARIS — overall supervision	Waterproofing, drainage, repairs and engineering works for the Cave Museum are included in the total contract price; temporary protection and internal supervision are to be borne by the contractor; external specialist supervision is to be provided in accordance with the relevant Project contract	Methodology, authorization, moisture/water log, test reports, photographs, expert opinions from relevant specialists.
M-25	Mountain trail and Babur's Mosque	Loss of original steps/masonry, erosion, rockfall, disruption to the pilgrimage experience	Carry out an inventory and survey of the original steps, masonry, surfacing and path features; preserve them in situ and do not cover them up or replace them without specific approval. Work in short sections, ensure a safe passage is restored daily, monitor slopes and meshwork, and avoid visually intrusive solutions; coordinate the schedule with pilgrimage activities.	Before, during and after each section	Contractor — execution; technical/design supervision and cultural heritage specialist — monitoring; NHAMC and ARIS — coordination	Repairs to footpaths, steps, handrails, staircases, safety netting and landings are included in the scope of works; temporary safety measures are to be provided at the contractor's expense	Map of authentic elements, methodology, access route log, photographs, CT scan reports.
M-26	The mausoleum of Asaf ibn Burkhiya and sacred areas	Damage to historical artefacts, vibration, humidity, disruption to ritual use	Do not carry out any cleaning, repair, securing, opening or other intervention on the historical artefacts without separate, approved conservation documentation. Avoid storage and heavy machinery; control vibration, water and humidity; ensure respectful access and coordinate work with the National Institute for Architectural and Monuments Conservation (NHA-MC) and religious events.	Before and during works	Contractor — compliance with restrictions; NHAMC — coordination of sacred use; technical/design supervision and specialist — monitoring; ARIS — general supervision; Ministry of Culture — where applicable	The works on the adjacent site provided for in the project are included in the Bill of Quantities; protective and organisational measures are to be borne by the contractor; specialist supervision is to be provided in accordance with the relevant project contract	Methodology, authorization, daily log of the condition and protection of cultural heritage sites and access, photographs, expert opinion from relevant specialists.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-27	Bronze Age settlement, petroglyphs and potential burial sites	Damage to archaeological remains and rock surfaces, looting, erosion	Establish restricted and prohibited access zones; prohibit the use of heavy machinery, drilling and storage. The dismantling of the canopy, backfilling and any other interventions must be carried out in accordance with the approved methodology and under constant archaeological supervision. Manual methods, clean inert materials and separating geotextiles must only be used if specified in the approved decision; signs must be installed without disturbing the stratum.	Before, during and after work	Contractor — execution; archaeologist/specialist — specialist supervision; technical supervision, NHAMC and ARIS — monitoring; Ministry of Culture — where applicable	The dismantling, protective and interpretative elements provided for in the project are included in the Bill of Quantities; on-site protective measures are to be borne by the contractor; specialised archaeological supervision is to be provided in accordance with the relevant contract/project terms and conditions	Zone map, methodology, approval, archaeological log, photographs and acceptance certificate.
M-28	Concrete works, foundations and retaining walls	Cement runoff, vibration, changes to drainage, visual impact	Mix and rinse equipment only in authorized areas with drainage collection; protect coatings, historic surfaces and rock surfaces; monitor drainage holes and temporary stability. Use low-vibration methods and compatible finishes. Concreting, anchors and fixings to rock/historic surfaces — only in accordance with a specifically approved method.	During work	Contractor — execution; technical/design supervision — monitoring; specialist — where applicable; ARIS — overall supervision	Foundations, concrete structures and retaining structures — included in the total cost of the works; temporary environmental and protective measures — to be borne by the contractor	Maintenance plan/methodology, concealed works certificates, photographs, drainage monitoring.
M-29	Road surfacing, car parks, kerbs and golf buggy routes	Dust, hot tarmac, compaction vibration, traffic, visual impact	Work in stages, ensuring access routes and passageways are maintained; remove milled material to the agreed site; wear PPE when handling hot asphalt. In areas of cultural heritage, vibratory compaction is prohibited without authorization and monitoring; materials, colors, edges and the pattern of the surfacing must be approved. Clear the site at the end of each shift.	During roadworks	Contractor — execution; technical/design supervision — monitoring; NHAMC — access; ARIS — general supervision	Paving, car parks, kerbs, routes and specified elements are included in the scope of works; temporary safety and environmental control measures are to be borne by the contractor	Methodology, vibration approval, waste management documents, photographs and acceptance certificates.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-30	External utilities, drainage, irrigation and stormwater drainage	Damage to utility networks/archaeology, leaks, waterlogging	Clarify the location of existing utility networks and archaeological constraints; secure the trenches; maintain the existing drainage system in stages; test the utility networks before backfilling; put emergency procedures in place in the event of a leak; do not discharge effluent onto the ground; document all underground works.	Before and during work	Contractor — execution; technical supervision — monitoring; designer's supervision — compliance with the design; ARIS — overall supervision	Water supply, sewerage, irrigation and stormwater drainage are included in the total cost of the project; temporary protection of trenches and site management are to be borne by the contractor	Diagrams, test reports/concealed works certificates, photographs and as-built documentation.
M-31	Electricity supply, lighting, CCTV, charging points and solar panels	Electrical/fire risks, damage to cultural heritage from fixings, light pollution and glare	The work is carried out by qualified specialists, with the equipment switched off/locked out, earthed and protected against moisture. Cables and fixings must not damage historic or rock surfaces. Outdoor lighting should be warm, low-level (typically 2700–3000 K), directional and shielded; check for glare and visual impact prior to acceptance. Charging stations and solar panels must only be installed in accordance with the approved design.	During installation and commissioning	Contractor — execution; technical/design supervision — monitoring; ARIS — overall supervision; NHAMC — involvement in the verification of operational aspects	Power supply, lighting, CCTV, chargers and solar panels — included in the turnkey contract; safe installation requirements — to be met by the contractor	Approvals, test reports, route diagrams, lighting/glare checks, commissioning reports.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-32	Management of construction-related vibration	Cracks, deformation and damage to cultural heritage sites/structures	Well in advance and in all cases prior to the commencement of vibration works, the contractor shall carry out a baseline survey of any structures that may be affected and submit a Construction Vibration Management Plan for approval. The plan must specify the monitoring points, the instruments to be used and the requirements for their calibration, the procedure for carrying out trial operations, the frequency of measurements, as well as the warning and limit values established and approved in accordance with the prescribed procedure. During the execution of the works, monitoring shall be carried out in accordance with the approved plan. If a warning value is approached, the intensity of the vibration impact shall be reduced or the method of carrying out the works shall be altered. Upon reaching a limit value, the appearance of new cracks, chips or deformations, or the worsening of existing ones, as well as upon receipt of a complaint indicating possible vibration impact, the relevant operation shall be suspended immediately. Work may only resume after the monitoring results have been analyzed, the potentially affected structures have been inspected, the necessary corrective measures have been implemented, readiness has been re-verified, and the mandatory monitoring point has been documented as closed.	Before and during vibratory work	Contractor — preparation of the plan and monitoring; technical supervision — oversight; engineer and cultural heritage specialist — specialist assessment; ARIS — general oversight	Basic monitoring and surveillance required by the contractor's method shall be at the contractor's expense; separate independent expert assessment/monitoring shall be at the expense of the relevant Project contract, if commissioned separately	Baseline survey report, plan, calibrations, 'speed-time' graphs, notifications and authorization to resume.
M-33	Temporary structures and visual integrity	Cumulative visual clutter, obstruction of views, sacred routes and entrance areas	Fencing, containers, toilets, staff rest areas, generators, lighting, storage areas, earthworks, barriers and signage must only be placed in approved areas. Use unobtrusive, reversible solutions; do not attach them to historic or rock surfaces; do not obstruct historic views or entrances. Remove unused items regularly.	Before installation and weekly	Contractor — execution; NHAMC and technical supervision — monitoring; ARIS — overall supervision	За счёт Подрядчика, в рамках договорной цены.	Diagram, photographs, weekly visual inspection, approval from NHA-MC/supervisory body.

Code (M-measure)	Stage, type of work or aspect	Key risk or potential impact	Mandatory measures to be taken by the contractor	Duration	Institutional responsibility	Responsibility	Confirmation of completion and monitoring
M-34	Management of visitors, pilgrims and the sacred atmosphere	Overcrowding, disruption of ritual practices, congestion, noise and loss of the sacred experience	Schedule works taking into account peak visitor numbers, quiet periods and religious events; agree on temporary diversions; separate construction and pilgrimage flows; monitor crowds, movement off designated routes and the behavior of workers. Prevent excessive noise, advertising, bright lights and visual clutter in sacred sites.	Continuously and before activities	Contractor — implementation; NHAMC — coordination of usage arrangements; technical supervision — monitoring; ARIS — overall supervision	At the Contractor's expense, as part of the contract price; organisational activities of NHAMC/ARIS — as part of the Project's functions	Schedule, flow diagram, access/crowd log, notifications, complaints and photographs.
M-35	Exhibits, movable archiving	Damage, contamination, documentation	Prior to the works commencing, identify any exhibits or movable assets located within the area and, in conjunction with NHA-MC, ensure their protection, covering or relocation in accordance with the approved procedure. Prohibit staff from handling these items without authorization. Maintain a record of all works, finds, photographs, correspondence, expert recommendations and decisions; transfer this record to ARIS/NHA-MC.	Before, during and after	Contractor — safe record-keeping; inventory/decisions; technical supervision; monitoring	Protective measures of contractor's works shall be taken; actions under contract relating to museum records shall be part of NHAMC's/the Project's functions	Inventory/handover certificate, diagram, log, photo and inventory list.

6.4. Application of Additional Measures

Upon completion of the works and documented handover of the facilities, responsibility for their day-to-day operation, upkeep, and maintenance shall be transferred to the NHAMC or another designated operating organization. The measures set out in this subsection are aimed at managing environmental and social risks associated with the use of the rehabilitated facilities, engineering systems, and improved site area, taking into account the continued museum, tourism, public, and pilgrimage use of the complex.

Prior to the handover of the facilities, the Contractor shall provide the NHAMC with the as-built documentation required under the contract, manufacturers' instructions, manuals, and recommendations for the safe operation and maintenance of the installed equipment and systems, and shall provide the required training to the designated operations and maintenance personnel. The handover of documentation and completion of training shall be duly documented. During the warranty period, the Contractor shall remain responsible for rectification of defects and fulfillment of other obligations expressly stipulated in the contract.

Following the handover of the facilities, the NHAMC or another designated operating organization shall incorporate the applicable measures set out in Table 11 into its operating procedures, maintenance schedules, emergency preparedness plans, staff instructions, and internal monitoring and control forms. Technical Supervision and ARIS shall participate in monitoring compliance with the obligations related to the handover of the facilities and the closure of project and warranty obligations within the scope of their respective contracts and functions. Government authorities shall exercise oversight within the scope of their legally established mandates.

For each operational measure in Table 11, the principal responsible parties and the arrangements for ensuring its implementation are specified. Following the handover of the facilities, day-to-day operation, scheduled maintenance, routine repairs, provision of consumables, and implementation of organizational measures shall be carried out by the NHAMC or another designated operating organization within the scope of their respective functions and operational budgets.

Table 11. Environmental and Social Management Plan for the Operational Phase

Code	Operation Aspect	Main Risk or Potential Impact	Mandatory Measures	Implementation Period	Institutional Responsibility	Verification and Monitoring
O-01	Handover of Facilities and Preparation for Operation	Unsafe operation due to the absence of documentation, instructions, or trained personnel	Prior to acceptance of the facilities, the Contractor shall provide the NHAMC with the as-built documentation required under the contract, equipment passports and instructions, manuals, and recommendations for the operation and maintenance of the installed systems and equipment. The Contractor shall provide the required training to designated operations and maintenance personnel, including training on the safe operation of engineering and fire protection systems. The handover of documentation and completion of training shall be documented.	Prior to acceptance and handover of the facilities; during the warranty period, as applicable	Contractor — handover of documentation and provision of the required training; NHAMC — acceptance of documentation and ensuring participation of responsible personnel; Technical Supervision — verification of compliance with contractual requirements; ARIS — overall supervision	Acceptance and handover certificates; complete set of as-built documentation; instructions and manuals; training protocols/logs
O-02	Operation of Buildings, Utility Networks and Equipment	Equipment malfunctions and failures, leaks, electrical and other operational risks	Buildings, engineering systems, and equipment shall be operated in accordance with the design documentation, manufacturers' instructions, and manuals provided upon handover. Regular inspections and maintenance shall be carried out, and malfunctions, damage, and leaks shall be rectified promptly. Unauthorized modifications to designed systems or interference with sensitive cultural heritage elements shall not be permitted	Continuously; maintenance in accordance with the established schedule	NHAMC or designated operating organization — implementation; specialized maintenance organizations — as required; government authorities — oversight within their respective mandates	Operation and maintenance logs; repair and testing certificates; records of rectification of malfunctions
O-03	Water Supply, Sewerage, Irrigation, Stormwater Management and Drainage	Leaks, flooding, erosion, pollution, and dampening of cultural heritage assets	Regularly inspect the condition of utility networks, sanitary facilities, irrigation and drainage systems, and promptly rectify leaks, blockages, and damage. Uncontrolled discharge of wastewater or diversion of surface runoff toward historical, archaeological, or rock-cut heritage features shall not be permitted. Following heavy rainfall, additional inspections shall be carried out of drainage systems and areas sensitive to moisture.	Continuously; additionally following heavy rainfall and other significant events	NHAMC or designated operating organization — implementation; specialized maintenance organizations — as required	Inspection logs; records of leaks, blockages, and repairs; maintenance certificates; photographic records of identified issues
O-04	Waste Management and Sanitary	Pollution and littering of the site, visual impacts, blockage of drainage systems, sanitary and fire risks	Ensure a sufficient number of waste collection containers, regular cleaning of the site, and timely removal of waste. Maintain waste collection areas and sanitary facilities in proper	Continuously	NHAMC or designated operating organization — implementation; waste collection organizations —	Cleaning schedules and logs; waste collection contracts and disposal

	Maintenance of the Site		condition. Burning and unauthorized disposal of waste shall not be permitted.		in accordance with applicable contracts; state and municipal authorities — within their respective mandates	records; inspection results
O-05	Landscaping, Irrigation and Site Maintenance	Damage to vegetation, excessive irrigation, waterlogging of sensitive areas, and accumulation of dry vegetation	Ensure proper care of existing and newly planted vegetation; maintain the irrigation system in good working condition; and apply a rational irrigation regime. Waterlogging of historical, archaeological, and rock-cut heritage areas shall not be permitted. Dry vegetation and plant debris that may increase fire risk shall be removed in a timely manner.	Continuously; seasonally, depending on the type of work	NHAMC or designated operating organization — implementation; specialized organization — as required	Vegetation maintenance log; irrigation system maintenance records; inspection results; photographic records
O-06	Safety of Visitors, Pilgrims and Golf Cart Movement	Falls, slips, collisions, crowding, conflicts between vehicle and pedestrian flows, and restricted accessibility	Maintain pathways, stairs, platforms, handrails, barriers, surfaces, external lighting, and signage in good condition. Ensure safe separation of golf cart and pedestrian traffic, speed restrictions, and safe stopping and boarding areas. Maintain the accessibility provisions for visitors with reduced mobility. Where a hazardous area is identified, access shall be restricted immediately until the risk has been eliminated.	Continuously; enhanced monitoring during periods of high visitor numbers and events	NHAMC or designated operating organization — implementation; government authorities — oversight within their respective mandates	Inspection logs; records of identified defects and their rectification; visitor complaints and feedback; photographic records
O-07	Fire Safety and Life Safety of Visitors and Personnel	Fire, smoke, blocked evacuation routes, failure of fire protection systems, electrical fires, and risks associated with large crowds	Maintain the fire alarm and notification systems, fire-fighting equipment, emergency lighting, and other fire protection systems provided for in proper working condition. Evacuation routes and exits shall remain unobstructed, accessible, and clearly marked at all times. Conduct required inspections, maintenance, and testing of equipment, personnel training, and evacuation drills. When organizing events or periods of mass visitation, the safe occupancy capacity of premises and individual areas of the complex shall be taken into account.	Continuously; inspections, maintenance, and drills in accordance with the established schedule	NHAMC or designated operating organization — implementation; specialized organizations — maintenance of relevant systems; authorized government authorities — oversight within their respective mandates	Fire safety log; maintenance and testing certificates; records of training and evacuation drills; inspection results
O-08	Occupational Health and Safety of Workers during	Electrical injuries, falls from height, work on slopes and in caves/confined spaces, and injuries during repair and maintenance activities	Prior to carrying out maintenance and repair works, applicable risks and safe work methods shall be identified. Qualified personnel shall be engaged and the necessary PPE shall be provided. For high-risk activities, established	During operation, maintenance, and repair activities	NHAMC or designated operating organization — organization of safe working conditions; specialized contractors engaged —	Instructions; training and briefing logs; qualification records; work

