

TERMS OF REFERENCE

Issyk-Kul Ring Road Improvement Project (Barskoon-Karakol Section 3) Construction Supervision Consultant

A. Project Background:

The entire Issyk-Kul Ring Road (IRR) has severely deteriorated over time and now has poor riding quality and a traffic carrying capacity that does not meet the requirements of the high volume of vehicles present during the peak tourism and annual harvesting seasons. This results in high safety risks for all road-users. Adding to this, is a lack of roadside services for public use such as visitor's centers, parking areas, walkways and streetlighting which is seen as reducing the area's appeal to visitors.

The government has embarked on a program of reconstruction along the whole Ring Road route using its own funds and those provided by other agencies under various funding agreements. These include arrangements made with the Arab Coordination Group and the European Bank for Reconstruction and Development. The subject section of the route lies in the south-eastern lakeshore area and will complete the full program of interventions around the Ring Road corridor. In response to a request from the Government of the Kyrgyz Republic [the Government], the Asian Development Bank [ADB] is providing a financial assistance for the supervision of the reconstruction of the project road section.

The main scope of the project is the widening of the existing two-lane road and reconstructing the pavement of the 75.2 km Barskoon-Karakol section of IRR to provide a modern four-lane facility for safe movement of traffic and pedestrians.

Safeguards due diligence was carried out and an Environment Impact Assessment (EIA) ¹ and a Land Acquisition and Resettlement Plan (LARP) ² have been prepared. The project is classified as Category A for environment and Category B on involuntary resettlement in accordance with ADB Safeguards Policy.

The detailed engineering design [DED] for the project road section was undertaken by [Kyrgyzdortransproekt (DI) in the Kyrgyz Republic in 2023. The DED was then reviewed by an international consultant and some of the recommendations made have been incorporated into the final detailed design.

A Road Safety Audit (RSA) ³ of the DED was undertaken by the same international consultant however, a significant number of recommendations were not accepted by MOTC due to potential conflicts with current design standards. However, the Government is planning to facilitate acceptance and implementation of some of the road safety recommendations by approving a Design Exception Procedure in 2024.

For this project, the Executing Agency will be the Ministry of Transport and Communications (MOTC), and the Implementing Agency will be its Project Implementation Unit [PIU].

Site Location

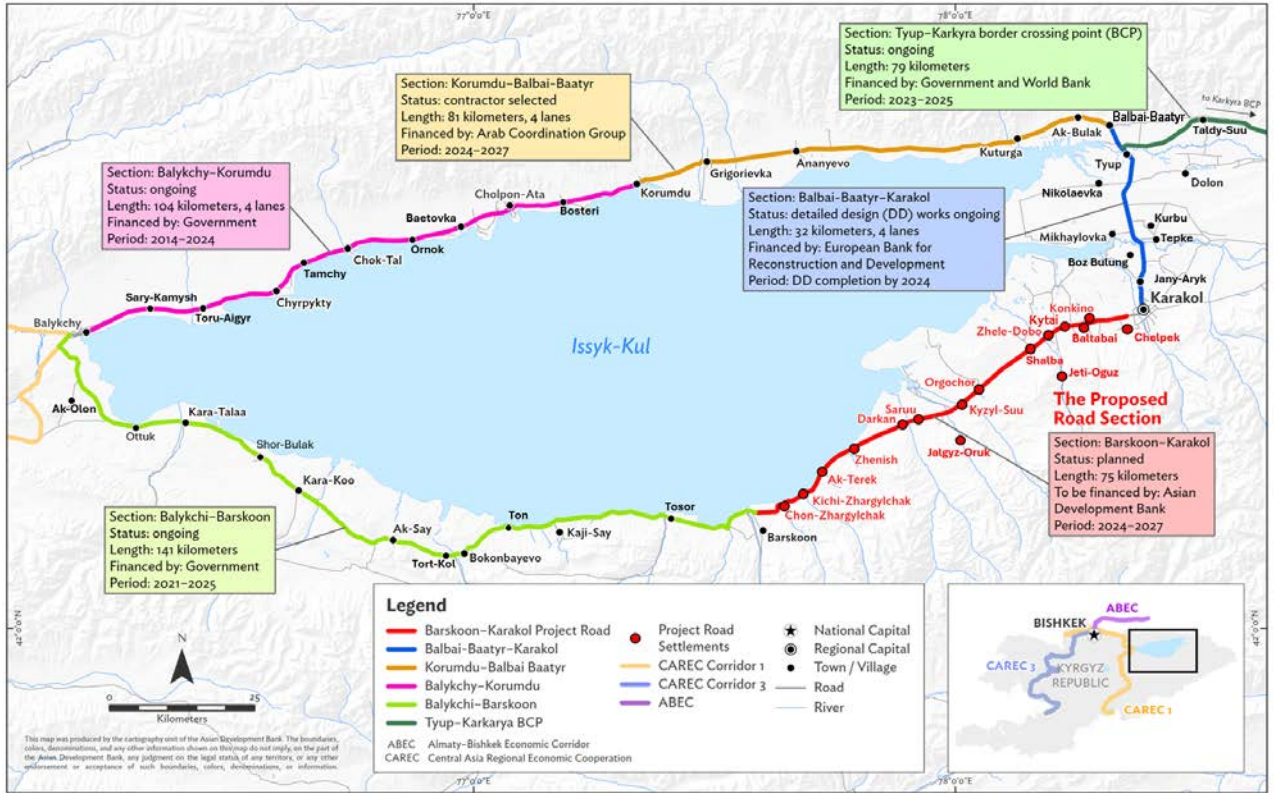
The subject 75.2 km long 'Barskoon-Karakol' section of the IRR is in the southeastern lakeshore area as shown in Figure 1 - Project Location Map overleaf:

¹ <https://www.dropbox.com/scl/fi/7e9uuk0rewcv5vcnf2h0c/TA6955-EIA-Report-Complete-20230906.pdf?rlkey=xblqdvqy8djtdoiayecg7j7&dl=0>

² <https://www.dropbox.com/scl/fi/624iias8k6wt546cl9os7/LARP-2nd-August-2023.docx?rlkey=2x2m47qkc1bvmm1pjm17w2hhg&dl=0>

³ <https://www.dropbox.com/scl/fo/qdfq81nrit8gigdzfcbju/h?rlkey=iicik76ma1qkc7glfagbzdzy8b&dl=0>

Figure 1: Project Location Map



B. Summary of Design Features

Technical Classification of the Barskoon-Karakol Road

The current Issyk-Kul Ring Road was assigned a Category II classification per GOST definition, based on perceived function and projected traffic volumes. The full Ring Road route extends over a total distance of about 440 km.

Project Section 3 design conforms with the requirements of GOST 33382-2015 “Automobile Roads for General Use-Technical Classification” for which a **Category II** road with a 4-lane divided configuration and a central median strip, is required. The design speed adopted was 120 km/h but the national speed limit of **90 km/h** will be posted on rural areas. For urban/semi-urban characteristics a **60 km/h maximum** speed limit will be posted.

Typical Design Cross Sections

Graphics showing typical cross section details for the proposed roadway in both rural stretches and in urban areas with adjoined and separated footway provisions, are given in Figure 2 and Figure 3 following:

Figure 2: Typical Cross-section Schematic - Rural Areas

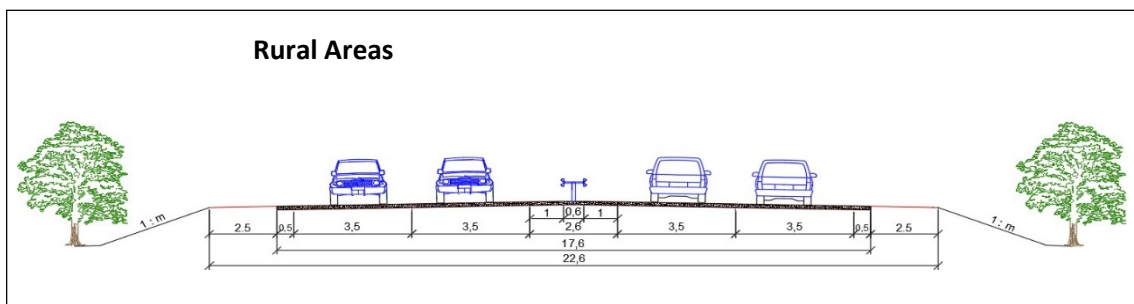
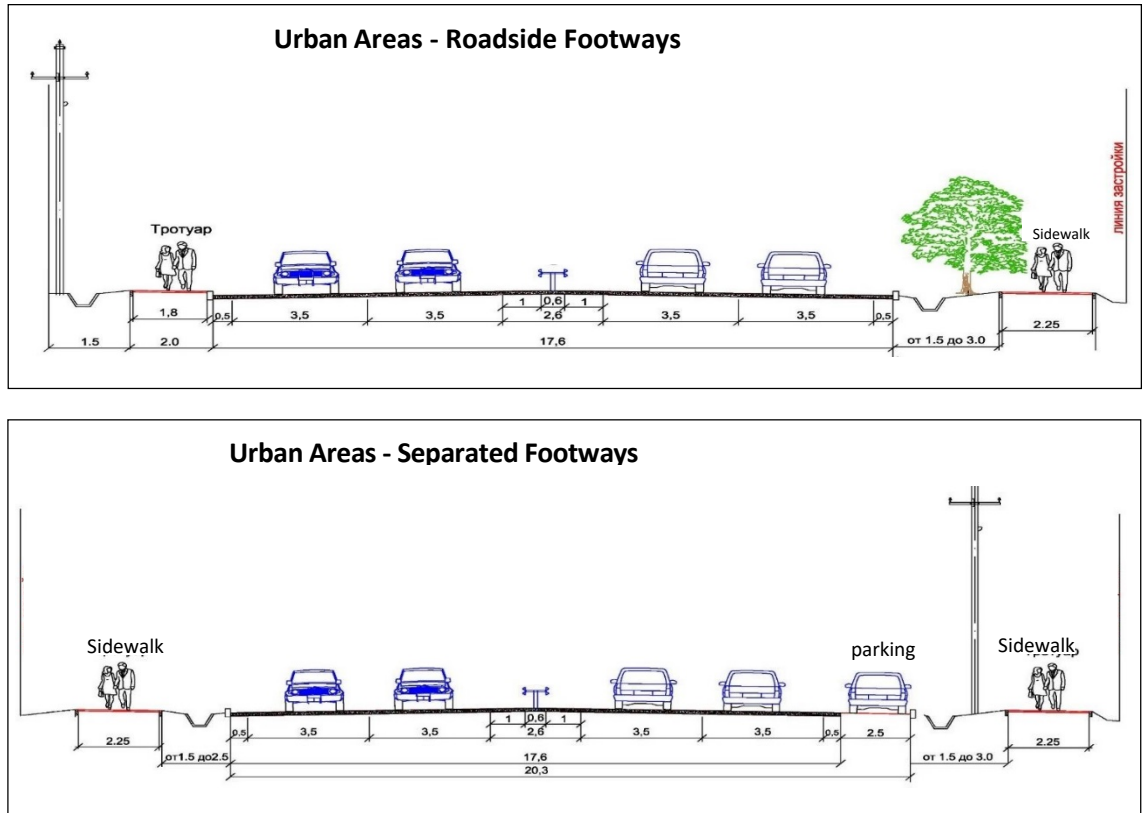


Figure 3: Typical Cross-sections - Urban Areas



Details of Bridges and Structures

- replacement bridges at 5 locations featuring pre-cast, pre-tensioned 'T' beams
- deck replacement only at one existing bridge location [km 178+957]
- pre-cast box section pedestrian underpasses of 3.0 m x 2.5 m dimensions and varying lengths to be constructed at 8 different locations
- pre-cast box section cattle underpasses of 3.0 m x 2.5 m size and varying lengths to be constructed
- miscellaneous retaining walls

The Detailed Engineering Design can be accessed via link.⁴

C. Supervision Services Contract Details

Required Services

MOTC (Client) is seeking the services of an engineering consultancy firm (Consultant) with broad international experience in construction supervision to serve as the Engineer of this Project. The Client will let out the Project's civil works under FIDIC *Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer*, Second Edition 2017 (Red Book 2017) through open competitive bidding for works using ADB Standard Bidding Document (October 2022).

Contract Duration and Phases

The Consultant's services will be required for **96 months** comprising **3 years (36 months)** during the pre-construction and construction phases and **5 years (60 months)** during the defects notification period. The Date of Commencement of Services is anticipated to be Quarter No. 3 of 2024. The Client expects the Consultant to efficiently program the experts in the supervision

⁴ <https://www.dropbox.com/scl/fo/jpwgy3gnnqx76yaazt45r/h?rlkey=15dgvuo6skq75yqdcrek65agt&dl=0>

team and other human and physical resources during the three phases described below with the aim of delivering the Project on-time and on-budget:

(i) **Pre-construction Period:** This phase extends from the Date of Commencement of Services of the Consultant to the Commencement Date of the Contractor. During this period, the Consultant must become fully familiar with the Contractor's scope of work through consultation with the Employer (Client), and review and ensure that the requirements such as access to the site, permits, licenses, Employer's documents, and Site Data are readily available for the Contractor to commence work.

Additionally, the Consultant must verify and clarify the price adjustment indices (if applicable in accordance with Sub-clause 13.7) and their sources and inform the PIU of any action required. The Consultant must seek the Client's concurrence before accepting or approving any revisions or modifications to the Employer's requirements, documents, personnel, equipment, or any other aspect of the Contract, especially due to changes in physical, social, and environmental conditions of the site. The Consultant must also seek the Client's concurrence before modifying the supervision method and program submitted with the RFP. Additionally, the Consultant will submit a Supervision Manual. The suggested contents of the Manual are in Annex 1.