	Operation and Maintenance		permit-to-work procedures, safe equipment isolation procedures, and access restrictions shall be applied. First aid and emergency response preparedness shall be ensured.		compliance with requirements within the scope of their works; government authorities — oversight	permits; maintenance and incident records
O-09	Emergencies and Natural Hazards	Earthquakes, heavy rainfall, flooding, rockfalls, slope instability, strong winds, extreme temperatures, drought, and fire	Maintain up-to-date emergency response procedures, evacuation plans, and emergency service contact information. Following earthquakes, heavy rainfall, strong winds, and other events that may affect the safety of the complex, conduct unscheduled inspections of slopes, protective structures, routes, drainage systems, engineering systems, and sensitive heritage assets. Where a hazard is identified, the affected area shall be closed until its safe use has been confirmed.	Continuous preparedness; additionally following relevant events	NHAMC or designated operating organization — initial monitoring and response; emergency services and relevant government authorities — within their respective mandates; specialized experts — as required	Emergency response plan/procedures; inspection logs and certificates; assessment materials; records of access restrictions and reopening
O-10	Cultural Heritage, Cave Museum and Sacred Areas	Moisture and leaks, cracking, damage to historical and rock surfaces, petroglyphs and museum elements, visual impacts, and disruption of sacred use	Operation and maintenance shall be carried out in accordance with applicable cultural heritage protection requirements and established protection regimes. Regularly monitor the condition of historic structures, rock surfaces and their interfaces with structures, petroglyphs, museum elements, drainage systems, and areas showing signs of moisture. In the Cave Museum, monitor leaks, humidity, and the condition of engineering systems. Unauthorized drilling, installation of fixings, equipment mounting, repairs, or other interventions into historic fabric shall not be permitted. The sacred and pilgrimage use of the site shall be taken into account.	Continuously; additionally following events that may affect the condition of the heritage asset	NHAMC — implementation and initial monitoring; specialized experts — as required; Ministry of Culture and other authorized authorities — within their respective mandates	Condition monitoring logs; photographic records; records of leaks and humidity; inspection reports; documentation approving interventions
O-11	Visitor Information and Handling of Feedback and Complaints	Delayed identification of safety, accessibility, sanitary, and operational issues; conflicts with visitors and pilgrims	Maintain accessible information on visitor rules, temporary restrictions, closed areas, and route changes. Provide an accessible mechanism for submitting feedback and complaints regarding safety, accessibility, infrastructure condition, sanitary conditions, and other operational matters. Complaints and feedback shall be registered and reviewed in accordance with established procedures.	Continuously	NHAMC or designated operating organization — day-to-day engagement with visitors and handling of feedback and complaints; ARIS — within the framework of the Project's existing GRM until completion of the relevant Project obligations	Information materials; feedback and complaints register; records of review and corrective actions taken

			Recurring complaints shall be used as a basis for additional inspections and corrective actions.			
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6.6. Modification of Established Measures and Response to Deviations

The measures established in Tables 10 and 11 shall not be cancelled, reduced, or replaced in a manner that would result in a lower level of environmental, social, occupational safety, or cultural heritage protection than that предусмотрено.

During the construction phase, the Contractor shall not independently modify the applicable measures set out in Table 10. Any proposed modification shall be justified and reviewed in accordance with the procedures established by the Project. An alternative solution shall comply with the legislation of the Kyrgyz Republic, the approved design documentation, the Cultural Heritage Management Plan (CHMP), and the Cultural Heritage Impact Assessment (CHIA), as applicable; provide a level of protection no lower than that originally предусмотрено; and shall not create additional risks to workers, visitors, local communities, or cultural heritage assets.

During the operation phase, the NHAMC or another designated operating organization may adjust the manner in which the measures set out in Table 11 are implemented within the scope of its operational authority, provided that the required level of protection is maintained. Any changes affecting approved design solutions, safety systems, protected cultural heritage assets, or other regulated matters shall be made only after obtaining the required approvals and permits.

Failure to implement an established measure during the construction phase shall be treated as a non-conformance and addressed in accordance with Section 7. During the operation phase, any identified deviation, malfunction, or inadequacy of a measure shall be recorded in the relevant operational documentation and rectified in a timely manner. Where an immediate threat exists, the relevant works, operation of equipment, or access to the hazardous area shall be suspended or restricted until the risk has been eliminated.

6.7. Linkage with Monitoring

Implementation of the measures set out in Tables 10 and 11 shall be monitored in accordance with Section 7 and Table 12 of this C-ESMP.

During the construction phase, compliance with measures M-01–M-35 shall be monitored by the Contractor, Technical Supervision, ARIS, and other Project participants within the scope of their assigned responsibilities. The results shall be documented in inspection checklists, logs, the non-conformance register, hold-point documentation, reports, and other required records.

During the operation phase, monitoring of measures O-01–O-11 shall be carried out by the NHAMC or another designated operating organization, with operational logs, maintenance records, inspection results, records of feedback and complaints, and other required supporting documentation maintained accordingly. Specialized experts and government authorities shall be involved within the scope of their respective mandates and as applicable.

The monitoring results shall be used to assess the effectiveness of the established measures, identify the need for additional or corrective actions, and verify their implementation.

7. MONITORING OF ESMP IMPLEMENTATION, NON-COMPLIANCES AND CORRECTIVE ACTIONS

7.1. Purpose of Monitoring

Monitoring of ESMP implementation is intended to confirm that the established measures are actually applied at the construction site and ensure the required level of protection for the environment, workers, visitors, pilgrims, and cultural heritage assets.

Monitoring shall not be limited to data collection or preparation of periodic reports. It is an integral part of daily work management and shall ensure timely identification of: deviations from approved work methods and defined work boundaries; insufficiency of established protection measures; deterioration of the condition of sensitive assets; hazardous conditions affecting workers and third parties; pollution, spills, and improper waste management; damage to surfaces, engineering networks, vegetation, and property; complaints, conflicts, and access restrictions; circumstances requiring suspension or modification of work methods.

The monitoring system shall be based on comparison of actual site conditions with the requirements of this ESMP, the Contractor's ESMP (C-ESMP), Work Execution Plans (WEPs), Special Method Statements, Permit-to-Work (PTW) requirements, Cultural Heritage Management Plan (CHMP), Heritage Impact Assessment (HIA), and approved project documentation.

Considering the substantial overall environmental and social risk category, monitoring shall include increased attention to sensitive operations, baseline condition documentation, mandatory Hold Points, photographic records, and documented confirmation of readiness before proceeding to subsequent stages.

7.2. Levels of Control

Control over compliance with the requirements shall be carried out through several interconnected levels.

Primary control shall be performed by the Contractor. It shall include daily inspections of work areas, verification of compliance with approved methods, maintenance of required records, and immediate correction of identified deficiencies.

The Technical Supervision team shall perform independent verification of actual implementation of measures, participate in mandatory Hold Points, record non-compliances, and confirm their closure.

ARIS shall provide overall control over implementation of the Subproject commitments, review significant and repeated violations, participate in selective inspections, and monitor completeness of reporting.

NHA-MC shall participate in monitoring matters related to access arrangements, operation of the museum complex, condition of assets, and impacts of construction activities on visitors and pilgrims.

The Author's Supervision and relevant specialists shall be involved in inspections where works may affect design solutions, historical structures, archaeological areas, rock surfaces, petroglyphs, and other sensitive elements.

State authorities shall conduct inspections and regulatory control within the powers established by the legislation of the Kyrgyz Republic.

Control performed by the above-mentioned parties shall not replace the Contractor's internal control system and shall not relieve the Contractor of responsibility for continuous compliance with the requirements.

7.3. Monitoring Procedure

Monitoring shall include visual inspections, review of documents and records, photographic documentation, comparison with baseline conditions, verification of Hold Points, and, where required, instrumental measurements.

Instrumental measurements shall be carried out where: they are required by project documentation, the CHMP, HIA, or a Special Method Statement; visual inspection does not allow reliable assessment of impacts; signs of vibration, noise, dust, or other impacts are identified; justified complaints are received; such a requirement is issued by the Technical Supervision, ARIS, a relevant specialist, or a state authority.

The frequency of monitoring shall correspond to the nature and risk level of the works.

Hazardous and sensitive operations shall be monitored directly before, during, and after execution.

General site conditions shall be inspected daily by the Contractor and regularly by the Technical Supervision team.

During the operation phase, monitoring shall be carried out by the NHAMC or another designated operating organization in accordance with Table 12. Monitoring shall include regular and event-triggered inspections, maintenance of operational logs, verification of the technical condition of engineering and fire protection systems, monitoring of visitor route safety and the preservation of cultural heritage assets, review of incoming feedback and complaints, and unscheduled inspections following emergencies and natural events that may affect the safety of people, the functioning of infrastructure, or the preservation of the complex.

Table 12. Monitoring plan for the implementation of ESMP measures C

Aspect subject to monitoring and measure codes	Main indicators	Monitoring method and frequency	Records and supporting documents	Verification
Site organization and safety, M-01, M-14	Fencing, signage, access routes, emergency access, separation of flows	Daily; after changes to boundaries; before events	Daily checklist, photos, access log	Technical Supervision Consultant; NHA-MC, ARIS
Transportation, M-02	Routes, speed limits, spotter presence, covers, equipment documents and idling control	During each delivery; random inspections during shifts	Delivery log, vehicle documents, photos	Technical Supervision Consultant, ARIS
Demolition / earthworks, M-03, M-04	Compliance with method statements, boundaries, depth, protection of heritage assets/utilities, trenches	Before commencement, continuously during sensitive operations, after completion of stage	Logs, permits, hidden works records, photos	Technical / Designer's and specialist supervision, ARIS
Dust and noise, M-05, M-06	Visible dust, watering, coverings, working hours 07:00–18:00, barriers, complaints	Daily; measurements upon complaints or risk identification	Checklist, schedule, complaints register, measurement results	Technical Supervision Consultant; NHA-MC, ARIS
Vibration, M-32	Baseline condition, monitoring points, calibration, peak particle velocity, warning and limit values, cracks	Baseline survey — sufficiently in advance and before vibration works; continuous monitoring at intervals not exceeding one minute for significant vibration; inspection after completion	Reports, plan, graphs, event logs, photos	Engineer, cultural heritage specialist; ARIS; Ministry of Culture where applicable
Water and drainage, M-07, M-24, M-30	Leaks, water ingress, humidity, drainage conditions, testing results	Daily; before/after rainfall; during waterproofing works; before backfilling utilities	Water/humidity logs, test records, photos	Technical Supervision Consultant; specialist, ARIS
Fuels and chemicals, M-08	Absence of fuel storage on site, labeling, containers, secondary containment, safety data sheets	Upon delivery; weekly; immediately after spills	Register, inspection sheets, spill records	Technical Supervision Consultant, ARIS
Waste and ACM, M-09, M-10	Waste segregation, containers, storage areas, absence of burning, transfer documentation	Daily; during each disposal; when suspected materials are uncovered	Waste logs, transfer documents, photos, ACM management plan	Technical Supervision Consultant; ARIS selectively
Biodiversity, M-11	Trees, roots, nests, shelters, breeding restrictions	3–5 days before works; during clearing/demolition; after discovery of protected features	Inspection act, photos, specialist opinion	Contractor ecologist / specialist where required and Technical Supervision Consultant, ARIS
Works within cultural heritage zones, M-12, M-13, M-35	Condition of assets, authenticity, approved methods, hold points, discoveries, movable heritage and archives	Before, during, and after operations; daily journal during sensitive works	Condition reports, heritage protection journal, permits, photo archive	Technical/Designer's supervision, NHA-MC, specialists, Ministry of Culture where applicable, ARIS
Cave Museum, M-24	Water/humidity, cracks, rock surfaces, petroglyphs, ventilation and exhibits	Continuously / regularly at key stages; after rainfall and water ingress events	Special log, photos, measurements, reports	Technical Supervision Consultant, NHA-MC, specialists, ARIS

Aspect subject to monitoring and measure codes	Main indicators	Monitoring method and frequency	Records and supporting documents	Verification
Mountain trail, M-25	Authentic elements, slope condition, protective nets, erosion, safe access and off-route movement	Daily; after rainfall/wind; before reopening to visitors	Trail/access log, maps, photos	Technical Supervision Consultant; NHA-MC, ARIS
Mausoleum and sacred zones, M-26, M-34	Cracks, humidity, noise, ritual access, crowding and sacred atmosphere	Before/during works; daily during active works; before events	Heritage protection and access journal, photos, complaints	NHA-MC, supervision, heritage specialist, ARIS
Bronze Age settlement / petroglyphs, M-27	Boundaries, absence of machinery/storage, condition of remains, supervision and finds	Continuously during works; before/after each stage	Archaeological journal, permit records, photos	Archaeologist/specialist, supervision, NHA-MC, ARIS
Temporary elements and visual impact, M-31, M-33, M-34	Visual clutter, blocked views, lighting/glare, signs, crowding	Weekly; evening inspection during lighting commissioning; after changes	Visual inspection sheet, photos, visitor records	Technical Supervision Consultant; NHA-MC; ARIS selectively
Labor and OHS, M-15–M-20	Worker documentation, Code of Conduct, PPE, equipment, permits, emergency readiness	During hiring; daily; before hazardous operations; after incidents	Registers, training logs, permits, reports	Contractor, Technical Supervision Consultant, ARIS
Information disclosure and grievances, M-21	Signboards, notifications, registration, response deadlines and corrective actions	Weekly and after each complaint	Register, responses, confirmations	Technical Supervision Consultant; ARIS
Resources and materials, M-22	Leaks, consumption, material compatibility, sample approvals	Weekly; upon material acceptance	Logs, approvals, records	Contractor and Technical/Designer's supervision, ARIS
Demobilization, M-23	Removal of temporary facilities/waste, restoration, closure, archives	After each section and before acceptance	Final checklist, photos, records and archive	Technical Supervision Consultant, ARIS, NHA-MC
Handover of Facilities and Readiness for Operation, O-01	Availability of a complete set of as-built documentation, instructions, and manuals; training of operations and maintenance personnel; designation of responsible persons	Once prior to acceptance and handover of the facility; repeated if documentation is found to be incomplete or additional training is required	Handover certificate; list of documents handed over; instructions; training protocols/logs; documents designating responsible persons	Technical Supervision; NHAMC; ARIS
Buildings, Engineering Systems and Equipment, O-02	Technical condition of systems and equipment; presence of malfunctions, leaks, and damage; compliance with maintenance schedules	Visual and technical inspections in accordance with the established schedule; additionally upon identification of malfunctions or receipt of a complaint	Operation and maintenance log; repair and testing certificates; records of rectification of malfunctions	NHAMC / operating organization; specialized maintenance organization, as applicable
Water Supply, Sewerage, Irrigation, Stormwater Management and Drainage, O-03	Leaks, blockages, condition of drainage systems, direction of surface runoff, signs of flooding and moisture in sensitive areas	Regular visual monitoring; following heavy rainfall; upon identification of a leak, flooding, or receipt of a complaint	Inspection log; records of repairs and cleaning; photographic records; maintenance certificates	NHAMC / operating organization; specialized maintenance organization, as required
Waste and Sanitary Conditions, O-04	Condition of the site and waste collection areas; availability and fill level of waste containers; timeliness of cleaning and waste removal; condition of sanitary facilities	Regular visual inspections; monitoring in accordance with cleaning and waste collection schedules	Cleaning schedules/logs; waste removal documentation; records of rectification of non-compliances	NHAMC / operating organization
Landscaping and Irrigation, O-05	Condition of vegetation; proper functioning of the irrigation system; signs of waterlogging; presence of dry vegetation	Seasonal and regular visual inspections; additional monitoring in the event of irrigation system malfunction	Maintenance log; irrigation system maintenance records; photographic records	NHAMC / operating organization

Aspect subject to monitoring and measure codes	Main indicators	Monitoring method and frequency	Records and supporting documents	Verification
Безопасность посетителей, паломников и движение гольф-каров, Э-06	Condition of pathways, stairs, handrails, barriers, surfaces, lighting, and signage; route safety; separation of pedestrian and golf cart traffic; presence of hazardous areas	Regular visual monitoring; enhanced monitoring before and during mass events; immediately upon notification of a hazard	Inspection log; records of defects and their rectification; visitor feedback and complaints; photographic records	NHAMC / operating organization
Fire Safety and Life Safety, O-07	Proper functioning of fire alarm and notification systems, fire-fighting equipment, and emergency lighting; unobstructed evacuation routes; personnel training; conduct of drills	Continuous visual monitoring; technical inspections and maintenance in accordance with the established schedule; evacuation drills periodically in accordance with applicable requirements	Fire safety log; testing and maintenance certificates; records of training and evacuation drills	NHAMC / operating organization; specialized organization; authorized government authorities within their respective mandates
Occupational Health and Safety during Operation and Maintenance, O-08	Availability of instructions, PPE, worker qualifications, safe work methods, and permits for high-risk activities; incidents	Prior to carrying out relevant works; during maintenance; following an incident	Training and briefing logs; work permits; qualification documents; incident records and corrective action records	NHAMC / operating organization; engaged Contractor — within the scope of its works
Emergencies and Natural Hazards, O-09	Up-to-date emergency response procedures; condition of slopes, protective structures, drainage, routes, and engineering systems following significant natural events; presence of hazardous areas	Periodic readiness checks; unscheduled inspection following an earthquake, heavy rainfall, strong winds, rockfall, or other significant events	Emergency procedures; inspection logs and certificates; photographic records; records of access restrictions and subsequent reopening	NHAMC / operating organization; specialized experts and emergency services, as required
Cultural Heritage, Cave Museum and Sacred Areas, O-10	Condition of historic structures, rock surfaces, petroglyphs, and museum elements; cracks, leaks, and moisture; condition of drainage systems; presence of unauthorized interventions; condition of sacred areas	Regular visual monitoring; additional inspection following heavy rainfall, an earthquake, leaks, cracks, or other signs of changes in condition	Condition monitoring log; photographic records; records of humidity and leaks; inspection reports; documentation approving interventions	NHAMC; specialized expert, as required; Ministry of Culture within its mandate
Information, Feedback and Complaints, O-11	Availability of information to visitors; presence and signage of temporary restrictions; number and nature of complaints and feedback; recurring issues; implementation of corrective measures	Continuously; periodic analysis of received feedback and complaints and whenever recurring complaints are identified	Feedback and complaints register; information materials; records of review and corrective measures	NHAMC / operating organization; ARIS — within the framework of the Project's existing GRM

Monitoring results shall reflect the actual condition of the site as of the inspection date. Formal statements of compliance without physical inspection or supporting evidence are not permitted.