(ii) **Construction Period:** This phase extends from the Commencement Date according to Sub-clause 8.1 to the Date of Completion. During this phase the Consultant will perform routine supervision and consult with the Contractor and the Client in accordance with the Supervision Manual with the aim of mitigating any risks that can affect quality, cost, and the Time for Completion.

(iii) **Defects Notification Period:** During this period, which will extend from the Date of Completion to the date of issue of the Performance Certificate in accordance with Sub-clause 11.9, the Consultant will conduct the field visits and routinely report the status to the Client. Details of the activities performed during this period will be described in the Supervision Manual.

General Responsibilities of Supervision Consultant

The primary objectives of the consulting services are to represent the MOTC at the field level and to interact with the Contractor in an equitable manner while ensuring that the work progresses in accordance with the Program. Also that it is delivered within the agreed budget and in compliance with the approved engineering design, Technical Specifications and Conditions of Contract contained in the executed Works contract agreement.

The Consultant shall establish an appropriate organization that shall meet the Project requirements for each period of project implementation, and in his capacity as 'Engineer' shall report directly to the PIU under the MOTC.

Main Duties of the Construction Supervision Team

- i. The Consultant is to function as the 'Engineer' as defined by FIDIC in administering the civil works contract and to report to the 'Employer' on all matters concerning the implementation of the works including quality management, certifying progress payments and process the Employer's or Contractor's claims as per the agreement or determination process set forth in the Contract. Also, to provide support to the 'Employer' in terms of the environmental, social and resettlement monitoring requirements as well as the overall financial management of the project.
- ii. The term "Delegated Staff" or "Delegated Assistants" (as per Sub-Clause 3.4 of the FIDIC Red Book) shall apply to any of the Consultant's senior engineering staff at the site level to whom specific duties have been assigned or specific authority has been delegated by the Consultant (the Engineer). As per the above-mentioned Sub-Clause 3.4, the Consultant (the Engineer) shall have to give notice to the Employer and to the Contractor

before such assignment or delegation take effect. Such duties may include inspection and supervision of works, testing of materials to be used, workmanship etc. to ensure that construction is carried out in accordance with the drawings and specifications.

- iii. The Consultant will be required to refer to and take direction from the Employer on matters relating to potential time and/or cost overruns. Actions requiring the Employer's specific pre-approval include (but are not limited to) the following:
- allowing the Contractor to sublet any part of the works not already mentioned in the Works Contract;
 - issuing any Variation Order with increase in quantities (above a certain threshold stated in the Contract Data under Sub-clause 3.2) or other financial implications
 - contract price adjustments
 - approving the use of Provisional Sum allocations in accordance with Sub-clause 13.4 in the general conditions and the Special Provisions.

Other Consultant Teams' Inputs

Other important functions of the Consultant's team will be to:

- i. ensure high standards of quality assurance and quality control in the execution and completion of the works within the stipulated time limit;
- ii. ensure full compliance with environmental and social safeguard requirements of the Government and ADB and support the Employer to obtain necessary statutory clearances on a timely basis;
- iii. monitor compliance with the environmental and social safeguard covenants in the financing agreements;
- iv. monitor implementation of the Resettlement Action Plan;
- v. provide efficient construction and maintenance supervision by personnel who are experienced in modern methods of contract management;
- vi. assist in taking remedial actions to avoid program slippage and time overruns caused by the Works Contractor;
- vii. monitor safety during construction and adherence to all Environment Management Plan prescribed in the Works Contract;
- viii. ensure occupational health and safety measures, including pandemic prevention measures are implemented properly on the site;
- xiii. ensure road safety measures are properly observed from the start of the construction phase until the end of the Defects Notification Period (DNP).

Scope of Work and Required Outputs

The consulting services will comprise the following tasks and associated deliverables:

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| <i>Task 1</i> | <i>Construction Supervision of Works Contract and DNP Period</i> |
| <i>Task 2</i> | <i>Environmental, Social Safeguards, Gender and Resettlement Activities</i> |
| <i>Task 3</i> | <i>Road Safety Awareness Campaign</i> |

Task-1: Construction Supervision of Works Contract and DNP Period

As the 'Engineer' under the FIDIC contract, the Consultant will undertake all duties required of the Engineer to ensure that the contract is implemented and completed in accordance with its provisions. The main tasks of the Consultant will include but are not limited to the following:

- The civil works will be carried out based on the FIDIC Conditions of Contract for Construction, Second Edition 2017, so the Consultant will administer the Works Contract, make engineering decisions, be responsible for quality assurance and quality control, provide general guidance and furnish timely responses to the Contractor in matters relating to the works. Also, to ensure that all obligations under the contract between the Contractor and the MOTC, are strictly complied with.
- Establish and maintain an effective documents management system in the Engineer's field office, which provides for separate filing of incoming and outgoing correspondence and documents, as well as by subject matter. Provide remote access to the system by authorized users.
- Maintain a Daily Diary/Journal from the start of the Services Contract and ensure that all supervision staff maintain appropriate daily records of all work performed by the Contractor and the members of staff's supervisory activities;
- Advise the MOTC's PIU on all matters relating to the execution of the Works Contract and act at all times to protect the interests of the Employer taking steps to keep the cost of implementation to a minimum, consistent with sound economic and engineering practices according to the 'Supervision Manual.
- Upon receipt of the Employer' approval and when the conditions precedent are fulfilled, issue an instruction to the Contractor to commence the Works.
- Ensure that the Contractor's Program is in accordance with the Contract and the current site conditions and monitor mobilization activities and issue timely Notices in accordance with Sub-clause 8.3.
- The Consultant, while supervising construction works, will make all necessary arrangements for quality control and implementation of the works. The tasks of the Consultant will include but not be limited to preparing progress meeting agenda, recording and distributing Minutes and designating members of the construction supervision team [such as the Assistant Engineer, Deputy Resident Engineers, Materials Engineers, Inspectors, etc.] to undertake the required actions and to notify the different parties of the results.
- Interpret the Special Provisions in the Contract relating to the Employer's obligation to give possession of the Site and of the Contractor's Work Program. Then confirm the availability of access to the site for the works and confirm any areas where land acquisition agreements are still pending so that access cannot be given to the Contractor. Assess the contractual implications of any specific unresolved land acquisition issues and advise the Employer on the appropriate actions to take.
- Verify the adequacy and validity of the Performance Security, Advance Payment Bank Guarantee and other bank securities as may be applicable; verify that they comply with the provisions of the Works Contract and advise the Employer accordingly and advise the Employer. If such documents are not submitted on time or in the correct format, advise the Employer of the available contractual remedies.
- Confirm that the form and substance of the Contractor's insurance coverage is satisfactory, that insurance premium payments are up to date and that the stipulated coverage is

effective from the dates required by the Contract. Also, that the 'principals' and amounts insured are correct or if any changes or extensions will be required [e.g., if/when the Contractor engages new subcontractors].

- Verify the contents of the Contractor's other submissions including Work Plans/Method statements, Staff and equipment deployment lists as well as the proposed public information disclosure strategy. Advise the Employer promptly if any deficiencies are noted.
- Prior to commencement of works, review the Contractor's sub-contract arrangements, locations of site compound[s], equipment servicing and materials processing/stockpiling areas, materials sources and intended haul routes etc.
- Without relieving the Contractor of any obligations review and approve the traffic management and occupational health and safety plans as stated in the environmental management plan and the Special Provisions, and later, ensure compliance therewith as the Works are carried out. This in order to provide a safe and secure worksite and to limit injury to all persons involved as well as to property.
- Review and comment upon and accept the Contractor's quality assurance plans and procedures and ensure that the on-site laboratory and test equipment to be supplied are fully functional and fit for purpose.
- Ensure that the Contractor has all the necessary data needed for layout purposes and jointly verify the accuracy of the survey control monument control system already installed by the design team of the Kyrgyz Design Institute. Agree any adjustments/modifications or monument replacements deemed necessary.
- Prepare the Consultant's Monthly Progress Reports (MPR) based on the Contractor's monthly progress reports. The Reports must conform to the format suggested by the Employer and must include the information set out in Sub-clause 4.20. The CMP is a set of tables, schedules, graphs and photographs, regularly updated with data from the site, designed to provide all meaningful information on how a contract is progressing, from the technical, financial or other perspectives (e.g. safeguard management). The CMP and the progress reports are intended to be a tool enabling the EA to take mitigation or corrective measures as may be required if any variance is detected so that the contract can be maintained (or put back) on track.
- Review any entitlements the Contractor may have to extension of the time for completion in accordance with Sub-clause 8.5 and other relevant conditions.
- Issue regular notices to the Contractors of intended field measurements, measure the Works, compute the quantities for payment, and determine the amounts due to the Contractor within the period specified in the Contract.
- Report on any justifiable design changes and promptly issue supplementary drawings, site instructions, variation orders or day work orders to avoid. If necessary, request the Employer to engage the Design Institute as the original designer to carry out all approved major design changes.
- Establish and maintain throughout the Works Contract, a structured system of measurement records, supporting documents and calculations for the payment of all BOQ Pay Items. Provide assistance to the Employer and any external auditors appointed in conducting audits of the quantity records, supporting documents and calculations in the preparation of interim and final payment details.
- Establish with the Contractors a standard format for the Contractor's Statement and the

Interim Payment Certificate submissions.

- Verify the sources of indices or prices for price adjustment in accordance with Sub-clause 13.7, determine a provisional value of an index / reference price until it is published, but, if the index is not published in certain period(s), apply the last available published value.
- Prepare and issue to the PIU, interim and final certificates for payment to the Contractors in accordance with the relevant Clause(s) of the Conditions of Contract, paying due regard to any contractual provisions for rate adjustments, exchange rate fluctuation etc. Certify the completion of the Activities/Works or parts thereof and check and verify the final payments to the Contractor.
- Carry out independent field and/or laboratory testing of materials and workmanship and approve or reject completed works that fail to comply with the Specification. Maintain a permanent record of the results of all the tests highlighting any failures observed.
- Give notice to Contractors of any defects and deficiencies, and issue formal instructions for the removal and substitution of unacceptable works, provided under the contract. If required, order suspension of the work(s) and/or recommend to the PIU other recourses available to remedy the situation.
- When the works are completed in accordance with the Contract, issue a formal 'Taking Over Certificate' to the Contractor. Note that this may be done on a 'sectional' basis at the Employer's discretion.
- Undertake a final inspection of the works and certify the Contractor's final accounts. Prepare a list of deficiencies [sometimes called a 'snag' or a 'punch' list] to be attended to by the Contractor during the DNP period.
- Assist the parties to establish a Dispute Board (DB) in accordance with the Contractual provisions and provide the required information to the Board at the intervals agreed with the Board and also facilitate the Board's site visits and timely communication with the Contractor and the Employer.
- In the event of any disputes, attempt to avoid the need for one of the parties to refer them to the Dispute Boards. In inevitable cases, assist the Employer with preparation and submission of the required documentation in accordance with the Contract.
- Carry out intermittent but detailed inspections at the agreed frequency of the works during the Defects Notification Period and prepare detailed inspection and recommendation reports for the Employer after each inspection. (if any) and carry out supervision of the remedial works. Issue a Performance Certificate(s) after rectification and approval of all notified defects, by the Contractor.
- Jointly inspect with the PIU the completed civil works and assist in the formal taking over process and review and approve the "as built drawings to be prepared by the Contractor and after referring to the Consultant's own field records, provide an acceptance document testifying to the satisfactory completion of the records.
- Prepare an official Project Completion Report in accordance with the ADB's formatting and content requirements.

Task-2: Environmental, Social Safeguards, Gender and Resettlement Activities

In parallel with the road and bridge rehabilitation work, members of the CSC Consultant Team will address the various non-engineering aspects of the Project. Duties will include:

- Confirming that all statutory clearances and permits required by the environmental regulatory agencies are in place;
- Ensuring that the Contractor comply fully with its contractual obligations relating to taking care of the environment [both specified and legislated] and that they provide all plans, reports and permits required for its operations. Attention must be paid to compliance with national and MOTC specifications on material storage at the camps and sites and waste disposal and the extraction and haulage of borrow material, aggregates etc;
- Ensuring that the Contractor's Site-Specific Environment Management Plan (SSEMP), including a Construction Vibration Management Plan, Site Specific Health and Safety Management Plan (SSHSMP) are in accordance with the approved Environmental Management Plan (EMP) and the approved Environmental, Health and Safety Management Plan and are submitted within the time specified in the Contract.
- Ensuring that physical works that can have any impacts outlined in the plans do not commence before the Supervision Team approve the plans and submit copies of the approved plans to Employer within 3 days of approval.
- Assessing and approve the Contractor's use of 'temporary' such as work camps, storage areas, access and haul roads, etc;
- Confirming that the Contractor has appointed a qualified environmental, health and safety manager[s];
- Monitoring the Contractor's compliance with their SSEMP and SSHSMP and ensuring that they are consistent with the contents of the impact studies on which the design was approved and developed for implementation. Based on the contents of the project's Environmental Impact Assessment (EIA), review requirements and ensure that adequate measures are incorporated into the Works Contractor's environmental management plan to mitigate potential adverse impacts;
- Ensuring that the approved plans remain valid and current and notifying the Contractor to update and approve the revisions as necessary . Include details of the updates in the MPRs and safeguard reports and submit the revised plans to the Employer within 3 days of approval.
- Undertaking project performance monitoring and evaluation in accordance with the Project Framework specified in the Project Administration Manual (PAM) and ADB's Project Performance Management System (PPMS) Handbook including the collation of baseline surveys with subsequent bi-annual updates as the work proceeds;
- Advising the PIU on need for periodic liaison with local authorities, police, landowners, utility owner agencies, the general public especially complainants and other organizations affected by the works in order to minimize delays and disputes;
- In case of any unanticipated environmental and/or social risks and impacts arise during implementation of the Project that were not covered by the EIA, EMP and LARP documents, assisting the PIU to inform the ADB of the occurrence with detailed descriptions of the events and a proposed corrective action plan;
- Collecting pre-construction baseline data on the for the defined impact indicators;
- Conducting environmental monitoring regularly to ensure that day-to-day environmental monitoring reports for the PIU within **30 days after** completion of the monitoring period. This should include air and water quality measurements and the monitoring of noise

propagation. Furthermore, with respect to the effects of vibration during the construction process the Consultant shall review the Contractor's Construction Vibration Management Plan (CVMP) as described in the Vibration Study dated June 2023. The contractor's CVMP shall spell out the methods of construction and working practice that the contractor intends to use to ensure that no cosmetic or structural damages are caused to nearby buildings or structures as the result of the works or the operations on site.

- Supporting the PIU in resolving project-related complaints/grievances and assisting with in organizing and consultations sessions and awareness-raising activities;
- Reviewing the project's social due diligence reports and confirming the status of any outstanding LARP items clearly identifying any non-available land areas. Also, ensuring that adequate measures are incorporated into the Works Contractor's management plan to avoid unlawful property encroachments;
- Assisting the PIU in maintain the LARP database and operationalizing the Grievance Redress Mechanism with complaints recording, tracking, monitoring and community outreach systems;
- Assisting the PIU in preparing LARP implementation compliance reports, semi-annual monitoring reports and LARP completion reports;
- Monitoring and ensuring project compliance with ADB Safeguard Policy Statement (2009) regarding land acquisition and resettlement, with the project Resettlement Plan;
- Regularly overseeing the performance of the grievance redress system for the project and report to MOTC / ADB any project-related concerns, queries and complaints received from affected persons, local authorities and other stakeholders;
- Preparing completion report on the project's environmental compliance performance; including lessons learned that may help MOT and the PIU in their environmental monitoring of future projects;
- Preparing an LARP completion report that evaluates the overall LARP implementation experience of the project and recommends actions for future operations.

Task-3: Road Safety Awareness Campaign

An outline of the features of the required Road Safety Awareness Campaign under this assignment is attached to this RFP as '**Appendix A**'. However, the Consultant shall develop a Proposal with full details of the intended methodology and timing for building awareness of Ring Road Section 3 road-users and the communities living along the project road, for MOTC approval. The Campaign will then be implemented by the Road Safety Specialist with the support of the Consultant's team and guided by the Team Leader. The Consultant must implement the Campaign during a period agreed with MOTC.. The Consultant will ensure that at least 50% of community Road Safety Awareness Campaign facilitators used are women.

The Consultant will be required to establish and maintain regular contact with Government and other agencies active in the road safety sector as may be required and assist them in achieving their objectives.

The Consultant will required to subcontract the work to a local specialist consultant or to a non-governmental organization and to assist the subcontractor with undertaking this task within the amount of the 'Provisional Sum' allocated in the main Services Contract for this activity.

D. Deliverables

Submission Schedule

The Consultant will be required to prepare at least, the main deliverables shown in Table 4 and submit them to the MOTC through its PIU with copies also to the ADB. In addition, there may be 'special reports' needed in order to secure rapid assessment and approval by the PIU of details [e.g. a revised approach to construction suggested by the Contractor] to avoid delay.

Table 1: List of Deliverables

Ref. No.	Item	Description of Contents	Due Date
1	Inception Report	This document shall include an updated Work Plan and staff mobilization schedule as well as details of the intended construction supervision methodology and Consultant's quality assurance process. Also details of the document storage/retrieval system installed and outline schedule for coordination meetings	Consultant's Commencement Date + 30 days
2	Construction Supervision Manual	The Consultant must provide a copy of the Company's standard Construction Supervision Manual to be mandated for staff during the construction and DNP periods. The Manual shall contain a detailed description of the software system to be implemented, as well as a quality control process to be performed while monitoring the acceptability of works performed.	Consultant's Commencement Date + 60 days
3	Detailed Design Review Report	This document is to contain details of the Consultant Team's findings after reviews of the Design Institute's DED package included in the Works Contract.	Consultant's Commencement Date + 30 days
4	Pre-works Photo-documentation Report	Records of pre-works conditions [including GPS coordinates, KMZ files, photos and/or videos] of areas likely to be disturbed during execution of the works. Also of , access road conditions and structures/assets along the corridor. Physical structures that are found or located in the impact zones should be provided with corresponding identification numbers for reference in the post-construction environmental audit report.	Consultant's Commencement Date + 30 days
5	SSEMP and SSHSMP Monitoring Reports	The Consultant is to report regularly on the Contractor's compliance with the approved Site-Specific EMP and HSMP documents in an agreed format. All areas of the work site shall be covered and include the information listed below: <u>Environmental Conditions:</u> Biodiversity, Air Quality & Water Quality, Archaeology, Noise & Vibration, Waste Management <u>Health & Safety Conditions:</u> Workers Occupational and Community impacts, Accident events.	At the end of each 3-month period from the Contractor's Date of Commencement
6	WSC Services Work Program	Submit to the PIU, the accepted (No-Objection) version of the Contractor's Program submitted in accordance with GCC Sub-clause 8.3 [Program]	Contractor's Date of Commencement + 42 days
7	Traffic Management and Safety Plan	The report should outline the effectiveness of traffic management strategies proposed by Contractor, including detours, road closures, and alternate routes, while also highlighting any challenges encountered and the corresponding solutions. Additionally, it should focus on the effectiveness of traffic safety measures implemented, such as signage, speed limits, and temporary barriers.	Commencement Date + 60 days
8	Monthly Progress Reports [MPR]	MPRs must be in the form of the relevant ADB template obtainable at website: https://www.adb.org/sites/default/files/project-documents/51268/51268-001-eapr-en_3.pdf Must include the implementation progress of the Road Safety Awareness Campaign.	By the 5 th day of succeeding Month

9	Quarterly Progress Reports [QPR]	QPRs must be in the form of the relevant ADB template obtainable at website: https://www.adb.org/sites/default/files/project-documents/51268/51268-001-eapr-en_3.pdf	Within 15 days of the end of each Quarter
10	Quarterly Environmental Monitoring Reports	Updates on the implementation of the EMP, performance of the monitoring system, summary of the main environmental issues and options for problem resolution.	At the end of each 3-month period from the Commencement Date
11	Semi-annual LARP Monitoring Reports	Updated records of findings, issues, non-compliance with the provisions of the Social Impact and LARP specifications in the Works Contract per the ADB's Safeguard Policy Statement (2009).	At the end of each 6-month period from the Commencement Date
12	Annual Report	A "promotional" report containing texts, graphics and photographs etc. as required to depict the scope and progress of the works. This is for public consumption with 100 hardcopies made available at MOTC offices and via the official MOTC website for the project.	12-month intervals
13	Works Progress Videos	A series of "promotional" videos based on drone footage, showing ongoing construction and showcasing health & safety, environmental protection and other safeguards measures in place. The videos will be uploaded to the official MOTC website for the project.	
14	LARP Monitoring Reports	A record of progress made with resettlement items and updates on land acquisitions secured and any outstanding.	When required
15	LARP Completion Report	The report detailing the land acquisition process, resettlement activities, and the impact on affected communities. It should also contain data on compensation and support provided to affected individuals or groups, highlighting any challenges and resolutions	within 15 days after completion of LARP implementation.
16	Project Performance Monitoring Reports	Updates of baseline data in on the achievement of the performance indicators, assumptions and risks in Design and Monitoring Framework (DMF) performance indicators in the social, economic and engineering aspects of the Project. Reports to be structured in accordance with standard ADB requirements. Submission dates for Mid-term and Final versions to be agreed with Clients.	Within 60 days of the Commencement Date.
17	'As-Built Drawings' and Taking-Over Report	Submission for the Client's archives, a full set of updated construction drawings accepted by the Engineer and the list of outstanding works to be completed during the DNP prepared jointly by the Contractor and the Consultant's team.	Within 2 months of the end of Rehab
18	Construction Completion Report	Summary of all relevant details of project progress and achievements. Content to be in a pre-agreed format	Within 2 months of the end of Road Construction Works
19	Defects Rectification List	List of defects corrected by Contractors and those not corrected (for a valid reason) or disputed by the Contractor.	At the end of Construction Period
20	Post-Construction Environmental Audit Report	Evaluation of the project sites and contractor's facilities clean-up, restoration and rehabilitation of areas to pre-works conditions or better, with reference to the Pre-works Photo-documentation Report and other reports prepared during execution of works	At the end of Construction Period
21	Post-Construction Road Safety Audit Report	Evaluation of the road's design, construction, and operational aspects. Potential hazards and their impact on road safety and recommend mitigation measures.	At the end of Construction Period
22	MOTC Project Completion Report	Update of summary of details of project achievements with progress photograph library attached. Summary of DNP	1 month before the end of the

		activities completed and final project status. The appropriate ADB template obtainable at website: https://www.adb.org/sites/default/files/project-documents/41504/41504-023-pcr-en.pdf is be used.	Consultant's Services
23	Quarterly Interim Reports - DNP Period	Summary reports of DNP phase to include engineering interventions made, payments made, penalties deducted etc.	Within 7 days of the end of each DNP Quarter

Document Distribution Process

The Contractor will be required to submit several documents as part of its contractual obligations including Insurances, Certificates, Staff and Equipment Lists, Work Plans, Method Statements, SSEMP Program, Traffic Management/Road Safety Plan. Occupational Health and Safety Plans etc.

These will be submitted by the contractor (in the specified number of copies) to the Consultant as the 'Engineer' for review and onward transmission to the 'Employer' after any updates are returned by the Contractor. The preferred media for document distribution purposes are by personal emails and USB 'flash drives'. A cloud storage medium is not to be used for sharing. <https://www.adb.org/sites/default/files/project-documents/41504/41504-023-pcr-en.pdf>

Report Formats and Number of Copies

Documents are to be prepared using MS Office or similar approved software and must be in the **English, Russian and Kyrgyz** languages.

Three 'hard' copies of each document are to be submitted with corresponding 'soft' versions in their original formats and with 'pdf' conversions.

Contractor's Submission Process

The Contractor will be required to submit several documents as part of its contractual obligations including Insurances, Certificates, Staff and Equipment Lists, Work Plans, Method Statements, SSEMP Program, Traffic Management and Road Safety Plans etc.

These will be submitted by the contractor (in the specified number of copies) to the Consultant as the 'Engineer' for review and onward transmission to the 'Employer' after updates are returned by the Contractor.

Consultant's Report Distribution

Three hard copy of each document in **English, Russian and Kyrgyz** languages and in a 'pdf' format to the MOTC offices by hand or courier service.

Upload each document in **English, Russian and Kyrgyz** languages and also in original MS Office and 'pdf' format to the MOTC Project storage medium for direct access by authorized users.

E. Personnel, Equipment and Services of Others to be Provided by the Client

Information

The PIU will provide the Consultant's Team with all relevant background reports, available reference documents and copies of design standards etc, for the implementation of the Services. The PIU will also assist with facilitating access by the Consultant to other government agencies for communications, assembly of relevant information, data, documents, etc. as may be required to undertake the services. A formal 'Letter of Introduction' for the Consultant's staff to use, will be provided upon request.

Personnel

The PIU may also assign counterpart personnel to the Consultant's team to learn by observation and exposure to contract administration method, at no cost to the Consultant. The cost of the counterpart staff will not therefore be included in the Consultant's proposal and subsequent contract agreement.

Equipment and Facilities

The following facilities will be provided by the Contractor at no cost to the Consultant:

- Field offices for the Consultant's field team. The offices will be fully furnished, air conditioned/heated, maintained and serviced with security protection and all required office equipment including desktop computers [2] with MS Office software loaded, including MS Project. Also, a printer/scanner unit and all consumables.
- Fully furnished site accommodation for the Consultant's field team with full time internet access, reliable electrical and water supplies and security protection. Premises are to be provided with air conditioning/heating and regularly cleaned and maintained.
- Equipped and adequately staffed field test laboratory, serviced and maintained and equipped with the facilities listed in the contract documents for laboratory testing of samples of materials collected. Also, computers, software and printer facilities as needed and utility services and consumables.
- Sets of modern survey equipment including instruments and all ancillaries] for conducting survey control monument verifications, project layout checks and other field surveys as required. The equipment is to be supplied new and provided with official manufacturer's recalibration services at the recommended intervals.
- A set of serviced and regularly maintained equipment for carrying out compaction density, concrete strength and other field tests as specified in the contract documents together with and additional qualified technical support staff, if requested.
- Fully insured and maintained 4WD vehicles of the types and the numbers indicated in the main Contract's BoQ with proficient drivers at all times and with adequate fuel and oil supplies.

The PIU will provide access to meeting room facilities in Bishkek for occasional use by the Consultant's team.

Facilities to be Provided by the Supervision Consultant

The Consultant will be required under the Supervision Services Contract to provide the following items for the exclusive use of the Consultant's Team:

- An appropriately staffed and equipped Project office in Bishkek conveniently accessible to/from the MOTC's own office complex for an agreed duration.
- Transport and accommodation for support staff at the Project office in Bishkek as required
- External service providers for conducting the required environmental and social safeguards baseline and monitoring surveys etc.
- Staff and equipment needed to conduct public consultations including road safety awareness campaigns etc.
- Miscellaneous other support services and facilities required for the duration of the Services Contract.