7.3.1. Measurable Cultural Heritage Monitoring

Cultural heritage monitoring shall not be limited solely to physical damage assessment. Depending on the specific site, monitoring shall include verification of: rock surfaces and hydrological conditions; archaeological areas and petroglyphs; the surroundings of heritage monuments; condition of trails and off-route movement; visitor congestion; impacts on the sacred atmosphere; temporary structures; visual clutter; lighting and glare; condition of toilets, navigation systems, and mobility infrastructure.

For each indicator, the relevant special method statement shall define the baseline condition, monitoring frequency, responsible person, deviation criteria, and required corrective action.

After each major stage of restoration or construction works, the Contractor, jointly with the Technical Supervision Consultant, shall prepare a Cultural Heritage Supervision Report comparing the condition before and after the works.

7.4. Daily, Weekly and Periodic Monitoring

The Contractor shall perform daily inspections of all active work areas before the start of each shift and during execution of works.

Daily monitoring shall cover: condition of fences and warning signs; safety of pedestrian routes and access ways; availability and use of PPE; condition of workplaces and equipment; management of waste and chemical materials; presence of dust, spills, and leaks; readiness of first aid and firefighting equipment; compliance with approved methods; condition of sensitive heritage assets within the impact zone; new complaints, observations, and incidents.

On days when sensitive works are performed, an additional cultural heritage record shall be maintained, including: type of operation; condition of the heritage asset; identified changes; implemented protection measures; photographic documentation.

At least once per week, the Contractor and the Technical Supervision Consultant shall conduct a joint inspection of active work areas.

Where required, ARIS, NHA-MC, Designer's Supervision, and relevant specialists shall participate in such inspections.

During the joint inspection, the following issues shall be reviewed: implementation of previously issued comments; readiness for upcoming operations; condition of sensitive areas; access management arrangements; compliance with method statements and special procedures; complaints and incidents; need for additional measures.

The results of the joint inspection shall be documented through a meeting record, checklist, or entry in the relevant log, indicating identified issues, responsible persons, and deadlines for corrective actions.

7.5. Hold Points

Hold points shall be applied for works involving increased environmental, social, technical, or cultural heritage risks.

A mandatory hold point means a stage after which continuation of works is not permitted until verification has been completed and readiness has been documented.

A witness point means a stage for which the Contractor shall provide advance notification to the Technical Supervision Consultant and other designated participants to allow their presence during execution of the activity.

Table 13. Types hold points

Type of Hold Point	Purpose	Application Procedure
Mandatory Control Point	To prevent commencement or continuation of works until confirmation that critical conditions have been fulfilled.	The Contractor shall suspend the process at the designated stage. Continuation shall be permitted only after inspection and written documentation confirming closure of the hold point.
Witness Point	To ensure the opportunity for supervision personnel or relevant specialists to be present during an important operation.	The Contractor shall provide notification within the established timeframe. If the notified party is unable to attend, the further procedure shall be determined and documented.
Post-Operation Control Point	To confirm absence of damage and completion of restoration and mitigation measures.	A follow-up inspection shall be performed, the condition shall be compared with the baseline record, and the results shall be formally documented.

The list of hold points shall be established in the Method Statement, special method statement, or permit-to-work.

For sensitive works, hold points may include: confirmation of baseline condition recording; verification of installed protective measures; inspection after opening structures or excavation areas; verification prior to drilling, anchoring, or use of vibration-generating equipment; inspection after completion of each stage; confirmation of absence of new cracks, deformations, water ingress, or other changes; authorization for restoration of surfaces or closure of concealed works.

The Contractor shall notify the relevant participants of the hold point sufficiently in advance. Execution of works without the required inspection shall be considered a non-conformity.

7.6. Identification and Registration of Non-Conformities

A non-conformity shall be considered any deviation from: this ESMP; the Contractor's C-ESMP; the Cultural Heritage Management Plan (CHMP) and Cultural Heritage Impact Assessment (CHIA); approved design documentation; Method Statements and special procedures; permits-to-work; permit and approval conditions; contractual requirements; mandatory instructions and decisions of competent authorities.

A non-conformity may be identified by: the Contractor; the Technical Supervision Consultant; ARIS; NHA-MC; Designer's Supervision; relevant specialists; government authorities.

Each identified non-conformity shall be registered with the following information: date and location; violated requirement; description of actual condition; immediate and potential consequences; required corrective action; responsible person; completion deadline; verification status; date and basis for closure.

Upon identification of a non-conformity, the Contractor shall first eliminate the immediate hazard, then analyze the root cause and implement measures preventing recurrence.

7.7. Categories of non-conformities

The category of a non-conformity shall be determined considering: actual and potential impact; recurrence of the violation; sensitivity of the affected area; Contractor's ability to promptly correct the deficiency.

Table 14. Categories of non-conformities and response procedures

Category	Description	Required Actions
Critical Non-Conformity	Immediate threat to life or health; damage or high risk of damage to cultural heritage; serious pollution; absence of a mandatory permit for a sensitive operation; concealment of a serious incident.	Immediate suspension of the affected works, ensuring safety, urgent notification of the Technical Supervision Consultant and ARIS, investigation, preparation of a written corrective action plan, and authorization for resumption of works.
Major Non-Conformity	Significant violation of a mandatory measure that may result in adverse impact; systematic recurrence; execution of works not in accordance with the approved method; restriction of access or a significant complaint.	Correction within an established short timeframe; restriction or suspension of the operation where necessary; root cause assessment and confirmation of closure by the Technical Supervision Consultant.
Minor Non-Conformity	A localized deficiency that does not create an immediate significant threat but requires correction.	Correction within the agreed timeframe and verification during the next inspection.
Observation	A condition that does not yet constitute a violation but may lead to a non-conformity or requires improvement.	Preventive action, monitoring, and verification during subsequent inspections.

The category may be increased if the contractor fails to rectify the violation within the established timeframe, the violation is repeated, or the actual conditions deteriorate.

Minor non-conformities shall not remain open on a systematic basis. Repeated minor deficiencies indicate an inadequacy of the internal control system and shall be considered as significant non-conformities.

7.8. Corrective and Preventive Actions

A corrective action shall address not only the visible violation but also its underlying cause.

Depending on the nature of the non-conformity, the contractor shall restore safe site conditions; remove waste or contamination; restore fencing or access routes; replace defective equipment; conduct additional training; revise the Method Statement or Work Execution Plan; strengthen supervision; modify the sequence or timing of works; engage a qualified specialist; conduct additional inspections; restore damaged objects; review subcontractor management arrangements; apply disciplinary measures; and update the Contractor's ESMP-CM.

For significant and critical non-conformities, the contractor shall prepare a written Corrective Action Plan containing a description of the violation; root cause analysis; immediate response measures; long-term measures; responsible persons; deadlines; required resources; and the method for verification of completion.

Preventive actions shall be implemented where monitoring indicates that a violation has not yet occurred, but the existing measures may prove insufficient.

7.9. Verification and Closure of Non-Conformities

A non-conformity shall be considered closed only after verification of the actual implementation of corrective actions.

Submission by the contractor of photographs or a written notification alone shall not constitute sufficient grounds for closure if the nature of the violation requires a site inspection, instrumental verification, specialist assessment, or confirmation of restoration of the affected object.

Closure shall be documented through an entry in the non-conformity register; signature of the authorized technical supervision specialist; a repeated inspection report; photographic records; measurement or testing results; an opinion of a relevant specialist; or a decision of a state authority, where required.

For non-conformities affecting cultural heritage, closure shall be confirmed with the participation of a relevant specialist and other parties specified in the Cultural Heritage Management Plan (CHMP), Heritage Impact Assessment (HIA), approved methodology, or Permit-to-Work.

ARIS shall monitor the closure of critical, significant, and repeated non-conformities.

7.10. Suspension of Works

Works shall be immediately suspended in the event of an immediate threat to people, the environment, cultural heritage, or the legality of the operation being performed.

Grounds for suspension include, but are not limited to: chance finds; damage or signs of deterioration of a cultural heritage object; new or increased cracks, deformations, spalling, or settlement; unexpected water ingress, flooding, or changes in water flow; slope instability, rockfall, or landslide; hazardous substance spills; an open hazardous area without protective barriers; a serious occupational health and safety incident; execution of works outside the approved area; use of an unapproved method or equipment; absence of a required permit, methodology, or authorization; discovery of an active nest, animal shelter, or other sensitive object; a significant complaint indicating an immediate threat or damage; vandalism, theft, or unauthorized intervention affecting a cultural heritage object.

Suspension shall apply to the area or operation associated with the identified risk. Where necessary, access to a wider area shall be restricted.

Suspension of works does not relieve the contractor from the obligation to ensure site security, stabilize the hazardous condition, prevent further impact, and immediately notify the responsible parties.

7.11. Resumption of Works

Works may resume only after the following conditions have been fulfilled:

1. The immediate hazard has been eliminated;
2. The cause of the event has been identified;
3. Required corrective measures have been implemented;
4. The damaged or affected area has been inspected;
5. Documents, methodologies, and permits have been updated;
6. Additional worker training has been conducted;
7. A repeated readiness verification has been completed;
8. Written confirmation has been obtained from the authorized party.

If the suspension is related to a chance find, a cultural heritage object, a mandatory state permit, or a decision of a state authority, works may resume only after receipt of the relevant official decision.

If a similar violation is identified again after resumption of works, the operation shall be suspended again and the execution method shall be fully reconsidered.

7.12. Documentation of Monitoring Results

Monitoring results shall be maintained by the contractor in a systematic manner and shall be available to technical supervision, ARIS, and other authorized parties.

The minimum set of records shall include daily inspection checklists; daily logs of the condition and protection of cultural heritage objects; waste, chemical materials, and spill registers; training and equipment inspection logs; Permit-to-Work registers; joint inspection reports; non-conformity registers; corrective action plans; incident reports; complaint registers; photographic records; control point records; and repeated inspection reports.

Records shall be dated and shall specify the location, responsible person, and inspection result. Corrections shall be made in a manner that preserves traceability of the original record.

Summary information on monitoring, non-conformities, incidents, and corrective actions shall be included in the contractor's monthly reports.

8. CAPACITY BUILDING AND TRAINING

8.1. General Requirements

Effective implementation of the C-ESMP requires that the Contractor's workers, Technical Supervision specialists, representatives of ARIS and the NHAMC, as well as other persons performing functions under the Subproject, be familiar with the applicable environmental and social requirements, occupational health and safety requirements, cultural heritage protection requirements, and procedures for responding to emergency and non-routine situations.

Prior to authorizing workers to commence works, the Contractor shall organize induction training and briefings appropriate to the nature of the works to be performed and the associated risks. Additional targeted training shall be provided prior to commencing high-risk activities, works in sensitive cultural heritage areas, changes to work methods, following significant incidents, or when recurring non-conformities are identified.

Training shall be provided in a format and language understandable to the relevant category of workers. The provision of training and briefings shall be documented through attendance sheets, logs, protocols, or other records that identify the topic, date, participants, and responsible person.

Technical Supervision shall verify the availability and adequacy of training for the Contractor's workers as part of the relevant monitoring activities. ARIS shall exercise overall oversight of compliance with the C-ESMP requirements and, where necessary, arrange additional training or clarification of requirements for Subproject participants.

Prior to handover of the facilities for operation, the Contractor shall provide the contractually required training to the NHAMC's designated personnel on the safe operation and maintenance of the installed engineering systems and equipment and shall provide the relevant instructions, manuals, and recommendations.

Table 15. Key Areas of Training and Capacity Building

Training / Briefing Topic	Target Group	Timing / Frequency	Responsible for Delivery	Verification
Induction on C-ESMP Requirements, Rules of Conduct within the Complex, and Environmental and Social Requirements	All Contractor and subcontractor workers	Prior to first access to the site	Contractor	Training log / attendance sheet
Occupational Health and Safety, Use of PPE, Main Site Hazards, and Procedure for Reporting Unsafe Conditions	All workers	Prior to authorization to work; thereafter in accordance with OHS requirements and when conditions change	Contractor	Safety briefing logs
High-Risk Activities: Work at Height, Work on Slopes, in Caves and Confined Spaces, Electrical Work, Hot Work, and Lifting Operations	Workers directly involved in the respective activities	Prior to commencement of the relevant works; repeated when the method or conditions change	Contractor	Targeted briefing; work permit / authorization
Cultural Heritage Protection Requirements, Restrictions in Sensitive Areas, and Prohibition of Unauthorized Interventions	Workers and supervisors performing works in cultural heritage areas	Prior to commencement of the relevant works	Contractor jointly with a cultural heritage specialist	Training protocol / attendance sheet
Chance Finds Procedure	Workers carrying out excavation, demolition, and other works that may result in the discovery of cultural heritage	Prior to commencement of the relevant works; periodic refresher briefings	Contractor / specialized cultural heritage expert	Attendance sheet
Waste and Hazardous Materials Management, Spill Prevention and Response	Workers involved in the handling of materials and waste	Prior to commencement of the relevant activities; when conditions change	Contractor	Training log / attendance sheet

Traffic Management, Visitor and Pilgrim Safety	Drivers, equipment operators, flaggers, and site supervisors	Prior to commencement of the relevant works	Contractor	Briefing attendance sheet
Code of Conduct, Non-Discrimination, Prohibition of SEA/SH, Workers' GRM, and Grievance Submission Mechanism	All Contractor and subcontractor workers	Prior to authorization to work; repeated as necessary	Contractor	Signed Code of Conduct; attendance sheet
Fire Safety, Emergency Response, Evacuation, and First Aid	Workers of the relevant categories	Prior to commencement of works; thereafter periodically and as part of drills	Contractor	Training log; drill records
Response to Incidents and Non-Conformities and Notification Procedures	Site supervisors, OHS/environmental specialists, and designated Contractor personnel	Prior to commencement of works and when procedures change	Contractor; ARIS / Technical Supervision — clarification of Project requirements	Training protocol / attendance sheet
C-ESMP Requirements, Monitoring and Reporting	Key specialists of the Contractor, Technical Supervision, ARIS, and NHAMC	Prior to mobilization / commencement of the respective functions; thereafter as necessary	ARIS	Training protocol / attendance sheet
Safe Operation and Maintenance of Handed-Over Engineering Systems and Equipment, Including Fire Protection Systems	Designated NHAMC operations and maintenance personnel	Prior to acceptance and handover of the respective systems and equipment	Contractor / supplier or specialized organization in accordance with the contract	Training protocol; instructions and manuals; handover certificate

The need for additional training shall be determined based on the results of monitoring and inspections, incident investigations, analysis of complaints, and identified non-conformities. In the event of repeated violations of the same category of requirements, corrective measures shall include refresher or targeted training for the relevant workers and responsible personnel.

9. STAKEHOLDER ENGAGEMENT, GRIEVANCE MANAGEMENT AND REPORTING.

9.1. General Provisions

Implementation of construction works within the territory of an operating museum complex requires continuous exchange of information between the Contractor, technical supervision, ARIS, NHA-MC and users of the territory. Information disclosure is one of the measures for managing social risks and shall ensure that changes to access arrangements, location of hazardous areas, schedule of noisy works and other circumstances that may affect visitors and the operation of the complex are communicated to stakeholders before the respective impact occurs.

Stakeholder engagement during the construction period shall be carried out as a continuation of the Project Stakeholder Engagement Plan and shall not be limited to public consultations conducted during the preparation stage of the subproject. After commencement of works, the main focus shall be placed on regular provision of updated information regarding the actual organization of construction, temporary restrictions and safety measures.

The Contractor is responsible for information disclosure at the construction site level and interaction with persons directly affected by its activities. ARIS ensures operation of the Project grievance mechanism, disclosure of information at the Project level and monitoring of the Contractor's compliance with established requirements. Technical supervision verifies the timeliness and adequacy of information disclosure, while NHA-MC ensures coordination with the operating regime of the museum complex, site visitation and cultural and religious events.

The information disclosure and grievance management system shall be accessible to visitors, pilgrims, NHA-MC employees, local residents, Contractor's workers and other persons who may be affected by the works. Submission of a request or grievance shall not result in retaliation, deterioration of the applicant's situation or restriction of access to other legal and Project-based means of protection.

9.2. Disclosure of Information Prior to Construction Commencement

Before opening the first construction site, the Contractor, jointly with ARIS, technical supervision and NHA-MC, shall ensure disclosure of information necessary for safe and organized commencement of works.

The information subject to disclosure shall include: the name of the subproject and brief description of works; information on the Employer, Contractor and technical supervision; indicative construction schedule; location of initial work areas; expected temporary access restrictions; designated safe routes; rules for visitors staying near construction areas; contact details for inquiries and grievances; procedure for reporting immediate threats or incidents; location where the ESMP and other disclosed documentation can be reviewed.

Information shall be presented in a clear and accessible manner in the languages used by the Project for stakeholder communication. The disclosure method shall be determined considering the nature of the information and the affected groups and may include publication of documents on official resources, information boards, announcements, messages through NHA-MC and direct notification of users of specific routes or facilities.

Information materials shall not contain excessive technical details that may hinder understanding of the main requirements. At the same time, they shall allow visitors to identify the location of the work area, available routes, responsible contact persons and the procedure for submitting grievances.

Public consultations on the ESIA materials of the subproject were held on 1 July 2026 within the territory of NHA-MC "Sulaiman-Too". The minutes, participant list, photographic materials, announcement and presentation materials are stored as part of the ESIA documentation.

During the construction period, stakeholder engagement shall continue through targeted notifications, working meetings and reception of inquiries regarding the actual implementation of works.

9.3. Information Disclosure During Works Implementation

Information at the construction site shall be maintained in an up-to-date condition throughout the entire period of works. The Contractor shall update information in case of changes to the schedule, site boundaries, routes, contact details or grievance submission procedure.

Table 16. Information to be disclosed during the construction phase

Information subject	Main content	Timing and method of notification	Responsible party
Opening of a new work area	Location, nature of works, start date and estimated completion date, boundaries and safety measures.	Before opening the work area; information board and notification to NHA-MC.	Contractor.
Temporary change of access	Closed route, duration of restriction, safe alternative route, access for persons with reduced mobility and emergency services.	In advance before changing the route; signs, scheme and direct notification of affected users.	Contractor jointly with NHA-MC.
Noisy, vibration-generating or other disruptive works	Type of operation, expected duration and impact mitigation measures.	Before commencement of the operation if it may affect museum operations, visitors or pilgrimage activities.	Contractor.
Movement of machinery and major deliveries	Delivery time, affected route and temporary safety measures.	Before delivery; coordination with NHA-MC and technical supervision.	Contractor.
Schedule changes	New dates, areas or working arrangements affecting users of the complex.	After approval of the change and before commencement of works according to the revised schedule.	Contractor.
Emergency situation or immediate danger	Restricted area, temporary limitations and safe procedure for actions.	Immediately after ensuring initial safety measures.	Contractor, technical supervision and ARIS.
Channels for submitting inquiries and grievances	Contact person, telephone number, electronic and written communication channels, possibility of anonymous submission.	Permanently at all active work areas.	Contractor and ARIS.
Completion of works at a work area	Removal of restrictions, restoration of routes and remaining temporary conditions.	After confirmation of the safety of the area.	Contractor jointly with technical supervision and NHA-MC.

The Contractor shall ensure the preservation, visibility and legibility of information boards, signs and warning notices. Damaged, outdated or inconsistent materials that do not correspond to the actual traffic and access arrangements shall be replaced immediately.

Information disclosure does not replace physical safety measures. Posting a warning is not sufficient if the hazardous area is not fenced, the route is unsafe, or visitors can enter the work area without control.

9.4. Coordination with NHA-MC and Complex Users

NHA-MC is the principal participant in ongoing coordination between construction activities and the continued use of the territory. The Contractor shall provide NHA-MC with up-to-date information on planned works that may affect visitor and staff access; pilgrimage routes; events; operation of museum premises; lighting and utility systems; fire and emergency access; noise and dust levels; and the condition of adjacent facilities.

The work plan for the upcoming period shall be discussed at regular coordination meetings. Particular attention shall be paid to works involving temporary closure of an entrance or route, movement of machinery through public areas, use of noisy equipment, or sensitive operations near cultural heritage assets.

Obtaining NHA-MC's views on matters related to the use of the territory does not replace technical, design or governmental approval where such approval is required. At the same time, the Contractor shall not commence works affecting access or the operation of the complex without prior coordination with NHA-MC.

Proposals, comments and information received from NHA-MC employees, visitors and pilgrims shall be considered as one of the sources for monitoring actual impacts. Repeated complaints may indicate that the measures are insufficient and shall constitute grounds for reviewing the organization of works.

9.5. Stakeholder Grievance Mechanism

The Project Stakeholder Grievance Mechanism shall remain operational throughout the entire construction period. Its purpose is to ensure an accessible, transparent and timely procedure for receiving, registering, reviewing and resolving issues related to implementation of the subproject and the Contractor's activities.

The GM operates at two interconnected levels:

- at the construction site level, managed by the Contractor;
- at the Project level, managed by ARIS through the existing ARIS Feedback Mechanism (FM).

The Contractor shall ensure the site-level GM and designate a responsible person who is accessible to visitors, pilgrims, NHA-MC employees, local residents and other persons affected by construction activities.

At the site level, the Contractor shall ensure:

- receipt of oral, written, telephone and electronic complaints and inquiries;
- registration of complaints and inquiries in the Contractor's log;
- initial assessment of the content and urgency of the complaint or inquiry;
- immediate action where there is a threat to life, health, visitor safety, the environment or cultural heritage;
- review and resolution of issues related to the Contractor's activities;
- forwarding of registered complaints and inquiries to the Project GM through the ARIS FM;
- implementation and documentation of corrective actions;
- provision of ARIS with information on the status of review and measures taken.

The site-level GM does not replace the ARIS FM and does not restrict the right of the complainant to contact ARIS, NHA-MC, technical supervision, government authorities or the court directly. All complaints and inquiries received by the Contractor, including those resolved directly at the site, shall be registered and forwarded to ARIS for centralized recording and monitoring.

Complaints may concern temporary restriction or blocking of access; visitor and pilgrim safety; noise, dust, vibration and pollution; construction traffic; property damage; impacts on cultural heritage assets; worker conduct; disruption of cultural or religious use of the territory; lack of information; failure to implement previously agreed measures; and other environmental and social issues.

Table 17. General procedure for receiving and handling enquiries and complaints

Stage	Action description	Responsible party
Receipt	The complaint or inquiry is accepted regardless of the form in which it is submitted. Where possible, the applicant is informed of the further review procedure.	Contractor, NHA-MC, technical supervision or ARIS.
Registration	The complaint or inquiry is registered by the Contractor's responsible person in the site log and forwarded to the Project GM through the ARIS FM.	Contractor's responsible person, with forwarding to the Project GM.
Initial assessment	The presence of an immediate threat, impact on cultural heritage, safety, access, property, or signs of SEA/SH is determined.	Contractor, technical supervision and ARIS within their respective areas of competence.
Immediate response	In the event of an immediate threat, access is restricted, affected works are suspended and safety measures are implemented.	Contractor.
Review	The Contractor reviews and resolves issues within its area of competence. Issues requiring the involvement of other parties are referred to technical supervision and ARIS.	Contractor and technical supervision under the oversight of ARIS.
Determination of measures	Corrective action, a responsible person and a completion deadline are assigned.	Contractor; approval by technical supervision and ARIS, as applicable.
Informing the applicant	Information on the decision taken and the actions completed or planned is provided in accordance with the Project GM procedures.	Responsible GM party.
Closure	The Contractor provides evidence of the measures implemented. The complaint or inquiry is closed in accordance with the Project GM procedures after verification of the outcome and notification of the applicant, where contact details are available.	ARIS with the participation of the Contractor and technical supervision.
Analysis	Repeated and similar complaints and inquiries are analyzed to identify systemic deficiencies.	Contractor, technical supervision and ARIS.

The timeframes for review shall be determined by the Project GM procedure. Complaints indicating an immediate safety threat, damage to cultural heritage, significant pollution or blockage of emergency access shall be addressed without delay and shall not await the expiration of the standard administrative timeframe.

Closure of a complaint in the register does not replace elimination of the relevant non-compliance. If the complaint is related to non-compliance with the ESMP, it shall also be recorded in the non-compliance register until completion of the corrective actions has been verified.

9.6. Worker Grievances

The Contractor shall establish a separate worker grievance mechanism accessible to its own personnel and workers of all subcontractors.

The worker grievance mechanism shall cover issues related to employment contracts and payment; working hours and rest periods; accommodation conditions, where provided; occupational health and safety and provision of PPE; discrimination; conduct of supervisors and other workers; harassment and violence; disciplinary measures; the right to refuse to perform unsafe work; and other issues related to employment relationships.

The grievance submission procedure shall be communicated to every worker during the induction briefing. Workers shall have the opportunity to submit grievances confidentially outside their direct reporting line.

Submission of a grievance, reporting an unsafe condition or refusing to perform work in the presence of an immediate threat shall not result in dismissal, reduction in pay, transfer to less favorable conditions or any other form of retaliation.

Worker grievances shall be maintained separately from community grievances; however, anonymized summary information on their number, subject matter and status shall be included in the Contractor's monthly reporting.

9.7. Confidential Complaints and SEA/SH

Complaints containing information concerning sexual exploitation and abuse or sexual harassment shall not be handled through the Contractor's standard grievance investigation procedure.

Upon receipt of such a report, the Contractor shall ensure the safety and confidentiality of the complainant; shall not require detailed accounts of the circumstances from persons who are not authorized to handle such complaints; shall not take actions that could lead to disclosure of the complainant's identity; shall immediately refer the complaint through the confidential channel established by the Project; shall provide information on available specialized support services; and shall limit access to the record to authorized personnel.

Only anonymized information, to the extent required by Project procedures, shall be included in general logs and reports. The complainant's name, detailed description of the circumstances and other identifying information shall not be included in the Contractor's routine reporting.

The Contractor shall not independently investigate the credibility of the report or arrange reconciliation between the complainant and the alleged perpetrator.

9.8. Immediate Notifications

Certain events require immediate notification regardless of the established periodic reporting requirements.

These include events that may result in significant impacts, require the involvement of a qualified specialist, or fall outside the Contractor's authority.

Table 18. Events requiring immediate notification

Event	Contractor's initial actions	Parties to be notified
Fatal, serious or potentially serious incident	Stop the works, provide first aid and ensure site safety, preserve necessary information.	Technical supervision and ARIS immediately; emergency and government services, as applicable.
Damage to or risk of damage to cultural heritage	Stop the affected operation, fence off and stabilize the area without unauthorized intervention.	The Site Manager, technical supervision, ARIS, NHA-MC and the relevant specialist shall be notified immediately. ARIS shall ensure written notification of the Ministry of Culture and, as applicable, the relevant local authorities in accordance with the procedure and timeframes established by legislation, permits and the CHMP.
Chance find	Stop the works, fence off and protect the location, do not move the find.	The Site Manager, technical supervision, ARIS and NHA-MC shall be notified immediately. ARIS shall ensure notification of the authorized government authorities in accordance with Appendix 4 of this ESMP. Works may resume only after a written decision has been obtained from the competent authority.
Fire, collapse, rockfall, earthquake or evacuation	Implement the emergency response plan, evacuate people and restrict access.	Emergency services, technical supervision, ARIS and NHA-MC.
Significant spill or pollution	Stop the source, contain the spread, protect drainage and sensitive areas.	Technical supervision and ARIS; government authorities, as applicable.
Unforeseen access restriction or property damage	Restore safe access or restrict the works and document the condition.	Technical supervision, ARIS and NHA-MC.
Significant complaint or conflict	Ensure safety and stop the activity causing the immediate threat.	Technical supervision and ARIS.
SEA/SH complaint	Ensure confidentiality and referral through the specialized channel.	Designated Project confidential contact.
Inspection or order by a government authority	Provide access and documentation and do not obstruct the inspection.	Technical supervision and ARIS.
Unauthorized change in method or work outside approved boundaries	Stop the relevant operation.	Technical supervision and ARIS.

For an incident or chance find related to cultural heritage, immediate notification does not replace the established procedure for written notification of the authorized government authorities. Such notification shall be ensured by ARIS in accordance with the procedure and timeframes established by legislation, permits, the CHMP and Appendix 4 of this ESMP. Absence of a response shall not be considered authorization to continue the works; a written decision of the competent authority is required.

The Contractor shall not delay notification until completion of its own investigation. Preliminary information shall be уточнено as it becomes available.

Notification of the World Bank and government authorities shall be carried out by ARIS in accordance with the Project agreements and applicable legislation. This does not exempt the Contractor from obligations directly imposed on it by legislation, including calling emergency services and notifying competent authorities in cases where required.

9.9. Periodic Contractor Reporting

Reporting is intended to systematically confirm compliance with the Contractor's ESMP and shall not replace daily monitoring, immediate notifications and primary records.

The basis of reporting shall consist of checklists; logs; acts; permits-to-work; inspection records; waste, grievance, incident and non-compliance registers; measurement and test results; and photographic records.

The Contractor shall submit a monthly report on implementation of the Contractor's ESMP within the timeframe established by the contract. Technical supervision shall review the report for consistency with the actual site conditions and primary documentation. In case of discrepancies between the consolidated report and verified inspection results, the primary records and supervision findings shall take precedence.

The report shall not be limited to statements such as "requirements are being complied with," "measures have been taken," or "no violations have been identified" without specifying active work areas, inspections conducted, quantitative data and documentary evidence.

Table 19. Minimum Content of the Contractor's Monthly Report on the Implementation of the Contractor's ESMP

Report Section	Minimum Content
General Information	Reporting period, active work areas, number of workers, subcontractors, and main works completed.
Status of Measure Implementation	Summary by measure codes M-01–M-35, indicating completed, partially completed, not applicable, and overdue measures.
Inspections	Number of internal inspections, joint site inspections, and technical supervision inspections; key findings.
Permits and Control Points	Issued, valid, and closed permits-to-work; completed mandatory control points.
Cultural Heritage	Sensitive operations, monitoring results, changes in condition, baseline and follow-up photographic records.
Non-Conformities	Number by category, description of significant issues, deadlines, and status of corrective actions.
Incidents and Work Stoppages	Incidents, hazardous events, work stoppages and resumptions, chance finds, and cultural heritage-related events.
Grievances	Number of community and worker grievances by subject, status of review and closure; without disclosure of confidential information.
Occupational Health and Safety	Safety briefings, training, inspections, PPE issuance, first aid, and key safety indicators conducted during the reporting period.
Waste and Hazardous Materials	Waste generated and transferred by type, supporting documentation, spills, and handling of suspected ACM.
Information Disclosure	Notifications provided, route changes, information activities, and coordination with NHA-MC.
Photographic Records	Captioned photographs of key measures, identified problems, and completed corrective actions.
Plan for the Next Reporting Period	Upcoming work areas, hazardous and sensitive operations, required approvals, and control points.
Cultural Heritage Reporting	Daily cultural heritage condition and protection log, results of control points/observation points, reports following major stages, water/moisture and vibration monitoring, visual impact, and archive of chance finds and approvals.