F. Outline of Road Safety Awareness Campaign

National Context

The Government of the Kyrgyz Republic has made a commitment to improving road safety and in 2016, together with the other Central Asia Regional Economic Cooperation (CAREC) member countries endorsed the Safely Connected: A Regional Road Safety Strategy for CAREC Countries (2017–2030). This strategy aims to reduce the number of road crash fatalities on the CAREC road corridors by 50% by 2030 (compared to 2010) and provides a benchmark for all CAREC member countries to address regional safety issues through tackling road safety challenges in their own jurisdictions. The Kyrgyz Republic recorded a fatality rate of 15.4 fatalities per 100,000 inhabitant in 2018, which is the fifth highest among the CAREC countries. While road crashes do not only create suffering, fear and trauma to victims and families, they are also a heavy burden on the economy of the nation. The economic cost of road deaths and injuries in the Kyrgyz Republic in 2018 was estimated to be 5.2% of national GDP, the second highest in Central Asia.

Given this situation and further demonstrating its commitment to improving road safety, the Government of the Kyrgyz Republic has established a strategic approach to reducing road cash incidences using the 'Safe System' approach. Implementing this requires the development of a national road safety strategy and the incorporation of systematic procedures in future road rehabilitation projects to reduce problems through audits of existing conditions and during the development of new construction and road projects. To this end, a number of road safety studies have already been implemented - some are still ongoing at this time - under international donor sponsorship.

Ring Road Section 3 Background

For the Issyk-Kul Ring Road program, a design audit of the Design Institute's detailed design product was undertaken for among others, the subject Section 3 [Barskoon to Karakol] in 2023 and a report on the findings with recommendations for design modifications, was published in June of that year. To support these initiatives, a public road safety awareness campaign is to be carried out by staff of the Construction Supervision consultant who is to be appointed in 2024. An outline of the tasks to be addressed by the Consultant's expert's is given below for which the team is to provide a proposal at the start of the assignment and which after MOTC approval, will be reimbursed on a 'milestone delivery' basis from the allocated Provisional Sum quoted in Clause 16.1 of the Data Sheet and in Part 'E - Specified Provisional Sums' of the BoQ

Indicative List of Campaign Activities

For the subject section of Issyk-Kul Ring Road program, the Construction Supervision consultant is to develop for ADB and MOTC approval, a detailed proposal giving full details of how the team will address the following topics involving road users and communities situated within the area of influence of the route:

Table 2: Outline of Road Safety Awareness Campaign:

Task	Period	Main Activities	Deliverables	Target Completion Date
1	Background Data Desk Review and Record Assembly	Past & present studies	Reference library	Commencement Date + 2 to 4 weeks
		Relevant Policies and Legislation		
		Regional Incident Records		
2	Campaign Design	Confirm Team Resources needed	Campaign Proposal	Commencement Date + 4 to 6 weeks
		Define Target Timeframe		
		Target audience - Community representatives		
		Target audience - Community members		
		Coordination with others - Traffic Police, Insurers		
		Coordination with others - ADB, Govt. Agencies, Academia & NGO's		
		Coordination with others - Consultants		

		Confirm Types of Media to be used for meeting announcements and dissemination of data.		
		Program definition - meeting schedule, exhibit types/contents		
3	Program Initiation	Technical discussions - Govt. Agencies Focus group discussions - Communities	Inception Report	Commencement Date + 6 to 8 weeks
4	Program Delivery	Public Meetings Presentation - Regulations/Road Code Presentation - Emergency Services Presentation - Modern Monitoring & Enforcement Techniques Presentation - Modern Road-user Safety Measures Presentation - Future Traffic Flow Predictions Presentation - Crash Incident Examples	Progress Reports	Commencement Date + 8 to 32 weeks
5	Post-campaign Evaluation	Interviews - Community Level Interviews - Community Level Recommend Future Monitoring Process	Assessment Report	Commencement Date + 32 to 36 weeks

G. Team Composition

The consulting supervision services will be carried out by an international consulting firm to be appointed by the MOTC following a standard ADB competitive bidding process. International firms are encouraged to associate with national consultancies in the interest of capturing their local experience and providing them with technical and construction site management knowledge transfer.

All firms shall have extensive and directly relevant experience in the construction supervision and maintenance aspects of road and bridge works and shall nominate personnel who can demonstrate solid and recent work histories on projects of similar size and nature. Different members of the Consultant's Team must have backgrounds in the fields of highway, pavement and short span bridge construction and in slope protection and drainage system installations as part of works contract management responsibility.

Team specialists must also be experienced in environmental and social safeguards management, monitoring and reporting on site conditions relating to these aspects and to resettlement and GRM processes. Other responsibilities will include addressing public relations, traffic management, road safety and occupational health and safety regimens.

Inputs in Pre-construction Period

The Consultant's number of staff will be required to mobilize on the date of the Commencement of Works subject to the availability of the facilities and equipment to be provided for them under the Works Contract and to implement the Consultant's tasks during the Pre-construction Period. The expenses of at least some of the Consultant's team pending delivery by the Works Contractor, of the site facilities, vehicles etc will be recovered through the reimbursable expenses allocation.

For monitoring the Works Contractors' DNP work, intermittent inputs by a limited team only will be required. This team is expected to consist of (i) the National RE assisted by national staff providing adequate technical and administrative support as required to monitor remedial intervention work and report on progress on a monthly basis and (ii) an international civil engineer who will provide inputs on a quarterly basis.

Team Presence in the Construction & DNP Periods

It is anticipated that the Consultant's staff organization will be as set out in the indicative staffing lists given in **Table 3: Minimum International Key Staff Inputs**, **Table 4: Minimum National Key Staff Inputs** and **Table 5: Indicative Non-Key & Support Staff Inputs** below. However, in preparing their Proposals, the Consultants may propose alternative arrangements which in their opinion, will provide the required services of an equivalent or better standard.

It is estimated that the minimum amount of input to be provided by the Consultancy is **89.0 persons-months** for **International Key Experts** and **285.5 person-months** for **National Key Experts** and a further **336.0 persons-months** for **Non-Key and Support staff**.

Inputs will be required over **36 months** of design review and construction phases with a subsequent **60 month** period of DNP monitoring.

Table 3: Minimum International Key Staff Inputs

Ref. No.	Position	No. of Roles	Time Allocations [person-months]		
			Design Review	Construction	DNP
IK-1	Team Leader/Chief Resident Engineer	1	1.0	27.0	5.0
IK-2	Structures/Bridges Engineer	1	1.0	12.0	1.0
IK-3	Pavement/Materials Engineer	1	0.5	9.0	1.0
IK-4	Environmental Specialist	1		12.0	5.0
IK-5	Social and Resettlement Specialist	1		4.0	1.0
IK-6	Road Safety Audit Specialist	1	0.5	2.0	1.0
IK-7	Contract Specialist	1		2.0	1.0
IK-8	Project Management Software Specialist	1	1.0	2.0	
Sub-totals =		8	4.0	70.0	15.0
Total =					89.0

Table 4: Minimum National Key Staff Inputs

Ref. No.	Position	No. of Roles	Time Allocations [person-months]		
			Design Review	Construction	DNP
NK-1	Deputy Team Leader	1	1.0	36.0	10.0
NK-2	Structures/Bridges Engineer	1		27.0	3.0
NK-3	Pavement/Materials Engineer	1		27.0	3.0
NK-4	Environmental Specialist	1		27.0	3.0
NK-5	Resettlement Specialist	1		18.0	3.0
NK-6	Road Safety Specialist	1	1.0	8.0	3.0
NK-7	Health and Safety Specialist	1		12.0	
NK-8	Biodiversity Specialist	1		3.0	
NK-9	Vibration Specialist	1		6.5	
NK-10	Quality Control Engineer	1		27.0	
NK-11	Quantity Surveyor	1		32.0	
NK-12	Topographic Engineer	1		32.0	
Sub-totals =		12	2.0	255.5	25.0
Total =					282.5

Table 5: Indicative Non-Key & Support Staff Inputs

Ref. No.	Position		Time Allocations [person-months]
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		No. of Roles	Design Review	Construction	DNP
NKN-1	Inspector - Structures	1		27.0	3.0
NKN-2	Inspector - Roads, Drainage, Electrical	1		27.0	3.0
NKN-3	Laboratory Technician [3]	3		81.0	
NKN-4	Topographic Technician [2]	2	2.0	54.0	
NKN-5	Quantity Surveyor	1		27.0	
NKN-6	CAD Operator	1		12.0	
SS-1	Office Manager / Accountant	1	2.0	36.0	12.0
SS-2	Translator / Secretary	1	2.0	36.0	12.0
Sub-totals =		11	6.0	300.0	30.0
				Total =	336.0

Experts' Minimum Qualifications

The Consultant is required to determine the optimal staff time allocations for this assignment along with the individual time inputs to be provided by each of the Key and Non-Key experts named in its proposal. This with due regard paid to the timely delivery of quality outputs under the scope of services and the available budget as indicated in the RFP **Data Sheet**.

The Consultant is expected to provide overall management of the Team by a suitably experienced member of the proposed Team preferably on the firm's permanent staff roster.

A well-balanced team that provides the right mix and level of skills, must be made available at the appropriate times and with an appropriate number of person-months of input, to ensure the effective delivery of the project. Proposing entities should explain how the presence of their nominated 'Key' and 'Non-Key' experts has been arranged to achieve the required project deliverables. The team members' minimum credentials are presented below in **Table 6: Qualifications & Experience Requirements - International Key Experts**, **Table 7: Qualification/Experience Requirements for National Key Experts** and **Table 8: Qualifications & Experience Requirements - National Non-Key Experts** respectively.

The Consultant's personnel schedule shall clearly show the amounts of 'home' and 'field' inputs for each team member including the intermittent presence needed in the DNP period in accordance with the individual time allocation limits quoted. The Consultant should coordinate the entries on the Work Schedule [**Form TECH-5**] with those of its Personnel Schedule [**Form TECH-6A**] to ensure that all tasks are correctly staffed.

The Consultant must also include in its Technical Proposal, the CVs of Key Experts using the RFP **Form TECH-6B** and brief resumes of each of the Non-Key specialists demonstrating their capabilities to implement the tasks. Only the CVs of the 'Key' experts will be evaluated.

International Key Staff

Table 6: Qualifications & Experience Requirements - International Key Experts

Position:	IK-1 Team Leader/Resident Engineer
Qualifications:	University degree in engineering to at least a bachelor's level with a licensed by a recognized international professional engineering body. Preferably on the permanent staff of the Consultant with fluency in the English language [written and oral] is required and an ability in Russian will be an added advantage. Certified or sound knowledge of FIDIC Red Book 2017 Certificate, training or a sound knowledge of agreed project management software.
Experience:	At least 15 years of the management of construction supervision teams for major road and/or bridge projects in Central Asia [preferably the Kyrgyz Republic] is required. <ul style="list-style-type: none"> • Previous management of multi-disciplinary teams on road/bridge design and construction projects funded by IFI agencies is required.

Tasks:	<ul style="list-style-type: none"> • Assume overall responsibility for implementing the project, client liaison and reporting duties • Provide ongoing Project team management in the performance of the services. • Give and respond to all Notices with due regard to the time-bars • Coordinate with the Employer to provide the Contractor timely of access to the site in accordance with Sub-clause 2.1 (Right of Access to the Site). Release 'For Construction Purposes' drawing package. • Reviews the Contractor's formal submissions [e.g. Insurances, certificates, dedicated staff/equipment resources, work plan etc]. • Review other Contractor's formal submissions [e.g. TMS & road safety plans, SSEMP & SSHSMP documents, nominated sub-contractors & materials supplier lists etc]. • Review Contractor's method statements, shop drawings etc. • Ensure proper function of the Contractor's Quality Management Compliance Verification system. • Provide ongoing Project team management in the performance of the services. • Manage safeguards monitoring processes including noise & vibration impacts. • Convene of regular site meetings and preparation/distribution of minutes. • Prepare of monthly reports based upon the Contract Management Plan (CMP). • Report anticipated claims, program delays with recommended action plan. • Reconcile of IPC statements received against site records & certification of payments. • Release of section completion and handover certification. • Acquire, verify and submit to the MOTC, the Contractor's 'as built' drawings. • Compile list of defects apparent at the start of the DNP period. • Issue defect remediation certificates after completion of DNP work. • Prepare of Project Completion report.
Outputs & Contributions:	Inception & Progress Reports, Supervision Manual, Work Program, MPRs and QPRs, Annual Report, Performance Monitoring Report, Construction Completion Report, Project Completion Report & Quarterly Interim Reports [DNP Period].
Input Time:	Total allocation 33 person-months minimum - see Table 3 above
Position:	IK-2 Structures/Bridge Engineer
Qualifications:	A university degree to at least a bachelor's level in structural engineering and a recognized international professional registration. Fluency in the English language [written and oral] is required and an ability in Russian will be an added advantage.
Experience:	<ul style="list-style-type: none"> • At least 10 years of work on bridge construction projects in Central Asia [preferably the Kyrgyz Republic] will be an advantage. • Knowledge of relevant GOST and SNiP codes and international design methods.
Tasks:	<ul style="list-style-type: none"> • Review of design details for bridges, pedestrian and cattle underpasses and other structures. • Assess the contractor's technical submissions [e.g. Shop drawings, bar bending schedules, work program etc.]. • Review of contractor's pre-casting yard and pc unit fabrication/transport plans. • Assess of contractor's environmental impact management proposals. • Assess contractor's noise and vibration reduction proposals. • Review of contractor's traffic management & utility protection/shifting plan at each bridge site. • Verify contractor's 'as built' records for structural work. • Identify any structural defects noted for remedial interventions. • Provide advice on actions needed to address items found during the DNP period.
Outputs & Contributions:	Design Review Report, Works Progress Reports, 'As-Built Drawings', Completion Reports.
Input Time:	Total allocation 14 person-months minimum - see Table 3 above
Position:	IK-3 Pavement/Materials Engineer
Qualifications:	University degree to at least a bachelor's level in geotechnical engineering or geology with a recognized international professional registration. Knowledge of relevant national GOST and SNiP codes and international design methods

	Fluency in the English language [written and oral] is required and an ability in Russian an added advantage
Experience:	<ul style="list-style-type: none"> • At least 10 years of experience in materials testing and pavement design. Work in Central Asia [preferably the Kyrgyz Republic] will be an advantage. • Previous work with mix design and placement of SMA pavement layer materials on major road bridge projects in Central Asia [preferably the Kyrgyz Republic] will be required. • Background with sourcing, testing and placement of earthworks and pavement layers for major road projects in Central Asia [preferably the Kyrgyz Republic] will be an advantage.
Tasks:	<ul style="list-style-type: none"> • Confirm the original pavement design [using both Kyrgyz and international methods] based on the properties of materials proposed by the Contractor for use. • Assess the capabilities of the Contractor's equipment to meet the specified minimum sub-grade support and overlying layer strengths and compaction levels. • Review the Contractor's proposals for the production, transportation and placement of SMA and AC materials to meet laying temperature and degree of compaction specifications. • Recommend any modifications of materials properties or placement methods. • Assess the capabilities of the equipment mobilized by the Contractor to produce the required quality and quantity of road building materials, concrete aggregates etc. • Review the Contractor's proposals for the transport of materials to the works site. • Inspect facilities and equipment to be provided for laboratory testing of materials samples. • Confirm type / frequency of field and lab testing needed to comply with the CSC QA process. • Review mix designs for concrete and asphalt materials proposed by the Contractor. • Establish of a system for recording testing activities with appropriate records of dates and locations of the work tested. • Evaluate the accuracy and acceptability of field & lab test results obtained by the CSC staff. • Summarize the findings and provide recommendations for any necessary modification of materials properties or placement methods.
Outputs & Contributions:	Design Review Report, Works Progress Reports, 'As-Built Drawings', Completion Reports.
Input Time:	Total allocation 10.5 person-months minimum - see Table 3 above.
Position:	IK-4 Environmental Specialist
Qualifications:	University degree to at least a bachelor's degree in environmental engineering, environmental science or other appropriate qualification, preferably with relevant post-graduate qualifications. Fluency in the English language is preferred and an ability in Russian an added advantage.
Experience:	<ul style="list-style-type: none"> • At least 10 years of experience in EMP implementation and addressing environmental issues for transport sector projects with IFI agency financing. • Extensive knowledge of relevant standards, codes and practices used in Kyrgyzstan. • Proven practical experience in the preparation and implementation of EMP's and in project-level environmental safeguards compliance monitoring. • Previous exposure to transport sector (roads) projects under IFI jurisdiction in Central Asia. • A sound knowledge or received training in FIDIC Red Book 2017 • Working knowledge or sound understanding of the environmental safeguard requirements in ADB Standard Bidding Documents 2022.
Tasks:	<ul style="list-style-type: none"> • Support the PIU in meeting the requirements of ADB Safeguard Policy Statement (SPS) and updates that may be issued by the ADB during project implementation the government of the Kyrgyz Republic's regulations and standard son environmental, occupational health and safety and labor. • Assist the PIU in obtaining all necessary permits and statutory requirements. • Lead and supervise the National Environmental, Health & Safety, Biodiversity and Vibration Specialists.

	<ul style="list-style-type: none"> • Support the Contractor in preparing the site-specific SSEMP to ensure compliance with the ADB SPS and its updates and that government clearances and permits are incorporated accordingly. • Assist the PIU in updating the EIA reflect any design or scope changes or unanticipated impacts not yet reported and ensuring impact mitigation measures are reflected in the SSEMP and the updated EIA. • Monitor the Contractors' compliance with all environment and health & safety contractual requirements. • Assist in preparing accident reports and keep records on-site as required • Assist the PIU with stakeholder engagements, public consultations, information disclosure and addressing complaints/grievances. • Review the Contractor's public awareness program and measures taken to avoid/reduce, mitigate or offset/compensate impacts. • Assist the PIU in the preparation of environmental monitoring reports. • Coordinate with external environmental experts on results of independent monitoring and support the PIU to prepare corrective actions, if required. • Provide/organize training/workshops/seminars on environmental safeguards, occupational health & safety and labor standards matters. • Review the Contractor's health & safety program and code of conduct and monitor its implementation. • Support the PIU during ADB review missions. • Other tasks related to compliance with environmental safeguards, occupational health & safety and labor standards.
Outputs & Contributions:	Inception Report, SSEMP and SSHSMP Monitoring Reports, Quarterly Env. Monitoring Reports, Post-Construction Environmental Audit Report
Input Time:	Total allocation 17 person-months minimum - see Table 3 above.
Position:	IK-5 Social/Resettlement Specialist
Qualifications:	<p>University degree to at least a bachelor's degree in social sciences or similar subjects, preferably with relevant post-graduate qualifications.</p> <p>At least 10 years of experience in social impact studies and the management of involuntary resettlement processes in Kyrgyzstan.</p> <p>Familiarity with the relevant codes and practices used and the approval processes required.</p> <p>Fluency in the English language [written and oral] is required and an ability in Russian an added advantage.</p>
Experience:	<ul style="list-style-type: none"> • Proven experience in preparation and implementation of project-level social safeguards and resettlement processes. • Previous exposure to transport sector (roads) projects under IFI jurisdiction in central Asia. • Working knowledge or sound understanding of. Of the social safeguard requirements in ADB Standard Bidding Documents 2022.
Tasks:	<ul style="list-style-type: none"> • Lead development of social safeguards documents per SPS requirements and good practice • Review assembled data on relevant census, socio-economic profiles, detailed measurement surveys, valuation reports etc. • Check 'implementation ready' land acquisition and resettlement plan (LARP) prepared during project processing stage. • Prepare and monitor an action plan for LARP implementation (with timelines) for all necessary social safeguards activities. • Conduct consultations with the affected communities as needed. • Monitor status of the 'grievance redress mechanism' (GRM) and participate in consultations with adversely affected persons. • Advise on the drafting & signing of any outstanding land acquisition/resettlement agreements+ • Assist with the allocation of funds in compensation packages payments. • Assist with physical reallocation activities. • Ensure the project grievance redress mechanism is effectively resolving all project related complaints and requests and they are properly documented. • If needed, support the EA/IA in resolving any complex complaints.

	<ul style="list-style-type: none"> • Prepare compliance report confirming full implementation of statutory LARP procedures. • Prepare corrective action plan (CAP) or Addendum LARP if needed to comply with any design changes, unanticipated impacts or other circumstances that would require plan revisions. • Engage detailed measurement surveyor/valuator/data collection experts for any revisions. • Support coordination of modified safeguards report approval [e.g. LARP, CAP, LARP etc]. • Prepare social safeguards semi-annual and annual monitoring reports; • Perform any related tasks assigned.
Outputs & Contributions:	Inception Report, SSEMP and SSHSMP Monitoring Reports, Semi-annual LARP Monitoring Reports, LARP Monitoring & Completion Reports.
Input Time:	Total allocation 5 person-months minimum - see Table 3 above.
Position:	IK-6 Road Safety Audit Specialist
Qualifications:	<p>University degree to at least a bachelor's degree in traffic engineering or road safety auditing of existing conditions, design proposals and work zone operations. Previous work in the transport sector (roads) for projects under IFI jurisdiction in Central Asia.</p> <p>Fluency in the English language [written and oral] is required and an ability in Russian an added advantage.</p> <p>Certification as a Safety Auditor from an established authority such as International Road Federation or proven record of road safety research</p>
Experience:	<ul style="list-style-type: none"> • At least 10 years' experience in road safety auditing methods. • Background in preparing traffic management plans for roadworks and bridge sites. • Knowledge of the ADB's CAREC corridor safety manuals and other reference documents. • Familiarity with practices used and government directives in place, in Kyrgyzstan. • Background in implementing and monitoring road safety matters for major road and bridge construction projects.
Tasks:	<ul style="list-style-type: none"> • Review the Project Road Safety Audit Report and measures included in the DED package noting any opportunities to improve traffic operational safety conditions during the Works. • Review the Contractors road safety and traffic management plans for compliance with the Specifications and identify any areas where amendments may be needed. • Observe traffic safety conditions at all work zones and recommend any improvements needed • Provide written accounts of road safety site work undertaken for inclusion in monthly progress documents. • Conduct a road safety audit at the completion of the works period close to the completion of the works and report on the findings.
Outputs & Contributions:	Inception Report, Traffic Management & Safety Plan, Post-Construction Road Safety Audit Report
Input Time:	Total allocation 3.5 person-months minimum - see Table 3 above.
Position:	IK-7 Contract Specialist
Qualifications:	<p>University degree to at least a bachelor's degree in contract law or a related field. Certified or sound knowledge of FIDIC Red Book 2017</p> <p>Certificate, training or a sound knowledge of agreed project management software. Works Contract development for transport projects in the transport sector using FIDIC GCCs under IFI jurisdiction [particularly the ADB] in Central Asia, is required.</p> <p>Fluency in the English language [written and oral] is required and an ability in Russian would be an added advantage.</p>
Experience:	<ul style="list-style-type: none"> • Interpretation of the executed Civil Works Contract. • Familiarity with the ADB's Standard Bidding Documents (2022) and Procurement Guidelines. • Management of Contractor's claims and dispute resolution/arbitration processes under FIDIC General Conditions of Contract. • Application of provisions in accordance in Sub-clauses 13.6 and 13.7 of Red Book 2017.
Tasks:	<ul style="list-style-type: none"> • Review the executed Works Contract contents.

	<ul style="list-style-type: none"> • Advise the Employer (via the Team Leader) on the possible consequences and risks arising from the construction Works Contract's terms and conditions. • Participate in the preparation of Variation Orders, Instructions and Addenda to the Works Contract Documents • Assist team members, the Employer and the Contractor in interpreting the contract conditions, in any case of ambiguity, absence or contradictions. • Produce proposals to assist claims avoidance or settlement. • Assess and monitor the Contractor's performance to determine if all contractual obligations are met and propose a resolution mechanism to the Employer in any case of non-compliance.
Outputs & Contributions:	Detailed Design Review Report, Construction Completion Report, Defects Summary List
Input Time:	Total allocation 3 person-months minimum - see Table 3 above.
Position:	IK-8 Project Management Software Specialist
Qualifications:	University degree to at least a bachelor's level in a directly relevant field. Membership in a recognized international project management group [e.g. PMI, IAPM, Prince2 or approved equivalent]. The Specialist should be proficient in both written and spoken English and preferably have experience working on civil works projects in similar geographic areas, A working knowledge of the Russian language will be considered to be an advantage.
Experience:	<ul style="list-style-type: none"> • At least 5 years of experience in the development and application of project management systems for monitoring and reporting progress on construction works projects.
Tasks:	<ul style="list-style-type: none"> • Advise the Employer (via the Team Leader) on the alternative system available. • Assist with the procurement and installation of the software package used by the Contractor. • Familiarize the Employer's and the Engineer's staff in the use of the software. • Monitor uploading of data by the Consultant's staff at frequent [monthly] intervals. • Advise on database contents at contract completion stage.
Outputs & Contributions:	Design, Installation and Maintenance of an approved construction progress monitoring system.
Input Time:	Total allocation 3.0 person-months minimum - see Table 3 above.

The Consultant should ensure that all its nominated key experts are available during the contract execution period in accordance with the personnel schedule included in the signed contract.

The Client will not accept any requests for replacement during contract execution except for clearly justified and exceptional circumstances or emergency cases such as death, serious illness [supported by a medical report] retirement or resignation.

In case of such a change, the Consultant should ensure that the replacement expert is either equally or better qualified than the original nominee.

National Key Staff

The minimum professional qualifications required for the various national key-experts nominated to the Consultant's national team are summarized in the following table.

Table 7: Qualification/Experience Requirements for National Key Experts

Position:	NK-1 Deputy Team Leader
Qualifications:	University degree to at least a bachelor's level in areas related to road design and/or construction. Construction supervision services on at least two successfully completed road projects in the past 5 years. At least a working knowledge of written and spoken English will be a distinct added advantage.