The monthly report shall be accompanied by the documents necessary to substantiate material information. The complete set of daily records may be kept on site and provided upon request, unless the contract requires all forms to be mandatorily attached to the report.

9.10. Reporting by the Technical Supervision and ARIS

The Technical Supervision shall reflect the implementation of the Contractor's ESMP in its periodic reporting and shall not be limited to reproducing the information provided by the Contractor.

The Technical Supervision report shall include an independent assessment of the actual condition of the site; the quality of the Contractor's internal control; implementation of mandatory measures; compliance with permit conditions and control points; the status of significant and recurring non-conformities; the timeliness of responses to grievances and incidents; and the need to strengthen measures or engage specialized experts.

ARIS shall use the Contractor's and Technical Supervision's reports, the results of its own inspections, and GRM information to prepare Project reporting and inform the World Bank.

Where discrepancies are identified, ARIS may require clarification of the data, an additional inspection, revision of the classification of the non-conformity, or preparation of a separate corrective action plan.

9.11. Storage and Transfer of Documentation

The Contractor shall ensure systematic storage of environmental and social documentation throughout the entire period of works.

Documents shall be identified by object, site area, and date; protected from loss and unauthorized modification; accessible to the Technical Supervision and ARIS; maintained in their current version; and linked to the relevant measure, permit, non-conformity, or operation.

Upon completion of the works, the Contractor shall submit as part of the final documentation the final report on implementation of the Contractor's ESMP; the register of permits and approvals; the register of non-conformities with confirmation of closure; information on incidents and work stoppages; baseline and final condition records; materials related to sensitive operations; waste transfer documentation; an anonymized summary of grievances; measurement and testing results; photographic records; and documents required by NHA-MC for the subsequent maintenance and operation of the transferred facilities.

Completion of construction works shall not release the Contractor from the obligation to remedy outstanding non-conformities, damage, and substantiated grievances related to the performance of the contract. Outstanding issues shall be closed before final acceptance or included in an agreed action plan with defined deadlines and responsibilities.

10. APPENDICES:

APPENDIX 1. MINIMUM REQUIREMENTS FOR THE CONTRACTOR'S ESMP

1. Purpose of the Appendix

This Appendix establishes the minimum content of the Contractor's ESMP, which each Contractor shall prepare prior to mobilization in accordance with its contractual scope of works. The Contractor's ESMP may cover one or more facilities and work areas.

The main ESMP establishes the Subproject's obligations and the minimum measures applicable to all Contractors. The Contractor's ESMP shall translate these requirements into a specific work organization system, taking into account the actual scope of the contract, location of work areas, work schedule, technologies and equipment used, personnel, and subcontractors.

The purpose of the Contractor's ESMP is not to reproduce the text of the main document, but to describe how the requirements will be implemented at the specific construction site. The document shall clearly indicate where each measure applies; who is responsible for its implementation; when and how frequently it is to be implemented; what resources are provided; which documents will serve as evidence of implementation; who will conduct internal verification; what conditions require suspension of works; and how identified non-conformities will be addressed.

General statements of intent, such as "the Contractor will comply with the requirements," "waste will be properly removed," or "the works will be carried out safely," without specifying concrete procedures, locations, responsible persons, and supporting records shall not be considered sufficient adaptation of the ESMP.

2. Status and Application Procedure

The Contractor's ESMP is a mandatory working document of the respective Contractor and applies to its own workers, all subcontractors, suppliers and drivers, temporary personnel, and other persons whose activities are related to the performance of the contract.

A Contractor engaging subcontractors shall be responsible for incorporating the applicable requirements into subcontract agreements, method statements, special procedures, work instructions, and training programs.

The Contractor's ESMP shall be submitted for review prior to physical mobilization. The commencement of relevant works shall not be permitted until comments related to human safety, cultural heritage, permits and approvals, access arrangements, and pollution prevention have been addressed.

Review of the Contractor's ESMP by the Technical Supervision and ARIS does not transfer responsibility for the completeness and feasibility of the document to them. The Contractor remains responsible for ensuring that the document corresponds to actual site conditions and for its implementation on site.

3. Preparation of the Contractor's ESMP

The document shall be developed by the Contractor's specialists jointly with production personnel. Preparation solely by an environmental specialist without the participation of the Site Manager, engineers, OHS specialists, and work area supervisors may result in measures that are not aligned with the actual work methods and schedule.

Prior to preparing the document, the Contractor shall:

1. review the main ESMP, ESIA, CHMP, Cultural Heritage Monitoring Plan, design documentation, technical specifications, and contract;
2. inspect all work areas;
3. identify sensitive areas and restrictions;
4. reconcile the work schedule with the required surveys, approvals, and control points;
5. identify applicable permits;
6. establish a list of hazardous and sensitive operations;
7. determine the required composition of specialists;
8. select control and reporting forms.

4. Mandatory Structure of the Contractor's ESMP

4.1. Cover Page and Document Control

The cover page shall contain the name of the Subproject and contract; the name of the Contractor; the facilities and work areas covered by the document; the revision number and date; information on the specialists who prepared and reviewed the document; information on the review of the document by the Technical Supervision and ARIS; and a revision history table.

Each revision shall be clearly identified. Simultaneous use of different unidentified versions at the site is not permitted.

Table P1-1. Revision Control of the Contractor's ESMP-C

Revision	Date	Reason for Issue or Amendment	Prepared by	Checked by Contractor	Review Status

4.2. Contract Scope and Work Areas

This section shall provide a brief description only of the facilities and works included in the Contractor's contract. The following shall be specified: the name of each work area; the types of works to be performed; the anticipated dates and duration; the maximum number of workers; subcontractors; the main types of equipment; adjacent operational facilities; public and pilgrimage routes; and sensitive cultural heritage assets.

Technical information from the design documentation does not need to be reproduced in full. The section shall identify the information that affects environmental and social measures.

4.3. Organizational Structure

This section shall provide a management structure indicating the Site Manager; Environmental and Social Specialist; Occupational Health and Safety Specialist; person responsible for cultural heritage; person responsible for stakeholder engagement and grievances; person responsible for waste and hazardous materials; persons responsible for first aid, fire safety, and emergency response; work area supervisors; and designated alternates.

For each person, the position, contact details, qualifications, authority, and substitution arrangements shall be specified. It shall be clearly defined who is authorized to stop unsafe work; sign a permit-to-work; register a non-compliance; notify ARIS and the Technical Supervision of an incident; receive grievances; and confirm completion of an internal corrective action.

4.4. Register of Applicable Requirements

The Contractor shall provide a list of documents whose requirements are incorporated into its Contractor's ESMP-C: the main ESMP, CHMP, CHMP-EMF, design documentation, technical specifications, permits and conclusions, contractual requirements, applicable legislation and regulations of the Kyrgyz Republic, and World Bank requirements. For each document, it shall be specified which types of works it regulates and where its requirements are reflected in the Contractor's ESMP-C.

The Contractor's ESMP-C shall include an applicability matrix for measures M-01–M-35. For each measure, the corresponding facility or work area, applicable type of work, status of "applicable" or "not applicable," justification for non-applicability, the section of the Contractor's ESMP-C or other Contractor document where the measure is specified in detail, the responsible person, and the form of verification of implementation shall be indicated. If the contractual scope, work boundaries, methods, or actual conditions change, the matrix shall be updated accordingly.

Table P1-2. Applicability Matrix for ESMP Measures

Measure Code	Facility/Work Area	Type of Work or Risk	Status	Justification for Non-Applicability	C-ESMP Section / Document	Responsible Person	Evidence

4.5. Site Layout Plan

The document shall include a legible plan or set of plans showing the contract boundaries; active work areas; sensitive areas; prohibited and restricted-access zones; cultural heritage assets; existing visitor and pilgrimage routes; temporary diversion routes; vehicle routes; unloading areas; material storage areas; temporary waste accumulation areas; chemical materials; temporary structures; sanitary and welfare facilities; fire-fighting equipment; first-aid point; evacuation routes; emergency access; and existing utility networks.

If works are carried out at sites located remotely from one another, separate plans shall be prepared for each site.

4.6. Description of Conditions and Sensitive Assets

This section shall specify the conditions described in Section 3 of the main ESMP. The Contractor shall identify the actual locations of historic structures; archaeologically sensitive areas; rock surfaces and petroglyphs; sacred areas; areas of high visitor traffic; hazardous slopes; caves and confined spaces; trees and other elements requiring protection.

For each sensitive asset, the potential source of impact, protective measure, monitoring method, and grounds for suspension of works shall be specified.

4.7. Pre-Mobilization and Pre-Construction Conditions

This section shall provide a list of the documents and conditions specified in Section 5 of the main ESMP, indicating their status. The Contractor shall demonstrate what has already been prepared; what is under review; what must be prepared before opening a specific work area; who is responsible; the established deadline; and which document confirms readiness.

4.8. Environmental Management

This section shall specify measures related to dust, noise and vibration, water and runoff, waste, hazardous materials, prevention of fuel and oil leaks from equipment, spill containment, soil protection, resource efficiency, biodiversity, and site restoration. For each aspect, specific locations, containers, routes, service providers, and record-keeping forms shall be indicated.

For waste management, the Contractor shall specify the expected types of waste; locations where waste is generated; segregation methods; types of containers; temporary storage locations; frequency of removal; the organization to which waste is transferred; and documents confirming the transfer.

4.9. Occupational Health and Safety

The section shall be aligned with the Contractor's OHS Plan (in accordance with the requirements of Annex 8 to this ESMP) and shall include an assessment of key risks; worker access and authorization procedures; PPE requirements; equipment inspections; work at height; work on slopes; cave and confined-space work; excavation works; hot works and electrical works; lifting operations; first aid; medical support; sanitary and welfare conditions; emergency response; and procedures for stopping unsafe work.

4.10. Public Safety and Access

The Contractor shall describe the separation of public and construction traffic flows; installation of barriers; safe diversion routes; access for visitors with reduced mobility; construction vehicle traffic management; procedures for the use of flaggers; notification of restrictions; maintenance of emergency access; and coordination with NHA-MC.

4.11. Cultural Heritage

The section shall be prepared taking into account the CHMP and CHMP-Related Requirements and shall include a map of sensitive areas; a list of operations requiring a special methodology; requirements for baseline documentation; procedures for issuing permits-to-work; mandatory hold points; record-keeping procedures; the chance finds procedure; grounds for suspension of works; procedures for engaging relevant specialists; and the final inspection procedure.

The cultural heritage section shall expressly establish the principles of minimal intervention, authenticity, reversibility, visual restraint, protection of sacred use, and prevention of cumulative visual clutter. It shall contain a list of operations and areas requiring review by the Ministry of Culture, as well as procedures for notifying ARIS, technical supervision, NHA-MC, and authorized government authorities in accordance with the CHMP, permitting documents, and Annex 4 of this ESMP.

4.12. Labor and Social Issues

The section shall include procedures for worker registration; age verification; prohibition of child and forced labor; non-discrimination; Code of Conduct; prevention of SEA/SH; the worker grievance mechanism; procedures for interaction with visitors; disciplinary measures; and subcontractor management.

4.13. Training

The Contractor shall provide a training matrix specifying the topic, target group, frequency, instructor qualifications, registration method, and method for verifying understanding.

Table P1-3. Training Matrix

Topic	Worker Category	Before Authorization	Periodic Refresher	Targeted Briefing	Verification

4.14. Monitoring and Reporting

The section shall define daily monitoring; weekly joint inspections; monitoring of sensitive operations; instrumental measurements; maintenance of logs; registration of non-conformities; incident reporting; complaints; monthly reporting; and the procedure for record keeping.

4.15. Change Management

The Contractor shall establish a procedure for reviewing the Contractor's ESMP-C when there is a change in the design solution; method; equipment; work boundaries; schedule; composition of subcontractors; number of workers; access conditions; identified risks; permit requirements; or the results of an incident or complaint. Work affected by the change shall not continue until the need to update the relevant documents has been assessed.

5. Review of the Completeness of the Contractor's ESMP-C

Table P1-4. Contractor's ESMP-C Review Checklist

Nº	Required Section or Appendix	Provided	Sufficiently Detailed	Comment	Status
1	Scope of Works and Work Areas				
2	Organizational Structure				
3	Site and Sensitive Area Layouts				
4	Permit Register				
5	Environmental Measures				
6	OHS and Emergency Situations				
7	Cultural Heritage				
8	Access and Public Safety				
9	GRM and Code of conduct of workers				
10	Grievances and Code of Conduct				

№	Required Section or Appendix	Provided	Sufficiently Detailed	Comment	Status
11	Monitoring and Reporting				

The following statuses shall be used during the review: “accepted,” “accepted with conditions,” “revision required,” “not applicable with justification.”

APPENDIX 2. REQUIREMENTS FOR INFORMATION BOARDS AND SIGNS

1. Purpose of the Appendix

This Appendix establishes the minimum requirements for the Subproject information banner, information boards and temporary signs to be installed by the Contractor before the commencement of works and throughout the construction period. Its purpose is to ensure clear and timely information for visitors, pilgrims, employees of the NHA-MC, local residents and other users of the territory.

Information materials do not replace physical safety measures. Hazardous areas shall be securely fenced, and safe routes shall be organized regardless of the presence of warning signs.

2. General Requirements

The Contractor shall install information boards and temporary signs before the commencement of works at the respective site. Their content, locations and design shall be agreed with ARIS, NHA-MC and the Technical Supervision.

Boards and signs shall correspond to the actual boundaries, schedule and conditions of the works; be clearly visible and legible; be maintained in good and up-to-date condition; and shall not obstruct visitor movement or emergency access. They shall not adversely affect the visual integrity of the site and shall not be attached to historical, archaeological, rock or other protected surfaces without a separate authorization.

3. Content of Information Materials

Depending on their location and purpose, information materials shall contain:

- the name of the Subproject and the Client;
- the name of the Contractor and contact details of the responsible site representative;
- work schedule and timelines;
- key safety measures for visitors;
- temporary alternative routes and restricted-access areas;
- information on the GRM and contact details of the ARIS Feedback Mechanism;
- prohibition of entry into work areas and other warning signs, where necessary.

Signs shall be clear, contrasting and positioned at a height that is accessible for viewing, where applicable taking into account the needs of persons with disabilities. Information on routes, restrictions and contacts shall be provided at least in Kyrgyz and Russian.

4. Sample Subproject Information Banner

The Subproject information banner shall be installed at the main entrance or at another location agreed with ARIS, NHA-MC and the Technical Supervision. Before producing the banner, the Contractor shall complete all designated fields and agree the final content with ARIS. The contact details of the ARIS Feedback Mechanism shall be verified for accuracy and currency.

Sample information banner

1000 mm	
500 mm	  
	COMMUNITY DEVELOPMENT AND INVESTMENT AGENCY REGIONAL ECONOMIC DEVELOPMENT PROJECT (REDP-1) IN THE OSH REGION AND THE CITY OF OSH Sub-project title: Total cost of the sub-project: Community contribution: Completion date: Contractor: Party responsible for the operation of the facility: For any enquiries regarding the progress of the Project, please contact: Feedback mechanism ARIS: + 996 (770) 700-522 (WhatsApp), + 996 (550) 700-522 (mob.) Email: bfm@aris.kg The ARIS online platform: www.op.aris.kg

Figure P2-1. Example of a sub-project information banner

APPENDIX 3. REGISTER OF PERMITS, APPROVALS AND MANDATORY DOCUMENTS

1. Purpose of the Appendix

This Appendix is intended to prevent the commencement of works without the required documentation and to eliminate uncertainty in the allocation of responsibilities among the Client, Contractor, Technical Supervision and government authorities.

Various documents with different statuses are used within the Subproject. A government permit, project approval, waste transfer agreement, method statement and internal permit-to-work are not interchangeable.

The Register allows for establishing which document is required; which facility and type of work it relates to; who is responsible for obtaining it; who issues or approves the document; when it was obtained; its validity period; what conditions it contains; whether those conditions have been fulfilled; and when an update is required.