Experience:	<ul style="list-style-type: none"> • 10 years of experience in the administration of road and bridge Works Contracts for international donors. • Background knowledge in the use of FIDIC GCC provisions. • Procurement and placement of materials for flexible pavements and bridges on major roads. • Knowledge of the application of field QA/QC procedures using test labs and sample recovery equipment. • Familiarity with procedures for highway design, construction and maintenance work in the Kyrgyz Republic. • A working knowledge of written and spoken English will be a distinct added advantage
Tasks:	<ul style="list-style-type: none"> • Previous assignment to multi-disciplinary teams on road/bridge construction work • Provide ongoing support to team leader in the delivery of the services. • Assist with reviews the contractor's formal submissions [e.g. Insurances, certificates, dedicated staff/equipment resources, work plan etc]. • Assist with reviews of other submissions [e.g. TMS & road safety plans, SSEMP & SSHSMP documents, nominated sub-contractors & materials supplier lists etc]. • Review contractor's method statements, shop drawings etc. • Monitor the use of the approved quality assurance system. • Attend regular site meetings and assist with the preparation/distribution of minutes. • Advise on the validity of claims for delays etc. • Input to IPCs statements versus site records and certification of payments. • Input to review of contractor's 'as built' drawings. • Draft list of defects at start of the DNP period. • Input to project completion report.
Outputs & Contributions:	Inception & Progress Reports, Supervision Manual, Work Program, MPRs and QPRs, Works Progress Videos, Performance Monitoring Report, As-Built Drawings, Construction Completion Report, Project Completion Report & Quarterly Interim Reports [DNP Period].
Input Time:	Total time allocation 47 person-months minimum - see national key staff list above.
Position:	NK-2 Structures/Bridge Engineer
Qualifications:	<p>University degree to at least a bachelor's level in short span bridge design and pre-cast concrete fabrication.</p> <p>Familiarity with procedures for bridge construction and materials obtainable in Kyrgyzstan.</p> <p>Construction supervision on 2-3 successfully completed bridge projects the past 5 years.</p> <p>A working knowledge of written and spoken English will be a distinct added advantage.</p>
Experience:	<ul style="list-style-type: none"> • 10 years of experience in short/medium-span concrete bridge construction and pre-casting operations. • Administration of new construction and rehabilitation of bridges by Works Contracts for IFI donors. • Background knowledge in the use of FIDIC GCC provisions. • Familiarity with the relevant GOST and SNiP codes used in Kyrgyzstan.
Tasks:	<ul style="list-style-type: none"> • Knowledge of material property testing protocols and background in concrete mix designs • Review of design details for bridges, underpasses and other structures. • Assess the contractor's technical submissions [e.g. Shop drawings, bar bending schedules, work program etc.]. • Review contractor's pre-casting yard and pc unit fabrication plans. • Assess proposed haul routes to and from bridge sites • Check contractor's noise and vibration reduction proposals. • Check contractor's traffic management & utility protection/shifting plan at each bridge site. • Verify contractor's 'as built' records for structural work. • Advise on the validity of claims for delays etc.
Outputs & Contributions:	Design Review Report, Works Progress Reports, 'As-Built Drawings', Completion Reports.
Input Time:	Total time allocation 30 person-months minimum - see national key staff list above.
Position:	NK-3 Pavement/Materials Engineer
Qualifications:	<p>University degree to at least a bachelor's level in geotechnical engineering or geology.</p> <p>Experience with modern materials test methods and pavement construction technologies including SMA.</p>

	<p>Participation in 2-3 successfully completed major road projects within the past 5 years in Central Asia.</p> <p>A working knowledge of written and spoken English will be a distinct added advantage.</p>
Experience:	<ul style="list-style-type: none"> • At least 10 years of experience in materials testing and pavement design. • Work undertaken in the Kyrgyz Republic] is preferred. • Previous work with mix design and placement of SMA pavement layer materials on major road bridge projects in Central Asia [preferably the Kyrgyz Republic] will be required. • Background with sourcing, testing and placement of earthworks and pavement layers for major road projects in the Kyrgyz Republic will be an advantage.
Main Outputs:	<ul style="list-style-type: none"> • Assist with review DED pavement design [using both Kyrgyz and international methods] based on the properties of materials proposed by the Contractor for use. • Assess the capabilities of the Contractor's equipment to meet the specified minimum sub-grade support and overlying layer strengths and compaction levels. • Review Contractor's proposals for the production, transportation and placement of SMA/AC materials including transport & laying temperature, compaction specification etc]. • Recommend any modifications of materials properties or placement methods. • Inspect facilities and equipment to be provided for laboratory testing of materials samples. • Confirm type / frequency of field and lab testing needed to comply with the CSC QA process. • Assist with reviews of Contractor's mix designs for concrete and AC materials. • Utilize system for recording test results. • Evaluate the accuracy and acceptability of field & lab test results obtained by the CSC staff. • Summarize findings and add recommendations for any modification of materials or placement methods.
Outputs & Contributions:	Design Review Report, Works Progress Reports, 'As-Built Drawings', Completion Reports.
Input Time:	Total time allocation 30 person-months minimum - see national key staff list above.
Position:	NK-4 Environmental Specialist
Qualifications:	<p>University degree to at least a bachelor's level in environmental engineering, environmental or other appropriate qualification.</p> <p>Widespread participation in environmental impact studies and IEE, EIA and EMP implementation protocols to ADB requirements in Kyrgyzstan is essential.</p> <p>Fluency in Russian and/or the Kyrgyz language is required and a working knowledge of English will be a distinct added advantage.</p>
Experience:	<ul style="list-style-type: none"> • At least 5 years of experience in EMP implementation and addressing environment issues for transport or major development projects in Kyrgyzstan. • Practical experience in the implementation of EMP and project-level safeguard compliance monitoring. • Familiarity with transport sector (roads projects) under IFI jurisdiction.
Tasks:	<ul style="list-style-type: none"> • Assist the team with satisfying the requirements of the ADB's Safeguard Policy Statement (SPS). • Assist with obtaining all necessary permits and meeting statutory requirements. • Support the Contractor in preparing the SSEMP to ensure compliance with the ADB's SPS and its updates, and that conditions in governmental clearances are incorporated accordingly. • Update the EIA to reflect any design or scope changes or unanticipated impacts not yet reported in the EIA. • Monitor the Contractors' compliance with all environment and health & safety contractual requirements. • Assist in preparing accident reports and site record keeping as required • Assist the PIU with stakeholder engagements, public consultations, information disclosure and addressing complaints/grievances. • Review the Contractor's public awareness program and measures taken to avoid impacts. • Inputs to environmental monitoring reports.

	<ul style="list-style-type: none"> • Coordinate with external environmental experts on results of independent monitoring and identify corrective actions, if required. • Participate in training/workshops/seminars on environmental safeguards, occupational health & safety and labor standards. • Review the Contractor's health & safety program and code of conduct and monitor its implementation. • Support the PIU during ADB review missions. • Develop a data management system on environmental safeguards matters. Other tasks as required.
Outputs & Contributions:	Inception Report, SSEMP and SSHSMP Monitoring Reports, Quarterly Env. Monitoring Reports, Post-Construction Environmental Audit Report
Input Time:	Total time allocation 30 person-months minimum - see national key staff list above.
Position:	NK-5 Social/Resettlement Specialist
Qualifications:	University degree to a bachelor's level in social or environmental engineering or similar. 5 years of experience in land acquisition/resettlement procedures under IFI jurisdiction. 10 years of experience in general health/safety & labor items for major development projects in Kyrgyzstan. Fluency in Russian and/or the Kyrgyz language is required and a working knowledge of English will be a distinct added advantage.
Experience:	<ul style="list-style-type: none"> • Proven background in the preparation and implementation of project-level social safeguards and resettlement processes. • Previous exposure to transport sector (roads) projects under IFI jurisdiction in central Asia.
Tasks:	<ul style="list-style-type: none"> • Assist with development of social safeguards documents per SPS requirements and good practice. • Review assembled data on relevant census, socio-economic profiles, detailed measurement surveys, valuation reports etc. • Check 'implementation ready' land acquisition and resettlement plan (LARP) status. • Monitor action plan for LARP implementation of necessary social safeguards activities. • Conduct consultations with the affected communities as needed. • Monitor status of the 'grievance redress mechanism' (GRM) and participate in consultations with adversely affected persons. • Advise on status of any outstanding land acquisition/resettlement agreements+ • Assist with the allocation of funds in compensation packages payments. • Assist with physical reallocation activities. • Monitor the project grievance redress mechanism and resolution status. • If needed, support the EA/IA in resolving any complex complaints. • Input to compliance report confirming full implementation of statutory LARP procedures. • Input to corrective action plan (CAP) or Addendum LARP if needed to comply with any changes, unanticipated impacts or other circumstances that would require plan revisions. • Assist detailed measurement surveyor/valuator/data collection experts for any revisions. • Monitor modified safeguards report approval [e.g. LARP, CAP, LARP etc]. • Input to social safeguards semi-annual and annual monitoring reports. • Perform any related tasks assigned.
Outputs & Contributions:	Inception Report, SSEMP and SSHSMP Monitoring Reports, Semi-annual LARP Monitoring Reports, LARP Monitoring & Completion Reports.
Input Time:	Total time allocation 21 person-months minimum - see national key staff list above.
Position:	NK-6 Health and Safety Specialist
Qualifications:	University degree to a bachelor's level in environmental or civil engineering, environmental science or other appropriate qualification. 10 years of general work experience with 5 years of health & safety and labor issues for development projects in Kyrgyzstan. Familiarity with practices used and government directives in place, in Kyrgyzstan. Fluency in Russian and/or the Kyrgyz language is required and a knowledge of English will be a distinct added advantage.
Experience:	<ul style="list-style-type: none"> • General experience in project-level health & safety and labor compliance monitoring. • Practical experience in implementation of health and safety and labor standards. • Knowledge of requirements in the transport sector (roads projects) under IFI jurisdiction. • Familiarity with practices used and government directives in place, in Kyrgyzstan.

Tasks:	<ul style="list-style-type: none"> • Ensure compliance with the requirements of ADB Safeguard Policy Statement and its update and the government of Kyrgyz Republic on occupational health & safety, and labor standards; • Obtain all necessary health & safety and labor-related permissions and comply with health & safety and labor statutory requirements; • Ensure that the contractor submits health & safety and labor-related requirements as per the project EIA/EMP and government clearances/permits; • Assist the contractor in the preparation of health and safety related management measures to the SSEMP, to ensure ADB SPS and its update, and conditions in government clearances are incorporated accordingly; • Update the EIA for any change in scope, design, location, or unanticipated impacts related to health and safety of workers that are not reported in the EIA; • Review any changes in the contractor's design and support the PIU in ensuring environmental/health & safety assessment, impacts/risks avoidance and mitigation measures are reflected in the SEMP and updated EIA; • Ensure all project related health & safety and labor clearances, and ADB's no-objection, and monitor and control construction compliance against the updated EIA, ADB SPS and its update, and SEMP; ▪ Monitor the contractors' compliance with all health and safety requirements as stated in contract and SEMP, during and prior to any construction activity; ▪ Conduct periodic inspections of work areas and campsites to ensure workers and community safety and compliance with safety standards and government regulations; • Periodically review and make recommendations for improving/adapting EMP/SEMP measures and sub-plans related to health and safety based on observations on site and to manage unforeseen impacts, if any; ▪ Investigate health-related complaints and inspect work areas to ensure compliance with public health legislation and all applicable standards and regulations; • Work with engineers to establish control or implement remedial measures for hazardous or potentially hazardous conditions (e.g., management of asbestos containing materials), work activities, or equipment; • Assist in preparation of accident report and keeping accident records on-site as required; • Monitor the implementation of the health and safety requirements in the SEMP during construction and pre/post construction phases; • Ensure continuing stakeholders' engagement, consultations, information disclosure and addressing complaints/grievances; • Develop public awareness program and materials related to health and safety to support wider understanding of the project, potential impacts and measures to ensure impacts are avoided, mitigated and affected people, if any, are compensated; • Prepare health & safety and labor monitoring reports; • Coordinate with external environment experts on results of independent monitoring and support the PIU to prepare corrective actions related to health and safety, if required; • Provide and organize trainings/workshops/seminars on occupational health and safety, and labor standards; • Review contractor's health and safety program and monitor its implementation; ▪ Support PIU during ADB review missions; ▪ Develop data management system on health & safety and labor; and ▪ Perform other tasks related to occupational health and safety, and labor standards.
Outputs & Contributions:	Inception Report, SSEMP and SSHSMP Monitoring Reports, Traffic Management and Safety Plan, Project Performance Monitoring Reports
Input Time:	Total time allocation 12 person-months minimum - see national key staff list above.
Position:	NK-7 Road Safety Specialist
Qualifications:	<p>University degree to a bachelor's level in related engineering or science field. 10 years of general work experience, 5 years in road safety assessments a construction projects. Knowledge of the ADB's CAREC corridor safety manuals and other reference documents. Familiarity with practices used and government directives in place, in Kyrgyzstan. Fluency in Russian and/or the Kyrgyz language is required & knowledge of English will be a distinct added advantage..</p>
Experience:	<ul style="list-style-type: none"> • General experience in road safety auditing methods. • Preparation and assessment of traffic management plans for road and bridge works.

Tasks:	<ul style="list-style-type: none"> • Review the Project Road Safety Audit Report and measures included in the DED package noting any opportunities to improve safety conditions during the Works. • Review the Contractors road safety and traffic management plans for compliance with the Specifications and identify any areas where amendments may be needed. • Observe traffic safety conditions at all work zones and recommend any improvements needed • Provide accounts of road safety site work issues for inclusion in monthly progress documents. • Assist with road safety audit at the completion of the works and reporting of findings.
Outputs & Contributions:	Inception Report, Traffic Management & Safety Plan, Post-Construction Road Safety Audit Report
Input Time:	Total time allocation 12 person-months minimum - see national key staff list above.
Position:	NK-8 Biodiversity Specialist
Qualifications:	<p>University degree to at least a bachelor's level in environmental science, biology, ecology or other relevant qualification.</p> <p>Previous participation in biodiversity and/or environmental studies to IFI requirements for road transport sector projects, is required.</p> <p>Fluency in Russian and/or the Kyrgyz language is required a knowledge of English will be a distinct added advantage.</p>
Experience:	<p>A minimum of 5 years of biodiversity/ecology work for directly related studies is required. Knowledge of regulations applicable when working near 'RAMSAR' sites is also essential. Familiarity with practices used in Kyrgyzstan for similar transport sector projects is preferred.</p>
Tasks:	<ul style="list-style-type: none"> • Ensure compliance with the requirements of ADB Safeguard Policy Statement and its update, and the government of Kyrgyz Republic on biodiversity; • Develop and implement project-specific methodology for biodiversity monitoring, including identification of indicator species, which at the minimum should include (i) Seasonal surveys of biodiversity conditions, including migrating and nesting birds in the project area; (ii) Monitoring of rare and endangered species (e.g., migratory birds) included in the Red Book of Kyrgyzstan; • Carry out biodiversity monitoring twice a year and prepare the corresponding biodiversity monitoring report; • Review any changes in the contractor's design and support the PIU in ensuring biodiversity assessment (as part of the environmental assessment), and ensure impacts avoidance and mitigation measures are reflected in the SEMP and updated EIA; • Participate in stakeholders' engagement, consultations, information disclosure and addressing complaints/grievances related to biodiversity; • Carry out consultations with relevant national authorities such as Jeti-Oguz Forestry Department, Directorate of the Biosphere Territory of Issyk-Kul, UNESCO or RAMSAR to incorporate additional considerations or requirements needed in surveys, tree replacement, and in the construction and operation of the project in or adjacent to protected areas. • Support the delivery of training program for contractors related to biodiversity, to include ADB SPS and domestic laws, regulations and policies, and EMP implementation and environmental monitoring. • Contribute to the updating of EMP and EMoP related to biodiversity concerns. • Provide guidance in the planting of local varieties of trees and shrubs needed for the Tree Management Plan that do not require high level maintenance and watering. Review and verify biodiversity related section in contractors' Site-Specific Environmental Management Plan (SSEMP) • Monitor and report biodiversity requirements per approved SSEMP • Perform biodiversity related supervision tasks, recommendations on corrective actions, and inputs to the Quarterly Environmental Monitoring Report (QEMR) • Develop public awareness program and materials on biodiversity to support wider understanding of the project, potential impacts and measures to ensure impacts are avoided, mitigated and affected people, if any, are compensated; • Coordinate with external environmental experts on results of independent monitoring and support the PIU to prepare corrective actions in the area of biodiversity, if required; • Support the PIU during ADB review missions, if required; • Perform other tasks related to biodiversity safeguards. •

Outputs & Contributions:	Inception Report, SSEMP and SSHSMP Monitoring Reports, Quarterly Environmental Monitoring Reports, Post-Construction Environmental Audit Report
Input Time:	Total time allocation 3 person-months minimum - see national key staff list above.
Position:	NK-9 Vibration Specialist
Qualifications:	<p>Advanced degree in vibration, structural engineering, geotechnical engineering or a related field.</p> <p>Membership of recognized professional body.</p> <p>At least 5 years of work on noise and vibration propagation/attenuation methods for transport projects.</p> <p>Familiarity with prediction models and monitoring methods for alleviating vibration for road works in Kyrgyzstan.</p> <p>Fluency in Russian and/or the Kyrgyz language is required and a knowledge of English will be a distinct added advantage.</p>
Experience:	<ul style="list-style-type: none"> • Familiarity with internationally accepted construction vibration monitoring and analysis and assessment methods; • Experience in assessing and designing mitigation measures against vibration impacts of road construction on structures and people; and • Knowledge of Safeguarding Policies of the Asian Development Bank or comparable international development banks. • General experience in project-level prediction models for noise and vibration assessments. • Practical experience in the monitoring of impacts for construction equipment on road projects. • Knowledge of requirements for roadwork interventions on projects under IFI jurisdiction. • Familiarity with regulations and directives in place, in Kyrgyzstan.
Tasks:	<ul style="list-style-type: none"> • Ensure compliance with the requirements of ADB Safeguard Policy Statement and its update and the government of Kyrgyz Republic on construction vibration impacts and management; • Review and update the methodology and findings of the vibration assessment carried out as part of the environmental impact assessment of the project; • Review the methodology and results of the baseline condition survey and structural assessment carried out by the Contractor. • Review and approve the methodology and reporting of studies required to be carried out by the Contractor prior to construction commencing near buildings. • Review and approve the Construction Vibration Management Plan to be prepared by the Contractor including factors such as location and type of vibration monitoring. • Approve the construction methodology based on the revised assessment of vibration impacts (to be conducted by the Contractor) considering factors including international best practices and standards for managing and mitigating construction-related vibration impacts on the environment and nearby communities. • Inform the Social Safeguards team if structural damage is expected and to identify if there is a need to relocate the residents temporarily/ permanently. • Review the quarterly reporting of vibration monitoring provided by the Contractor • Assist the contractor in the preparation of vibration related management measures to the site-specific EMP (SEMP), to ensure ADB SPS and its update, and conditions in government clearances are incorporated accordingly; • Update the EIA for any change in scope, design, location, or unanticipated impacts related to vibration that are not reported in the EIA; • Review any changes in the contractor's design and support the PIU in ensuring vibration assessment, impacts/risks avoidance and mitigation measures are reflected in the SEMP and updated EIA; • Ensure all project related vibration clearances and ADB's no-objection, and monitor and control construction compliance against the updated EIA, ADB SPS and its update, and SEMP; • Monitor the contractors' compliance with all vibration management requirements as stated in contract and SEMP, during and prior to any construction activity; • Periodically review and make recommendations for improving/adapting EMP/SEMP measures and sub-plans related to vibration based on observations on site and to manage unforeseen impacts, if any; • Investigate vibration complaints and inspect work areas to ensure compliance with vibration management plan and all applicable standards and regulations;

	<ul style="list-style-type: none"> • Monitor the implementation of the vibration requirements in the SEMP during construction phase; • Ensure continuing stakeholders' engagement, consultations, information disclosure and addressing complaints/grievances; • Develop public awareness program and materials related to vibration to support wider understanding of the project, potential impacts and measures to ensure impacts are avoided, mitigated and affected people, if any, are compensated; • Prepare vibration monitoring reports, as required; • Coordinate with external environment experts on results of independent monitoring and support the PIU to prepare corrective actions related to vibration, if required; • Provide and organize trainings/workshops/seminars on vibration; • Review contractor's vibration management plan and its implementation; • Support the PIU during ADB review missions; and • Perform other tasks related to vibration management. •
Outputs & Contributions:	Inception Report, SSEMP and SSHSMP Monitoring Reports, Quarterly Environmental Monitoring Reports, Post-Construction Environmental Audit Report
Input Time:	Total time allocation 6.5 person-months minimum - see national key staff list above.
Position:	NK-10 Quality Control Engineer
Qualifications:	<p>University degree to at least a bachelor's level in civ/geotechnical engineering or related areas.</p> <p>At least 5 years of similar work on QA/QC process design & applications for road transport projects.</p> <p>Familiarity with methods in use by MOTC and other agencies in Kyrgyzstan.</p> <p>Fluency in Russian and/or the Kyrgyz language is required & knowledge of English will be a distinct added advantage.</p>
Experience:	<ul style="list-style-type: none"> • General experience in design and use of project-level QC/QA processes for road and bridge projects. • Definition of types, frequencies and locations of field laboratory and in-situ tests. • Application of control processes at road and bridge construction sites. • Knowledge of requirements for roadwork interventions on projects under IFI jurisdiction. • Familiarity with test procedure for roadworks contracts in use in Kyrgyzstan.
Tasks:	<ul style="list-style-type: none"> • Review Technical Specifications in 2024 Works Contract defining materials properties, compaction levels etc. • Review materials properties and potential sources information provided by the DI in their 2022-23 DED package, 2023 design review report and the Contractor's 2024 proposals. • Define types, locations and frequencies of field tests and results reporting protocols. • Examine Contractor's lab test facilities for condition and adequacy. • Assess capacity of Contractor's Lab Technician complement. • Oversight of team Lab Technicians • Prepare summaries of test results at required frequency for appending to progress reports. • Draft report sections for inclusion in Project Completion documents.
Outputs & Contributions:	Construction Supervision Manual, Detailed Design Review Report, Services Work Program, Construction Completion Report,
Input Time:	Total time allocation 27 person-months minimum - see national key staff list above.
Position:	NK-11 Quantity Engineer
Qualifications:	<p>University degree to at least a bachelor's level in civ/geotechnical engineering or related areas.</p> <p>At least 5 years of similar work on QA/QC process design & applications for road transport projects.</p> <p>Familiarity with methods in use by MOTC and other agencies in Kyrgyzstan.</p> <p>Fluency in Russian and/or the Kyrgyz language is required & knowledge of English will be a distinct added advantage..</p>
Experience:	<ul style="list-style-type: none"> • General experience in design and use of project-level QC/QA processes for road and bridge projects. • Definition of types, frequencies and locations of field laboratory and in-situ tests. • Application of control processes at road and bridge construction sites. • Knowledge of requirements for roadwork interventions on projects under IFI jurisdiction.

	<ul style="list-style-type: none"> • Familiarity with test procedure for roadworks contracts in use in Kyrgyzstan.
Tasks:	<ul style="list-style-type: none"> • Review Technical Specifications in 2024 Works Contract defining materials properties, compaction levels etc. • Review materials properties and potential sources information provided by the DI in their 2022-23 DED package, 2023 design review report and the Contractor's 2024 proposals. • Define types, locations and frequencies of field tests and results reporting protocols. • Examine Contractor's lab test facilities for condition and adequacy. • Assess capacity of Contractor's Lab Technician complement. • Oversight of team Lab Technicians • Prepare summaries of test results at required frequency as appendices to progress reports. • Draft report sections for inclusion in Project Completion documents.
Outputs & Contributions:	Construction Supervision Manual, Detailed Design Review Report, Services Work Program, Construction Completion Report,
Input Time:	Total time allocation 32 person-months minimum - see national key staff list above.
Position:	NK-12 Topographic Surveyor
Qualifications:	<p>University degree or technical diploma in civil engineering with topo survey credentials. Familiarity with modern survey equipment and data collection methods and MOTC requirements.</p> <p>At least 5 years of experience of similar work with road transport projects in Kyrgyzstan. Fluency in Russian and/or the Kyrgyz language is required & knowledge of English will be a distinct added advantage.</p>
Experience:	<ul style="list-style-type: none"> • General experience in data collection and plotting of results for major transport sector projects. • Design and installation of primary and secondary survey control systems. • Adjustment of closure errors and definition of monument coordinate values. • Practical experience in the monitoring of impacts for construction equipment on road projects. • Knowledge of requirements for roadwork interventions on projects under IFI jurisdiction. Familiarity with regulations and directives in place, in Kyrgyzstan.
Tasks:	<ul style="list-style-type: none"> • Review details of Design Institute's installed primary and secondary survey control system. • Review details of Design Institute's installed intermediate stations and benchmarks. • Confirm RoW and Lot boundaries along route. • Identify additional land areas per LARP and confirm acquisition status. • Manage Consultant team's topographic survey technicians. • Check type and functionality of survey equipment. • Coordinate with Contractor's survey crews to verify and replace any disturbed control points. • Collaborate with Contractor's survey crews to establish design centerline and gather existing ground cross section data; • Check Contractor's layout of 'working points' at all bridges and underpass sites. • Repeat cross section data collection as basis for progress quantity estimates/payments. • Prepare survey results for quantity calculations and inclusion in progress documents. Prepare details of survey process for inclusion in Project Completion reports.
Outputs & Contributions:	Detailed Design Review Report, Works Progress Videos, Construction Completion Report,
Input Time:	Total time allocation 32 person-months minimum - see national key staff list above.

Non-Key National Staff

The following expertise will be needed for the project implementation provided by non-key national (NKN) experts.

Table 8: Qualifications & Experience Requirements - National Non-Key Experts

Position:	NKN-1 Inspector - Structures
Qualifications:	Technical diploma in civil/structural engineering construction or a related subject.
Experience:	<ul style="list-style-type: none"> • At least 10 years of supervision of concrete bridge construction and pre-cast unit fabrication. • Knowledge of relevant GOST and SNiP design codes.

Tasks:	<ul style="list-style-type: none"> • Review Contractor's pre-casting yard and pc unit fabrication/transport plans. • Assess Contractor's environmental impact management proposals. • Review Contractor's traffic management & utility protection/shifting plan at each site. • Monitor construction activities and record full details. • Assist with Contractor's 'as built' records for structural work. • Identify any structural defects noted for remedial interventions.
Outputs & Contributions:	Inputs to MPRs and QPRs, Works Progress Videos, Quantity and Quality data, Construction Completion Report, Defects Summary List.
Input Time:	Total time allocation 30 person-months minimum - see non-key staff list above.
Position:	NKN-2 Inspector - Roads, Drainage, Electrical
Qualifications:	Technical diploma in civil engineering construction or a related subject.
Experience:	<ul style="list-style-type: none"> • At least 10 years of supervision of earthworks and SMA/AC pavement construction. • At least 5 years of supervision of drainage systems. • Background knowledge of electrical codes relating to streetlight and traffic signal installation. • Familiarity with relevant GOST and SNiP design codes.
Tasks:	<ul style="list-style-type: none"> • Review Contractor's proposed materials sources, processing plant and haul routes. • Assess Contractor's environmental impact management proposals. • Review Contractor's traffic management & utility protection/shifting plan for the corridor. • Monitor construction activities and record full details. • Assist with Contractor's 'as built' records for all civil works. • Identify any defects and remedial interventions.
Outputs & Contributions:	Inputs to MPRs and QPRs, Works Progress Videos, Quantity and Quality data, Construction Completion Report, Defects Summary List.
Input Time:	Total time allocation 30 person-months minimum - see non-key staff list above.
Position:	NKN-3 Laboratory Technician [3]
Qualifications:	Technical diploma in materials testing for civil engineering construction projects.
Experience:	<ul style="list-style-type: none"> • At least 5 years of experience in field and lab testing of construction materials. • Knowledge of the production and placement of SMA surfaces would be an advantage.
Tasks:	<ul style="list-style-type: none"> • Conduct tests on Contractor's proposed materials sources. • Conduct lab tests on recovered samples of in-place materials.
Outputs & Contributions:	<ul style="list-style-type: none"> • Recording and reporting of test results in approved format. • Identification of any deficiencies for assessment by the Materials Engineers.
Input Time:	Total time allocation 81 person-months minimum - see non-key staff list above.
Position:	NKN-4 Topographic Technician [2]
Qualifications:	Technical diploma in topographic surveying for civil engineering construction projects.
Experience:	<ul style="list-style-type: none"> • At least 5 years of experience in field surveys for major road and bridge projects. • Knowledge of modern survey equipment including the use of GPS and drone technology would be an advantage.
Tasks:	• Undertake surveys under the direction of the National Topographic Surveyor.
Outputs & Contributions:	<ul style="list-style-type: none"> • Assist with the verification of the survey control monument system and centerline layout. • Assist with the collection of cross sectional data for use in monthly quantity estimates.
Input Time:	Total time allocation 56 person-months minimum - see non-key staff list above.
Position:	NKN-5 Quantity Surveyor
Qualifications:	The Engineer should preferably have a university degree or at least, a diploma in civil engineering and/or quantity surveying or directly related area.
Experience:	At least 5 years of experience as a QS on transport sector assignments in the transport sector for IFI agencies.
Tasks:	• Preparation of quantity estimates at regular intervals as inputs to monthly progress payments.
Outputs & Contributions:	• Development of IFC AND Project completion documentation in support of National Quantity Engineer.
Input Time:	Total time allocation 27 person-months minimum - see non-key staff list above.
Position:	NKN-6 CAD Operator
Qualifications:	CAD drafting credentials obtained from formal training courses.
Experience:	At least 5 years of experience as CAD Operator on assignments in the transport sector.