2. Categories of Documents

The Register shall include:

1. government permits, conclusions and approvals;
2. permits and licenses related to the Contractor's activities;
3. documents related to waste and hazardous materials;
4. design and contractual approvals;
5. Contractor's ESMP-C and additional plans;
6. method statements and special procedures;
7. permits-to-work;
8. instructions issued by government authorities and Technical Supervision;
9. readiness certificates and hold points;
10. documents confirming the closure of work stages.

The inclusion of a document in the Register does not mean that the responsibility for obtaining it automatically rests with the Contractor. The responsible party shall be determined by applicable legislation and the contract.

3. Maintenance of the Register

The Register shall be established prior to mobilization and updated at least once a week, as well as upon receipt of a new document; changes to the design; opening of a new work area; engagement of a new subcontractor; extension or expiration of a permit; issuance of an instruction; or changes to the work method.

Originals or certified copies of documents shall be kept at the designated location. Documents directly related to the works being performed shall be available at the construction site.

4. Document Statuses

The following statuses shall be used: valid; under review; required before commencement of works; requires renewal; requires updating; suspended; expired; closed; not applicable with justification.

Work shall not commence if an applicable document has the status "required," "expired," or "suspended," or if it does not correspond to the actual work method and site.

Table P3-1. Register of Permits, Approvals and Mandatory Documents

No.	Document	Category	Facility and Type of Work	Responsible Party	Issued or Approved By	Date	Validity Period	Key Conditions	Status of terms and conditions	Storage location	Required action

5. Verification of Document Conditions

The mere availability of a document is not sufficient. The Contractor and Technical Supervision shall verify the conditions contained therein.

If a permit restricts the area, depth of works, method, working hours, materials, participation of a specialist, documentation procedure or period of execution, these restrictions shall be incorporated into the Contractor's ESMP-C, method statement, special procedure and work schedule.

6. Change Control

When the design is changed, the Contractor shall determine whether previously issued documents remain valid. Work shall not automatically continue if the new method or work boundary is not covered by the existing permit.

Table P3-2. Verification of authorization documents when work is amended

Changes	Documents concerned	A new license or renewal is required	Decision by the responsible party	Closing date

APPENDIX 4. CHANCE FIND PROCEDURE

1. Purpose and Scope

This procedure has been developed to ensure the preservation of cultural heritage and compliance with the requirements of the legislation of the Kyrgyz Republic, the World Bank Environmental and Social Standard 8 “Cultural Heritage” (ESS8), the CHMP, the Cultural Heritage Management Plan, and this ESMP.

The procedure is mandatory for every contractor, its subcontractors, suppliers, drivers, workers, and other persons involved in the implementation of the subproject in the event of the accidental discovery of objects that may have archaeological, historical, cultural, scientific, or religious value.

2. What Constitutes a Chance Find

Chance finds may include:

- archaeological artifacts, fragments of ceramics, glass, metal, wood, or worked stone;
- remains of foundations, walls, masonry, roads, canals, hearths, or other structures;
- cultural layers differing in color, structure, or composition from the surrounding soil;
- inscriptions, symbols, engravings, petroglyphs, and objects of religious or ritual significance;
- human remains, burials, or individual bones;
- any other unusual objects or structures whose origin cannot be reliably determined by contractor personnel.

A worker is not required to independently determine the cultural value of a find. In case of doubt, the discovered object shall be treated as a potential cultural heritage object until a decision is made by an authorized specialist or government authority.

3. Step-by-Step Response Procedure

Step 1. Immediate Suspension of Works

Responsible: any person who discovers the find.

- immediately stop all works within a radius of at least 10 meters from the place of discovery;
- stop machinery without any further movement of soil or materials;
- do not touch, move, clean, or remove the discovered object;
- mark the location of the find and report it to the immediate supervisor.

The initial suspension zone shall be established within a radius of at least 10 meters and may be expanded by the technical supervision, archaeologist, cultural heritage specialist, or authorized government authority, taking into account the nature of the find and the possible extent of the cultural layer.

Step 2. Notification

Responsible: site supervisor or another designated responsible person of the contractor.

- notify the construction site manager and the contractor’s responsible person for cultural heritage;
- immediately notify the technical supervision, ARIS, and NHA-MC;
- provide the date, time, location, type of work being performed, a brief description, and information on the measures taken.

Step 3. Temporary Protection of the Site

- install temporary fencing and a warning sign;
- stop machinery movement and access by unauthorized persons;
- appoint a responsible person to monitor and protect the area;
- prevent the movement of soil, structures, and materials from the protected area.

It is prohibited to remove, wash, dismantle, transfer to third parties, or publish the exact location of the find without authorization. Protective measures shall not include physical intervention in the find.

Step 4. Documentation of the Find

- complete the chance find registration form;
- record the date, exact time, object, location, and circumstances of discovery;
- take photographs of the general view and the location of the find from several safe angles;
- record GPS coordinates or an accurate reference to the site plan;
- indicate the boundaries of the suspended area, protective measures taken, and persons who were notified.

Step 5. Notification of the Authorized Government Authority

Following receipt of the initial information, ARIS shall ensure the immediate submission of written notification to the Ministry of Culture of the Kyrgyz Republic and, where applicable, to the relevant local authorities in accordance with the procedure and timeframes established by legislation, permitting documents, and the CHMP.

The contractor shall provide the chance find registration form, site plan, photographs, and any other available information, and shall ensure access for authorized representatives to the place of discovery.

Step 6. Decision on Further Actions

The decision shall be made by the authorized government authority with the involvement of relevant specialists, where applicable. Possible measures include:

1. permission to resume works if the find has no cultural value;
2. additional examination or archaeological investigation;
3. temporary conservation or expansion of the protected area;
4. modification of the method, route, boundaries, or design solution;
5. removal and transfer of the find to a museum, archive, or specialized institution;

6. preservation of the object in situ and establishment of additional restrictions.

Step 7. Resumption of Works

Works may resume only after an official written decision of the competent authority has been obtained and all prescribed measures have been implemented.

The decision shall be recorded in the construction works log, the daily cultural heritage condition and protection log, and the register of work suspensions and resumptions. An oral instruction shall not constitute sufficient grounds for resuming works.

4. Special Procedure in the Event of Discovery of Human Remains

If human remains or a suspected burial are discovered, works shall be immediately stopped, the area shall be fenced off and secured, and the remains shall not be moved or additionally exposed.

The contractor shall immediately notify the technical supervision, ARIS, and NHA-MC. ARIS shall arrange notification of the competent government authorities.

Contractor personnel shall not independently remove, relocate, or rebury the remains.

5. Key Principles for Implementation of the Procedure

- the procedure shall be included in the induction training and in targeted briefings prior to earthworks and demolition works;
- a short guidance note, up-to-date contact details, and the chance find registration form shall be permanently available at the site;
- each find shall be recorded in the daily cultural heritage condition and protection log, the incident and notification log, and the contractor's monthly report;
- non-compliance with the procedure shall be treated as a major or critical non-conformity depending on the consequences.

Table P4-1. A brief step-by-step guide in the event of an accidental discovery

Step	Action
1. Suspension of work	Cease all work within a radius of at least 10 meters; do not touch or move the find.
2. Notice	Notify the site manager, the technical supervision team, ARIS and NHA-MC.
3. Area protection	Fence off the site, restrict access and appoint a person in charge.
4. Documentation	Complete the form, take photographs and link them to the plan or coordinates.
5. Official Notice	Upon receiving the initial information, ARIS shall ensure that the Ministry of Culture and, where applicable, the relevant local authorities are notified in writing without delay, in accordance with the procedures and timeframes laid down by legislation, authorization documents and the CHMP.
6. Decision	The competent authority determines the status of the find and the next steps.
7. Resumption	Work should only resume once a written decision has been made and the specified conditions have been met.

Table P4-2. Form for reporting a chance find

Information	Information to be provided
Registration number	
Date and time of discovery	
Site and area	
Coordinates or reference to the plan	
Type of work being carried out	
Person who discovered the find	
Factual description without interpretation	
Initial cordoning-off radius	
Measures taken for cordoning off and protection	
Photographic record and diagram	
Who was notified and when	
Date and time of handover of materials by the contractor to ARIS	
Date and method of notification to the Ministry of Culture and other relevant authorities — to be completed by ARIS	
Decision of the competent authority	
Conditions for resumption of work	
Date and grounds for resumption of work	
Signatures of responsible persons	

APPENDIX 5. ASBESTOS-CONTAINING MATERIALS MANAGEMENT PLAN

1. Scope of Application

This Asbestos-Containing Materials Management Plan (ACMMP) applies to all construction, repair, and reconstruction works carried out under the subproject, as well as to adjacent areas associated with the execution of the works.

The contractor is responsible for compliance with the requirements of the ACMMP at construction sites and adjacent areas, including the safe handling, collection, temporary storage, transportation, and transfer of asbestos-containing materials and waste.

The Plan applies when confirmed ACM is discovered, as well as to materials of unknown composition that, based on their appearance, age, or intended use, may contain asbestos. Until their composition is determined, such materials shall be treated as suspected ACM.

2. Immediate Measures upon Discovery of ACM

Upon identification of ACM or suspected material, the contractor shall immediately:

- suspend all works within a radius of at least 5 meters from the place of discovery;
- evacuate personnel from the hazardous area;
- restrict access to the area using warning tape, fencing, and warning signs;
- prevent visitors, pilgrims, and other unauthorized persons from entering the area;
- notify the contractor's responsible specialists, technical supervision, and ARIS environmental and social specialists;
- arrange for an inspection of the area and determination of further actions.

3. Required Equipment

For safe handling of ACM, the contractor shall ensure the availability of:

- warning tape, fencing, and warning signs;
- shovels and other hand tools;
- a water source and hose with a spray nozzle;
- containers with water and cleaning cloths;
- durable polyethylene bags for double packaging of waste or other durable airtight packaging;
- airtight containers or metal drums with appropriate labeling.

4. Personal Protective Equipment

Workers involved in handling ACM shall be provided with:

- disposable protective coveralls with hoods;
 - closed footwear or boots without laces;
 - durable rubber gloves;
 - where necessary, respirators of the appropriate protection class.
- Smoking, eating, and drinking are prohibited in areas containing ACM.

5. Procedure for Handling Asbestos-Containing Materials

5.1. Removal of Small Quantities of ACM

Upon discovery of a limited quantity of ACM, it is necessary to:

- determine the location of all visible fragments;
- carefully wet the material with water to prevent the spread of dust;
- collect the ACM manually or using shovels and place it in double durable polyethylene packaging or other airtight packaging specified by the approved method;
- remove contaminated soil manually and also place it in containers for asbestos waste;
- label all bags and containers with warning signs;
- hermetically seal the containers after filling.

Upon completion of the works, the equipment used shall be cleaned with a damp cloth, and used materials, cleaning cloths, and disposable PPE shall be transferred as asbestos-containing waste.

5.2. Removal of Soil Contaminated with ACM

In case of soil contamination with ACM fragments, it is necessary to:

- pre-wet the area;
- manually remove contaminated soil to a depth of at least 300 mm;
- immediately place the removed material into asbestos waste containers without temporary open storage;
- after confirming the absence of ACM residues, backfill the area with clean soil.

The actual depth and boundaries of removal shall be clarified based on the extent of visible fragments and contamination; where necessary, contaminated soil shall be removed to a greater depth until a clean layer is reached.

6. Disposal of ACM

Asbestos-containing materials shall be transferred to a specialized hazardous waste disposal facility or another officially approved location in accordance with the requirements of the legislation of the Kyrgyz Republic.

The contractor shall:

- ensure the safe transportation of sealed and labeled containers;
- coordinate the conditions for acceptance and disposal of waste with the operator of the receiving facility;
- obtain documents confirming the transfer or disposal of the waste;

- if the approved disposal arrangement provides for isolation of the containers with a layer of soil or clay at least 250 mm thick, ensure that this condition is fulfilled by the receiving organization or under its supervision.

Independent determination by the contractor of the disposal site for ACM and placement of waste within the construction site are prohibited.

7. Personnel Decontamination

Upon completion of the works, personnel shall:

- clean their footwear with a damp cloth;
- carefully remove disposable PPE by turning the contaminated side inward;
- place used PPE and cleaning cloths into airtight bags;
- if disposable respirators were used, transfer them as hazardous waste;
- thoroughly wash their hands and exposed areas of the body before leaving the work area.

8. Control and Documentation

ACM handling works shall be carried out under the supervision of the contractor's responsible specialists and inspected by the technical supervision. ARIS shall exercise overall control over compliance with the requirements of the ACMMP.

Upon completion of the works, the contractor shall:

- conduct a visual inspection of the area;
- prepare an area clearance certificate;
- submit to ARIS a report with photographic documentation of the clearance process and its results;
- attach documents confirming the transfer of the waste.

9. Training and Information

Where necessary, environmental and social specialists shall organize training for contractor personnel. The training shall include:

- information on the health risks associated with asbestos exposure;
- requirements for the safe handling of ACM;
- the procedure for implementing the ACMMP;
- procedures for site clearance and waste transfer;
- measures to prevent exposure of workers and visitors.

10. Financing

All costs associated with the implementation of the ACMMP, including the provision of PPE, collection, packaging, transportation, temporary storage, training, and transfer of ACM, shall be included by the contractor in the cost of the construction works.

Table P5-1. Key requirements for the handling of asbestos-containing materials

Element	Requirements
Preliminary inspection	Before dismantling old floor coverings, pipes, roofing and insulation elements, the contractor must carry out an inspection to check for the presence of any suspicious materials.
Suspension of work	If any suspicious material is detected, work must be suspended within a radius of at least 5 meters until the material has been examined and further action determined.
Restricted access	The area must be cordoned off, personnel must be evacuated, and access by visitors and unauthorized persons must be prohibited.
Dust control	The material is moistened; dry cleaning, blowing out and uncontrolled crushing are prohibited.
PPE	Disposable protective clothing, closed-toe footwear, gloves and respirators appropriate to the level of risk are used.
Small quantities of hazardous substances (ACM)	The material is collected by hand, placed in sturdy bags or sealed containers, and labelled.
Contaminated soil	The soil is moistened and removed by hand to a depth of at least 300 mm without temporary open storage.
Waste transfer	The hazardous material (ACM) is transferred to a specialized or officially approved facility with documentary confirmation.
Sanitization	Tools and footwear are cleaned using a wet method; used PPE and rags are packaged as contaminated waste.
Documentation	A clean-up report, a photographic record and waste transfer documents are drawn up.
Funding	All costs are included by the contractor in the cost of the works.

APPENDIX 6. SPECIAL METHOD STATEMENT AND PERMIT-TO-WORK FOR SENSITIVE WORKS

1. Purpose of the Appendix

This Appendix establishes an enhanced procedure for planning, authorization, control, and close-out of operations that may affect cultural heritage, visitor safety, slope stability, cave sites, or other sensitive elements.

Its purpose is to ensure that such an operation is not treated as ordinary construction work and is not commenced solely on the basis of a general method statement.

The Special Method Statement describes how the operation will be carried out. The Permit-to-Work confirms that all conditions specified for its commencement have actually been fulfilled.

2. Operations Requiring a Special Method Statement

A Special Method Statement shall be prepared, in particular, for earthworks in sensitive areas; demolition works near structures to be preserved; drilling and anchoring; impact and vibration works; works near rock surfaces and petroglyphs; interventions in historic materials; waterproofing and drainage works affecting moisture conditions; installation of scaffolding and temporary supports near cultural heritage objects; works on slopes; works in the Cave Museum; works in confined spaces; temporary closure of a significant route; emergency stabilization; and other operations identified by the CHMP, Cultural Heritage Management Plan, technical supervision, or a relevant specialist.

3. Contents of the special methodology

Table P6-1. Minimum content of the specialised methodology

Section	Content
Identification of the operation	Property, plot, boundaries, type of work, dates.
Basis	DED, CHMP, OUV, drawings, permits.
Initial state	Description, diagram, cracks, damage, photos.
Sensitive elements	Cultural heritage sites, surfaces, rock faces, routes, networks.
Scope of work	The precise scope and limits of the intervention.
Sequence	A step-by-step guide from preparation to recovery.
Equipment and tools	Type, weight, power, method of use, restrictions.
Materials	Composition, compatibility, storage and preparation.
Personnel	Manager, skilled staff, subject-matter experts.
Risks	Environmental, social, health and safety, and cultural heritage risks.
Protective measures	Enclosures, screens, mountings, protection against water, dust and vibration.
Control points	Stages requiring verification and authorization before proceeding.
Monitoring	What is being observed, by whom, how often, and how it is recorded.
Stop criteria	Specific circumstances under which the operation is terminated.
Response	What to do in the event of damage, a discovery, a leak, a spill or a complaint.
Completion	Inspection, photographs, restoration and closure of access.

4. Procedure for Review of the Method Statement

The contractor shall submit the Method Statement in advance. The review shall involve the technical supervision, design supervision, cultural heritage specialist, occupational health and safety specialist, NHA-MC — regarding access and site management arrangements, ARIS, and other parties specified by the CHMP or the permit.

All comments shall be addressed before commencement of the works.

Approval of the Method Statement does not constitute automatic authorization to proceed. Actual readiness shall be verified before commencement.

For works on the mountain trail and near Babur Mosque, in the Cave Museum and in areas where it interfaces with rock surfaces, in petroglyph areas and areas of possible burials, in the surroundings of the mausoleum, and within the Bronze Age settlement area, the Method Statement shall be reviewed by the technical and design supervision, ARIS, NHA-MC, and the Ministry of Culture, depending on the applicable permitting regime. The Permit-to-Work shall not be issued until such review has been completed.

5. Control Point System

For a sensitive operation, mandatory hold points and mandatory witness points shall be established. The specific set of control points shall be determined by the Method Statement, taking into account the nature of the operation.

Table P6-2. Typical hold points

Code	Hold point	Required confirmation
MCP-1	Document check	Methodology, drawings and permits are in place.
MCP-2	Initial record-keeping	The report, diagram and photographs have been approved.
MCP-3	Protection of sensitive assets	Barriers and protective elements have been installed.
MCP-4	Staff readiness	Training, qualifications and PPE have been confirmed.
MCP-5	Equipment and materials readiness	Serviceability, limitations and compatibility have been checked.
MCP-6	Inspection following opening	The actual condition has been checked prior to proceeding.
MCP-7	Check of critical intermediate stage	The absence of damage has been confirmed.
MCP-8	Final inspection of the operation	The condition has been compared with the initial record.
MCP-9	Restoration and closure	The site has been restored and the documentation has been finalized.
MMP-1	Mandatory monitoring checkpoint	Authorized parties have been notified and are able to attend.

Not all control points apply to every operation. The method statement shall identify the applicable control points, the required notification period, and the persons who must participate in the inspection.

6. Grounds for Suspension of Works

The permit-to-work shall specifically identify the conditions requiring suspension of works: a new crack; an increase in an existing crack; chipping; deformation; settlement; water ingress; instability; an unexpected cavity; an accidental find; failure of protective equipment; work outside the agreed boundary; use of unauthorized tools; entry of a visitor into a hazardous area; or any other condition specified in the method statement.

Upon occurrence of any of the specified conditions, the work shall be stopped, the area shall be protected from further impact, and the responsible parties shall be notified. Work may resume in accordance with the procedure set out in Section 7 of this PESSMP.

7. Authorisation and Access Form

Table P6-3. Authorisation to carry out a sensitive operation

Information	Information to be provided
Permit number	
Site and area	
Name of operation	
Boundaries	
Start date and time	
Validity period	
Approved methodology	
Applicable authorizations	
Initial documentation	
Manager in charge	
Specialist personnel	
Team composition	
Equipment and tools	
Safety measures	
Applicable Technical Regulations and Safety Rules	
Criteria for suspension of work	
Communication procedures	
Additional conditions	

Table P6-4. Checking readiness for a sensitive operation

Condition	Done	Not done	Not applicable	Confirmation
Documents are valid				
The area has been marked out				

Condition	Done	Not done	Not applicable	Confirmation
The initial condition has been recorded				
Safety measures have been put in place				
Staff have been briefed				
Equipment has been checked				
Emergency response resources are ready				
Supervising specialists have been notified				

Depending on the results of the inspection, the operation is either authorised, authorised subject to specifically stipulated conditions, or not authorised. The decision is signed by the authorised representatives of the contractor, the technical supervision body and other mandatory participants as specified in the methodology.

Table P6-5. Parties involved in the review and closure of a sensitive transaction

Function	Compulsory attendance	Full name/organisation	Signature/date
The contractor's designated manager	Always		
The contractor's health, safety, environmental and social affairs specialist(s)	By applicability		
Technical supervision	Always		
Author's supervision	When making changes to a design solution or material		
NHA-MC	Where access to, the operating mode and the condition of the facility are affected		
Cultural Heritage Specialist/Archaeologist	For sensitive work		
ARIS	For significant/specifically defined transactions		
Ministry of Culture	Where this is provided for in the CHMP, a licence or legislation		

8. Closure of access

Upon completion, a re-inspection is carried out. The form details the scope of work carried out; deviations; reasons for stoppages; the condition of sensitive assets; photographs; remedial measures; outstanding issues; and the decision to close the work order.

The work order is not closed until the final inspection has been carried out, the current condition has been compared with the initial record, and the required documentation has been completed.

APPENDIX 7. WORKING FORMS FOR MONITORING, NON-CONFORMITIES, INCIDENTS AND REPORTING

1. Purpose of the Appendix

This Appendix establishes a uniform procedure for documenting the implementation of the Contractor's PESSMP.

The forms are intended to ensure that the Contractor conducts internal monitoring; the technical supervision verifies the actual condition; identified violations have an assigned responsible person and deadline; closure is confirmed; and the monthly report is based on primary records.

The forms shall not become a mechanical exercise. The status "compliant" shall be marked only after an actual inspection has been conducted.

2. Rules for Completion

Each record shall contain the date, site/area, name of the inspector, actual result, identified deviation, immediate action taken, responsible person, deadline, and confirmation of closure.

The following statuses shall be used: C — compliant; NC — non-compliant; NA — not applicable; RR — requires re-inspection.

A blank field shall not be considered confirmation of compliance. If an item is not applicable, the form shall state the grounds for its non-applicability.

Corrections shall be made in a manner that preserves traceability of the original entry. Deletion or replacement of records after inspection is not permitted.

3. Daily Monitoring Checklist

The purpose of the form is to confirm the readiness of active areas for safe work during the shift and to identify deviations before they develop into significant non-conformities. The list of items shall be expanded based on the active works and applicable measures M-01–M-35.

Table P7-1. Contractor's daily checklist

Measure code	Question under review	Status	Identified condition	Immediate effect	Responsible party and deadline	A photo or a recording
M-01	Barriers and signage are in good working order					
M-02	Vehicle routes are being followed					
M-05	Dust suppression is adequate					
M-07	There are no leaks or contaminated runoff					
M-08	Chemicals are stored correctly					
M-09	Waste is sorted and the site is tidy					
M-12	Sensitive areas are protected					
M-14	Visitors are kept away from the worksite					
M-16	PPE and safe working conditions are provided					
M-20	Emergency equipment is available					
	Additional question regarding ongoing works					
	Additional question regarding ongoing works					

4. Weekly joint rounds

The purpose of the form is to facilitate a joint assessment by the contractor and the technical supervisor, to verify that previous tasks have been completed and to confirm readiness for the upcoming operations.

Table P7-2. Checklist for the weekly joint inspection round

Section	Data
Date and participants	
Active areas	
Work for this week	
Sensitive operations for next week	
Outstanding discrepancies	
Complaints and incidents	
Key positive observations	
New risks	
Required actions	

Table P7-2a. Action plan based on the findings of the joint inspection

№	Issue identified	Measure code	Category	Action	Person in charge	Duration	Closure check

5. Register of Non-Conformities

The purpose of the form is to ensure traceability of the non-conformity from its identification through to its documented closure. The category shall be selected in accordance with Table 13 of the main ESMP.

Table P7-3. Register of non-conformities and corrective actions

№	Date and location	Requirement breached	Category	Description and consequences	Immediate action	Analysis of the cause	Corrective action	Person in charge	Duration	Status	Confirmation of closure

6. Incident Notification and Investigation

The purpose of the initial form is to promptly communicate information verified at the time of notification without waiting for the investigation to be completed. The preliminary nature of the information shall be clearly indicated; the information shall be updated as additional data becomes available.

Table P7-4. Initial incident report

Data	Information
Date and time of the incident	
Location	
Type of incident	
Brief factual description	
Casualties	
Impact on cultural heritage or the environment	
Initial measures taken	
Work suspended	
Parties notified and time of notification	
Current status	
Person in charge	

Following the initial notification, an investigation is carried out that is proportionate to the severity and potential consequences of the incident.

Table P7-5. Incident Investigation Report

Section	Content
Detailed sequence of events	
Immediate causes	
Key organisational causes	
Requirements breached	
Actual and potential consequences	

Section	Content
Corrective actions	
Preventative actions	
Responsible parties and deadlines	
Need to update the OHS Policy or procedures	
Verification of the effectiveness of the measures	

7. Register of Grievances and Complaints

The purpose of the form is to ensure the registration, referral, review, and closure of complaints without loss of information. Confidential information and information related to SEA/SH shall not be included in the general register.

Table P7-6. Register of enquiries and complaints

Nº	Data	Channel	Applicant category	Section	Subject of the enquiry	Urgency	Responsible	Measures taken	Date of reply	Status	Closing date

8. Logbook of Sensitive Work

The purpose of the logbook is to ensure that operations which may affect cultural heritage can be tracked on a daily basis, and to compare the condition of the site before, during and after the work has been carried out.

Table P7-7. Log of work carried out in the sensitive area

Date	Site and area	Operation	Methodology and approval	Weather conditions	Situation prior to the start	Observations made during	Deviations or stoppages	Condition following	Photo	Signatures

9. Monthly report on the implementation of C-ESMP

The purpose of the form is to consolidate the source records into a verifiable report, not to replace them with a general description.

Table P7-8. Key quantitative indicators

Indicator	During month	Cumulative	Note
Average and maximum number of employees			
Training sessions conducted			
Internal audits			
Joint site inspections			
Permits and authorisations			
Closed control points			
Non-conformities by category			
Closed non-conformities			
Incidents			
Complaints from the public			
Complaints from employees			
Waste volumes by type			
Incidental findings			
Work stoppages			

The monthly report must include information on active sites; the status of tasks M-01 to M-35; monitoring results; non-conformities; incidents; cultural heritage issues; waste; complaints; training; upcoming sensitive operations; photographs; and an action plan.

10. Final site checklist

The purpose of this form is to confirm that there are no outstanding environmental, social or cultural heritage obligations prior to the transfer of the site.

Table P7-9. Final check prior to handover

Condition	Completed	Not completed	Note
Temporary infrastructure has been removed			
Waste has been removed			
Surfaces have been restored			
Drainage is operational			
Green spaces have been restored			
Cultural heritage sites have not been damaged			
Final photographic documentation has been completed			
Complaints have been closed			
Non-conformities have been resolved			
As-built documentation has been handed over			
Operating instructions have been handed over			
A joint inspection has been carried out			

11. Additional object-specific forms

Additional asset-specific forms are set out below. These are used in addition to the general checklists when the relevant type of work or area is active.

Table P7-10. Monthly progress report on measures M-01–M-35

Measure code	Monthly status	Brief confirmation	Open issue/action	Duration	Confirmation of supervision
M-01					
M-02					
M-03					
M-04					
M-05					
M-06					
M-07					
M-08					
M-09					
M-10					
M-11					
M-12					
M-13					
M-14					
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Table P7-11. Pre-construction biodiversity survey report

Date	Object/boundaries	Verified	Result/description	Photo/diagram	Restrictions and measures	Expert's conclusion
		Nests, bats, burrows, reptiles, plants, trees				

Table P7-12. Initial Condition Report for a Sensitive Asset

Date	Object/exact location	Element/surface	Condition, cracks, moisture and defects	Photo No./category	Protective measures	Captions

Table P7-13. Waste Generation and Transfer Register

Date	Type of waste	Quantity/unit	Temporary storage facility	Carrier	Place of handover/removal	Document No.	Person in charge

Table P7-14. Visitor and Pilgrim Register

Date/time	Route/Entrance	Barriers and signs	Lighting/coverage	Accessibility/Support	Parting with one's appliances	Congestion/queues and measures	Those who carried out the checks

Table P7-15. Logbook for monitoring water, humidity and the condition of the Cave Museum

Date/weather	Zone/control point	Job/event	Water/humidity/leakage	Cracks/rock surfaces	Drainage/protective measures	Action/stop	Photos/signatures

Table P7-16. Readiness checklist for an individual section

The condition to be tested	C	HC	HII	Confirmation /notes	Person responsible/deadline
Boundaries and sensitive areas have been marked out					
The baseline condition and photographic record have been documented					
Permits and procedures are in place					
Barriers, access routes and emergency access points are ready					
Temporary infrastructure has been installed in accordance with the agreed plan;					
Waste and chemical materials have been organised;					
PPE, first aid, fire-fighting and rescue equipment are ready;					
Staff have been trained; relevant specialists have been notified;					
Technical and safety specifications and the access permit have been defined					

ANNEX 8. MINIMUM REQUIREMENTS FOR THE CONTRACTOR'S OCCUPATIONAL HEALTH AND SAFETY PLAN

(template)

The OHS Plan shall be based on an actual risk assessment and shall take into account the specific nature of works within an operational museum complex, including the presence of visitors and pilgrims, mountainous terrain, work at height and on slopes, work in caves and confined spaces, electrical and hot works, excavation and demolition activities, lifting operations, as well as emergency risks.

Minimum content of the OHS Plan:

1. General Provisions

- purpose and objectives of the Plan;
- scope of application;
- list of work areas and types of works;
- key OHS objectives and performance indicators.

2. Contractor's Policy and Commitments

- management commitment to providing safe working conditions;
- compliance with applicable legal requirements and Project documents;
- principle of preventing injuries, occupational diseases, and dangerous incidents.

3. Organizational Structure, Functions and Responsibilities

- person in charge of works;
- OHS specialist;
- designated responsible persons for specific types of work;
- workers and subcontractors;
- arrangements for interaction with Technical Supervision and ARIS.

4. Hazard Identification and Risk Assessment

- procedure for identifying hazards prior to commencement of works;
- risk assessment by type and location of works;
- review of risk assessments when work methods, equipment, or conditions change;
- separate assessment of high-risk activities.

5. Risk Control Measures

Measures shall be determined in accordance with the hierarchy of controls:

- elimination of the hazard;
- substitution of the method, material, or equipment;
- engineering controls;
- administrative controls;
- use of PPE.

The Plan shall include applicable requirements at a minimum for work at height and on slopes, excavation and trenching, demolition, work in confined and cave spaces, electrical work, hot work, lifting operations, vehicle and equipment movement, manual handling of loads, and use of equipment.

6. Personal and Collective Protective Equipment

- list of required PPE by type of work;
- procedures for issuance, inspection, and replacement;
- barriers, fall protection systems, protective screens, and other collective protective measures;
- monitoring of actual use.

7. Training, Briefing and Authorization to Work

- induction briefing;
- workplace briefing;
- targeted briefings prior to hazardous operations;
- specialized training for specific categories of workers;
- verification of qualifications and authorization to perform work;
- procedures for documenting training.

8. High-Risk Activities and Permit-to-Work System

The Plan shall identify types of work requiring a work permit or other established authorization procedure, including, as applicable:

- work at height and on slopes;
- work in confined spaces;
- electrical work;
- hot work;
- lifting operations;
- other high-risk activities.

9. Emergency Preparedness and Response

The Plan shall provide for actions in response to foreseeable emergencies, including:

- fire and smoke;
- earthquake;
- rockfall and slope instability;
- structural collapse;
- electrical equipment accidents;
- hazardous substance spills;
- sudden water ingress;
- medical emergencies.

For earthquakes, the Plan shall define evacuation routes, safe assembly points, responsible persons, communication procedures, and procedures for accounting for workers, as well as periodic drills. This specific addition was incorporated into the current version of the ESIA template.

10. First Aid and Medical Preparedness

- first-aid kits and their locations;
- trained first-aid personnel;
- procedures for calling emergency medical services;
- access for emergency services;
- procedures to be followed in the event of a worker injury or deterioration of health.

11. Inspections and Monitoring

- daily inspections of work areas;
- periodic OHS inspections;
- monitoring of the condition of equipment, barriers, and PPE;
- procedures for documenting inspection results;
- deadlines for rectification of identified violations.

12. Incidents and Dangerous Occurrences

- immediate notification procedures;
- recording of injuries, incidents, and near-miss events;
- investigation of causes;
- identification of corrective and preventive measures;
- monitoring of their closure.

13. Worker Engagement and Consultation

- communication of OHS requirements to workers;
- conducting brief pre-shift safety meetings;
- opportunity to report unsafe conditions without negative consequences;
- linkage with the Workers' GRM.

14. Documentation and Records

The Plan shall specify the list of mandatory records, including:

- risk assessments;
- training and briefing logs;
- work permits;
- inspection logs;
- PPE issuance records;
- worker qualification records;
- incident records;
- records of drills and exercises;
- corrective actions.

15. Review and Updating of the Plan

The Plan shall be reviewed when the scope, methods, or conditions of work change, following a significant incident, when recurring violations are identified, and upon request by Technical Supervision or ARIS.

The Contractor's OHS Plan shall be submitted for review and consideration prior to commencement of the relevant works. The existence of an approved Plan does not relieve the Contractor of its obligation to conduct a risk assessment immediately prior to carrying out individual operations and to comply with all applicable requirements of the legislation, the C-ESMP, the Contractor's C-ESMP (C-ESMP-C), the design documentation, and approved method statements.

APPENDIX 9. INFORMATION ON THE ARIS FEEDBACK MECHANISM

1. Purpose of the Mechanism

Within the framework of REDP-1, the ARIS Feedback Mechanism (FM) operates, through which stakeholders may submit questions, proposals, statements, comments, and complaints concerning the implementation of the Project and this Subproject.

The FM is available to visitors, pilgrims, NHA-MC staff, local residents, contractor and subcontractor workers, organizations, and other interested parties. Proposals may concern the organization of construction works, access, safety, the environment, cultural heritage, worker conduct, and other issues related to the implementation of the Subproject.

The ARIS Feedback Mechanism is the official channel for the submission, registration, and referral of proposals within the framework of the Project Grievance Redress Mechanism. Proposals may be submitted directly through ARIS AFM channels or received by the contractor, NHA-MC, and other participants at the Subproject level, with subsequent referral to the ARIS AFM.

2. Submission and Review of обращения

Proposals are accepted in written, oral, and electronic form and are registered in accordance with the applicable ARIS procedures. A proposal may be submitted anonymously. The absence of the applicant's name or contact details shall not constitute grounds for refusing to consider the proposal.

The applicant's personal data shall be treated as confidential and shall not be disclosed without the applicant's consent. Where contact details are provided, the applicant shall be informed of the decision taken. If the applicant is dissatisfied with the outcome of the review, they have the right to appeal in accordance with the established ARIS procedure or to contact government authorities or the court.

3. Feedback Channels

- WhatsApp and mobile communication: +996 770 700 522; +996 550 700 522;
- Email: bfm@aris.kg;
- ARIS online platform: op.aris.kg;
- Official ARIS website and official ARIS social media pages;
- Oral or written proposal during working meetings, site visits, and through the ARIS reception office.

4. Contractor's Responsibilities

The contractor shall not establish a mechanism that replaces the ARIS FM. Prior to commencement of works, the contractor shall designate a responsible person to receive proposals at the construction site, display up-to-date information on the FM, receive oral and written proposals, and refer them to ARIS in accordance with the established procedure.

The contractor shall not obstruct the submission of a proposal directly to ARIS, require the applicant's name to be provided as a mandatory condition, conceal proposals, or exert pressure on an applicant. If a proposal indicates an immediate threat to the life, health, or safety of visitors, the environment, or cultural heritage, the contractor shall immediately take protective measures and notify the technical supervision and ARIS.

5. ARIS FM Information Material

The information material provided below shall be displayed at the construction site and at active entrances in agreed locations. The contractor shall ensure its visibility, integrity, and up-to-date status.

6. Special Principles for Receiving and Handling SEA/SH Complaints

In line with the World Bank Good Practice Note for Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works, the GM will apply the following additional principles when receiving and processing complaints related to SEA/SH:

- No identifiable information about the survivor will be stored in the GM.
- The GM will not request or record more than the following information related to a SEA/SH allegation: (i) the nature of the complaint, in the complainant's own words and without direct questioning of the survivor; (ii) whether, to the best of the survivor's knowledge, the alleged perpetrator was associated with the Project; (iii) where possible, the age and sex of the survivor; and (iv) where possible, whether the survivor was referred to services.
- The GM will assist SEA/SH survivors by referring them to a GBV service provider immediately upon receiving a complaint directly from a survivor. This will be possible because a list of available service providers will be established, through a service provider mapping exercise, before commencement of Project works.

Information recorded in the GM will be kept strictly confidential, in particular with respect to the identity of the complainant. For SEA/SH cases, the GM will primarily serve to: (i) refer the complainant to the appropriate GBV service provider; and (ii) record resolution of the complaint, without documenting details that could identify the survivor.



For any enquiries or complaints regarding the implementation of **ARIS** projects, please contact:



АРИС КБМ
АРИС КАЙТАРҢЫМ САЛУАТЫШ МЕХАНИЗМ

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 +996 550 700 522
bfm@aris.kg
 онлайн - платформа АРИС
op.aris.kg

Figure P9-1. Information on the ARIS Feedback Mechanism

Appendix 5. Results of the Public Consultation

MINUTES OF PUBLIC CONSULTATIONS

on environmental and social issues in connection with the design of the ‘Reconstruction of the ‘Suleiman-Too’ National Historical and Archaeological Museum Complex’ as part of the Regional Economic Development Project (REDP)

Date: 1 July 2026

Date and time: 10:00

Venue: The ‘Sulaiman-Too’ National Historical and Archaeological Museum Complex, Osh, 235/2 Kurmanzhan Datka Street

Number of participants: 46 people, including 19 women (according to the registration form)

Participants at the meeting:

ARIS representative (coordinator) – **Shayloobek Arynov**

ARIS representative – **Ainura Tentieva**

ARIS representative – **Umutbek Raimov**

ARIS spokesperson – **Islam Israilov**

ARIS representative – **Mirlan Yegemberdiev**

Representative of RAM Engineering Associates (Deputy Director) – **Ulan Ishenaliev**

Representative of RAM Engineering Associates (Chief Engineer) – **Bakyt Kermaliev**

Representative of RAM Engineering Associates (Environmental Specialist) – **Asanalieva Nazgul**

Representative of RAM Engineering Associates (social affairs specialist) – Azamat Omurbekov

Representative of RAM Engineering Associates (Project Coordinator) – **Nursultan Ishenaliev**

Representatives of government bodies, the local community, residents of neighbouring areas and other interested parties also took part in the public hearings.

The conduct of public hearings

The public hearing was opened by the ARIS project coordinator, Mr Shayloobek Arynov, who welcomed the participants, introduced the project team and outlined the purpose of the event to those present.

In his opening remarks, he noted that the public hearing was being held as part of the ‘Regional Economic Development of the Osh Region and the City of Osh (RED-1)’ project, with the aim of informing stakeholders about the planned reconstruction of the ‘Sulaiman-Too’ National Historical and Archaeological Museum Complex

‘Sulaiman-Too’, to present the main design solutions, to discuss the environmental and social aspects of the project, and to gather suggestions and comments from the public. It was particularly emphasised that all suggestions and recommendations received would be considered during the further implementation of the project, subject to technical, environmental, economic and regulatory feasibility.

A welcome address was delivered by Mr Shukuraliyevich Madaminov, Deputy Minister of Culture, Information and Youth Policy of the Kyrgyz Republic, who thanked the participants for their interest in the project, expressed his gratitude to ARIS and the World Bank for their ongoing support in preserving sites of historical and cultural heritage, and spoke in detail about the significance of the forthcoming restoration of the National Historical and Archaeological Museum Complex ‘Sulaiman-Too’ to preserve the country’s cultural heritage and develop the region’s tourism potential.

Akylbek Abdishokurovich Sadirov, Deputy Head of the Interregional Directorate for the Southern Region of the Ministry of Economy and Trade of the Kyrgyz Republic, thanked ARIS and the World Bank for their many years of fruitful cooperation in implementing development projects in the city of Osh. In his speech, he emphasised the strategic importance of the museum complex’s reconstruction, highlighted the prospects for further strengthening its international status – including issues relating to UNESCO World Heritage sites – and announced that the project is in the final stages of design, which allows the main technical solutions to be presented to the public.

During the discussion, participants enquired about the timeline for the completion of the design phase and the start of construction and installation works.

In response to a question, Mr Shailoobek Arynov stated that the development of the design and cost estimate documentation was virtually complete, and that the working drawings and the estimated project cost had been prepared; following this, procurement procedures to select a contractor would commence. At the conclusion of the introductory session, the floor was given to the project specialists to deliver thematic presentations.

Environmental aspects of the project

The project's environmentalist, Ms Nazgul Asanalieva, gave a presentation.

During the presentation, information was provided on the objectives of the PRER-1 project, the current technical condition of the museum complex, and the need for renovation whilst ensuring the unconditional preservation of its historical, cultural and architectural value.

The speaker noted that the project primarily involves major refurbishment of existing buildings without altering their historical appearance or spatial layout. To minimise the impact on cultural heritage sites, the plan is to make maximum use of manual labour and limit the use of heavy construction machinery.

Participants were presented with the main potential environmental impacts associated with the construction works, including the generation of construction waste, noise and dust pollution, as well as possible risks of environmental contamination. It was noted that these impacts are temporary, localised and manageable, and will be minimised through the implementation of the Environmental and Social Management Plan (ESMP), which will be developed during the design phase and finalised by the contractor prior to the start of construction works.

During the project's implementation, particular attention will be paid to environmental monitoring, noise control, dust suppression measures, the management of construction waste, and strict compliance with environmental legislation, taking into account the site's high historical and cultural value.

Social aspects of the project

The presentation was given by the project specialist, Mr Azamat Omorbekov.

During the presentation, it was noted that the project includes a range of measures to improve accessibility to the museum complex for people with reduced mobility, including the installation of ramps, lifting platforms, safe pedestrian routes and wayfinding features for people with visual and hearing impairments.

In addition, participants were provided with information about the Feedback and Complaints Handling Mechanism currently in place at ARIS, through which members of the public can submit enquiries, suggestions, applications and complaints at all stages of a project's preparation and implementation.

Presentation of design solutions

The project's chief engineer, Mr. Bakyt Kermaliev, presented the key technical solutions and stated that the project involves the refurbishment of the museum complex's facilities, which are grouped into nine functional zones:

- The Gates of Fire — construction of a visitor center, a carport for four golf buggies and the development of the entrance area;
- Water Gate — construction of a ticket office, public toilet and kiosk using lightweight structures, as well as refurbishment of the entrance area;
- Mountain Gate — construction of a ticket office, a kiosk, a public toilet and the entrance area;
- Administrative complex — demolition of existing buildings and construction of a new administrative building;
- Cave Museum — major refurbishment of the premises, waterproofing works and reconstruction of the arch at the upper viewing platform;
- Burkhiya Mausoleum — major refurbishment of the site and landscaping of the surrounding area;
- Ethnographic Museum — major refurbishment of the façades, replacement of stained-glass windows and landscaping of the grounds;
- Mountain trail — major refurbishment of the route, cladding of steps with granite tiles, creation of rest areas, installation of staircases, handrails and protective netting against rockfalls, and reinforcement of existing guardrails;
- Golf cart track — laying of an asphalt concrete surface, installation of a drainage system, landscaping of the surrounding area and repair of existing fencing.

During the discussion, participants asked questions regarding the project's timeline and how the museum complex would operate whilst construction work was underway.

Mr Bakyt Kermaliev explained that the design organisation is responsible for preparing the design and cost estimate documentation, whilst the execution of the construction works falls within the remit of ARIS.

Mr Shayloobek Arynov stated that the renovation is tentatively scheduled for completion by the end of 2028. However, there are no plans to close the museum complex entirely during the construction period — the works will be carried out in phases, whilst allowing visitors to access certain parts of the complex.

Mr Umutbek Raimov, a representative of ARIS, further informed participants about the procedures governing the feedback mechanism and the complaints handling process, emphasising that complaints may be submitted at any stage of the project's implementation.

Questions from participants

Ms Mavlyuda Bulazhanova, a resident of the neighbouring area, asked questions regarding the removal of metal fencing at the burial sites located within the complex, as well as the sources of funding for the project.

In response, Mr Shayloobek Arynov stated that the project is being implemented by the Government of the Kyrgyz Republic with financial support from the World Bank.

It was specifically clarified that all construction, installation and landscaping works would be carried out exclusively within the boundaries of the project areas and locations presented during the public consultations. The area of the existing cemetery, burial sites and other areas not included within the boundaries of the project works will not be affected. Accordingly, the project does not envisage the removal of metal fencing at burial sites.

Regarding the dismantling of metal fencing, Akylbek Abdishokurovich Sadirov provided clarification, stating that the decision had been taken following inspections which revealed an increased fire risk and the unsatisfactory technical condition of most of the structures due to their significant physical wear and tear.

It was also noted that all measures were carried out with the participation of representatives of the Muftiate of the Kyrgyz Republic, in compliance with the requirements of current legislation and religious traditions.

During the subsequent discussion, participants requested further information on the landscaping of the complex's grounds.

Project representatives reported that the project envisages the reconstruction of the main footpath, the rectification of existing defects in the surfacing, the creation of safe pedestrian infrastructure, the establishment of routes for golf buggies, and comprehensive landscaping of the site. The use of heavy construction machinery will be kept to the absolute minimum.

Participants also enquired about the fitting out of the facilities with modern engineering systems. Representatives of the project team explained that the project provides for the installation of all necessary engineering systems to ensure the safe and comfortable operation of the buildings.

A separate issue concerned the installation of outdoor lighting for the complex's grounds.

Ms Ainura Tentieva explained that, given the site's high historical and cultural value and the need to preserve its historical landscape, the project does not envisage any large-scale architectural lighting. At the same time, the design solutions will fully comply with the requirements of legislation governing the protection of cultural heritage sites.

At the conclusion of the public consultation, participants raised the issue of the CCTV system. Representatives of the project team stated that the project provides for the installation of a modern CCTV system to enhance visitor safety and ensure the security of the museum complex's facilities.

Results of the public consultations

Following the public consultation, participants were briefed on the aims, objectives and key technical solutions of the 'Regional Economic Development of the Osh Region and the City of Osh (PRER-1)' project, specifically regarding the reconstruction of the 'Sulaiman-Too' National Historical and Archaeological Museum Complex.

During the event, representatives from ARIS and the project organisation presented the design, environmental and social solutions, explained the expected outcomes of the project, the potential environmental and social impacts, and the measures planned to prevent and minimise them.

The main questions from participants concerned the project timeline, the organisation of construction works, the operating arrangements for the museum complex during the reconstruction period, sources of funding, measures to preserve, the

improvement of the surrounding area, improving accessibility for people with reduced mobility, the organisation of outdoor lighting, the installation of a CCTV system, and the removal of metal fencing at burial sites.

Comprehensive explanations were provided to participants on all the questions raised.

The comments and suggestions raised during the public consultation will be considered in accordance with established procedures and, subject to technical, environmental, economic and regulatory feasibility, taken into account at subsequent stages of the project's implementation.

Participants in the public consultation expressed their support for the implementation of the project to renovate the 'Sulaiman-Too' National Historical and Archaeological Museum Complex

'Sulaiman-Too', noting its importance for the preservation of the historical and cultural heritage of the Kyrgyz Republic, the development of tourism infrastructure, the improvement of the museum environment and ensuring the site's accessibility to residents and visitors to the city of Osh.

Participants expressed an understanding of the possible temporary inconveniences associated with the construction work and agreed to its continuation.

No further comments or proposals regarding environmental or social issues were received.

Secretary of the meeting:

Umutbek Raimov



Appendices:

Registration list of participants Photographs from the public hearings

Appendix: List of participants

Приложение: Список участников

Катышуучулардын тизмеси

Компонент № __

Иш-чаранын аталышы: «Сулайман-Тоо комплекси жана Өзгөн тарыхый-архитектуралык комплексин реконструкциялоо жана модернизациялоо» долбоору боюнча Экологиялык жана социалдык чөйрөгө тийгизүүчү таасир боюнча

Өтүүчү жер: “Сулайман-Тоо” улуттук тарыхый-археологиялык музей комплекси

Дата: 01. 07. 2026

Катышуучулардын жалпы саны 46 анын ичинен аялдар 19

№	Аты жөнү	Кызматы/ иш орау	Телефон	Жынысы	Колу
1.		директор УИАК АРК		Ж	
2.		земелчи Эмилбе		М	
3.		Ногомкин Виталий Иванович		Ж	
4.		М.С.С.С. М.С.С.С. М.С.С.С.		Ж	
5.		Координатор ПРЭР АРК		Ж	
6.		Сулайман-Тоо УИАК Ш.К.		Ж	
7.		Сулайман-Тоо УИАК Ш.К.		Ж	
8.		Сулайман-Тоо УИАК Ш.К.		Ж	
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