Tasks:	<ul style="list-style-type: none"> • Prepare graphics for all Reports Collaborate with the Contractor's counterpart staff in the creation of 'As-Built' drawings.
Outputs & Contributions:	<ul style="list-style-type: none"> • Drawings and report graphics. Assist with verification of 'As-Built' drawings and details submitted by the Contractor.
Input Time:	<i>Total time allocation 12 person-months minimum</i> - see non-key staff list above.

Support Staff

The Consultant is required to provide support staff, including an Office Manager, Accountant, Translator/Interpreter and miscellaneous other staff as well as any external, specialist Service Providers that the Consultant will need. Sufficient staff is to be mobilized to provide effective administrative, technical and logistical support to the supervision team as needed during the Rehabilitation Works Contract period and intermittently by limited staff members during the subsequent 60-month DNP period.

Suggested time allocations for the Office Manager/Accountant and Translator/Secretary positions are:

50 person-months and 50 person-months respectively.

H. Construction Supervision Manual Contents

- (i) Team composition
- (ii) Input schedule with key milestones and deliverables
- (iii) Lines of communication
- (iv) Main supervision activities that will be performed (e.g., inspection, testing, audits)
- (v) Persons responsible for each activity (and sub-activities if applicable)
- (vi) Actions required from the Contractor and the time bars (e.g., procedure and lead time for request for inspections)
- (vii) Frequency of the activities (e.g., daily, weekly, monthly, or random inspections)
- (viii) Document flow and management system
- (ix) Consultant's service quality and compliance management system

Annex 1. Consultant's Monthly Progress Report Template

[This template is based on the ADB's Contract Management Procurement Guidance Note, December 2021 and provides guidance for setting out the actual contract management plan (CMP) and maintaining it throughout the life of the contract. It provides information on where to collect the relevant information and how to use it.

It is the Engineer responsibility to obtain the necessary data (each month) from the Contractor, Consultants, and Employer and to submit the report to the Employer.]

PART A

Table 9: Contract Background and Key Data

Project Number and Title	
Contract Scope	
Contract Type	
Employer	
Main Contractor	
Engineer	
Contract Amount	
Completion Date	
Contract Signing Date	
Commencement Date	

1. Executive Summary and proposed corrective actions

[This part should be updated monthly and only contain major items.]

- Cash-Flow: actual versus planned
- Physical progress: describe main progress activities during the month.
- Describe main risks/challenges/issues encountered during the month. Especially those connected to the critical path.
- Discuss proposed corrective actions that may be needed to put the contract back on track (as the case may be)

2. Monthly Contract Update

Permits, Licenses and Approvals

[List all Permits, Licenses, and Approvals and update each month if required (such as development consent/environmental license, certificate for imported materials and equipment, materials permit, quarry permit, water discharge permit etc)].

Contract Start-up Activities and Submittals

(i) LARP Processing

Table 10: LARP Report

Implementation status	Clearance of LARP Compliance report		
	Due Date	Actual Date	Comments

LARP = land acquisition and resettlement plan.

(ii) General start up activities

[The items below are only examples and additional items may need to be added and/or deleted].

Table 11: General Start-up Requirements

Clause	Action	Responsibility	Due Date	Actual Date	Comments
	Residual Tender Period Actions				
ITB 42.1	Issuance of Letter of Acceptance (LoA)	Employer			
ITB 19.6	Return Bid Security to Contractor	Employer			
ITB 43.2	Contract Agreement Signature	Employer			
	Contract Requirements				
GCC 4.2	Provision of Performance Security	Contractor			
GCC 2.4	Evidence of the Employer's Financial Arrangements	Employer			
GCC 2.1	Right of Access to the Site	Employer			
GCC 14.2	Provision of Advance Payment Guarantee	Engineer			
GCC 14.2 and 14.6	Submission and certification of application for Advance Payment	Employer			
GCC 14.7	Payment of Advance Payment	Employer and Contractor			
PCC 4.8	Preparation and submission of the Contractor's Site Specific Health and Safety Management Plan (SSHSMF)	Contractor			
PCC 4.18	Preparation and submission of the Contractor's Site Specific Environmental Management Plan (SSEMP)	Contractor			
GCC 8.1	Commencement Date	Engineer			
	Contract Activities required within 28 days of Commencement Date				
GCC 8.3	Submission of Detailed Program	Contractor			
GCC 18.1	Provision of Insurances (See Section 6)	Contractor			
GCC 20.2	Appointment of Dispute Board and signature of the Dispute Agreement(s) by the parties	Employer and Contractor			

ITB = instructions to bidders, GCC = General Conditions of Contract, PCC = Particular Conditions of Contract.

3. Mobilization Activities

[The items below are only examples and additional items may need to be added and/or deleted].

Table 12: Mobilization Period

Clause	Action	Reference	Scheduled Date	Actual Date	Variance
GCC 4.22/6.6	Establishment of Site boundaries, compound, offices etc.	Program			
GCC 1.1.5.1/4.17	Mobilization of Contractor's Equipment	Program			

GCC 1.1.2.7/6.9	Mobilization of Contractor's Personnel	Program			
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4. Risk Management

[This chapter is to be updated monthly and should only contain risks that are considered high and would have a serious impact on the project. This is a very important part of the report, and all major risks should be stated and have proposed mitigation measures. The full project risk register should be attached to the CMP as an appendix].

5. Program Monitoring

[This Sub-Chapter is to be updated monthly and should contain the items below. If the program is experiencing delays, then this needs to be highlighted and mitigation measures stated].

- Level 2* program
- Tabular form of progress – planned dates, actual dates, variances
- Graphical form – line graph illustrating actual verses planned progress
- Pie chart – overall progress (%), time elapsed, time remaining
- One month look ahead table with target dates
- Short paragraph on critical path

**A Level 2 Schedule is a high-level integrated project schedule for the entire project time frame that is used for high level internal and external management. This schedule shows the project milestones of engineering, procurement, construction, and start-up activities.*

6. Variations and Claims

[These tables are to be updated monthly and contain all claims and variations submitted].

7. Financial Management- Payment Schedule

[This table records all payments related to the contract – including contractor, PMC, consultants, etc].

8. Evolution of the Estimated Contract Price

[This table records the impacts of variations, claims, disputes, etc. It shows why the contract cost has increased or decreased].

9. Comparison of Progress versus Planned Payments

[Insert a graph illustrating the difference between planned payments (cashflow) and actual payments. If there is a significant difference, then a comment should be made explaining why.]

10. Earned Value

[Insert a graph that illustrates the Earned Value. If there is a significant difference, then a comment should be made explaining why.]

11. Disputes

[Insert any information relating to disputes in these two tables.]

12. Environment, Social, Health and Safety and Security Related Obligations

- i. Site Specific EMP (SSEMP) activity Monitoring

[Record all SSEMP activities in this table].

Table 13: ESHS & S Actions

Corresponding Submittal	Due / Planned Date	Description of SSEMP Activities	Actual Date Received

SSEMP = Site Specific Environmental Management Plan.

ii. Social Safeguards Monitoring

[Record all Social Safeguards monitoring activities in this table.]

Table 14: Social Safeguards Monitoring

Description of Social Safeguard Activities	Corresponding Submittal	Due / Planned Date	Actual Date Received
COVID 19 Management Plan (re PCC 6.7)			
HIV/AIDS prevention activities (re PCC 6.7)			
Respectful Work Environment (re PCC 6.25)			

PCC = Particular Conditions Of Contract.

iii. Health and Safety Monitoring

[Record all Health and Safety monitoring activities in this table.]

Table 15: H&S Monitoring

Current period	
Average daily manpower (including Subs)	
Lost Time Injury (LTIn)	
Lost Time Injury Frequency Rate (LTIFRn)	
First Aid Injury (FAI n)	
Medical Treatment Injury (MTIn)	
Significant Near Misses (SNMn)	
Total Recordable Injury Frequency Rate (TRIFRn)	
Contract period to date	
Average daily manpower (including Subs)	
Lost Time Injury (LTI)	
Lost Time Injury Frequency Rate (LTIFR)	
First Aid Injury (FAI)	
Medical Treatment Injury (MTI)	
Significant Near Misses (SNM)	
Total recordable Injury Frequency Rate (TRIFR)	

LTI = number of work-related injuries or disease that result in a fatality, permanent disability or time lost from work. It could be as little as one day or shift (excluding the day of the incident).

LTIFR = number of lost-time injuries (LTIs) within a given accounting period, relative to the total number of hours worked in that period. The formula measures the number of LTIs per million hours worked during an accounting period and is as follows:

$(\text{Number of LTIs in accounting period}) / (\text{Total hours worked in accounting period}) \times 1,000,000$

FAI = number of injuries that requires a single first aid treatment and a follow-up visit for subsequent observation involving only minor injuries, and for which the person would typically return immediately to their normal activities.

MTI = number of injuries or disease that resulted in a certain level of treatment given by a physician or other medical personnel under standing orders of a physician other than on-site first aid treatment.

SNM = number of unplanned events that did not result in injury, illness, or damage – but had the potential to do so (i.e. 'Close-Call', 'Nearly a Collision', 'Near Hit').

TRIFR = number of injuries (excluding fatalities) requiring medical treatment per million hours worked within an organization. The formula is as follows:

$$\text{TRIFR} = \frac{\text{Number of recordable injuries in accounting period}}{\text{Number of hours worked by all staff in the same accounting period}} \times 1,000,000.$$

iv. Security Monitoring

[Record all Security monitoring activities in this table]

13. Completion of Work and Contract Closure Activities

[The following is a non-exhaustive list of activities stated in the Contract, required to be undertaken precedent to Contract Closure. Additional items may need to be added / deleted depending on the particular project].

Table 16: Project Close-out

Clause	Action	Responsibility		Due Date	Actual Date
GCC 9	Test on Completion	Contractor			
GCC 10.1	Application for a taking over certificate	Contractor			
GCC 10.1	Issuance of the Taking Over Certificate	Engineer			
GCC 14.9	Certification of payment/return of 50% of the retention Money	Engineer			
GCC 14.9	(If used) issuance of a Retention Money Guarantee (RMG) for the release of the second half of the retention.	Contractor			
GCC 14.10	Statement at Completion	Contractor			
GCC 11.1	Notification of Defects	Employer			
GCC 11.3	End of Defects Notification Period (DNP) and extension thereof (if applicable)	Employer			
GCC 11.9	Issuance of Performance Certificate	Employer			
GCC 11.11	Clearance of Site	Contractor			
GCC 4.2	Return of Performance Security	Employer			
GCC 14.9	Payment of outstanding balance of Retention Money	Engineer			
GCC 14.9	(if an RMG is used): Return of the RMG	Employer			
GCC 14.11	Application for Final Payment Certificate	Contractor			
GCC 14.12	Issuance of Final Payment Certificate	Engineer			

GCC = General Conditions of Contract, DNP = defect notification period, RMG = retention money guarantee

14. Site Photographs

[Only add photos taken in the period that the report covers].

PART B

[A majority (but not all) of part B can be completed once and would not need updating].

15. Contract Details

[Only update when required].

16. Communications and Reporting

Key Points of Contact

[Only update when required].

Meeting Schedule

[Once agreed, only update when required].

Reporting

[Once agreed, only update when required].

17. Securities and Insurances

Bank Guarantees / Securities

[Record all guarantees and security information in this table].

Insurances

[Record all insurances in this table].

Annex Environmental, Health and Safety (EHS) Obligations

Environmental, Health and Safety (EHS) Obligations

Ensure that the Contractor delivers its EHS obligations under its contract. This includes, but is not limited to the following:

1. Review the Contractor's Environment, Health and Safety Management Plan, including all updates and revisions at frequencies specified in the Contractor's contract (normally not less than once every 6 months);
2. Review all other applicable contractor's documents related to Environment, Health and Safety aspects including the health and safety manual, security management plan, etc;
3. Review and consider Environment, Health and Safety risks and impacts of any design change proposals and advise if there are implications for compliance with project requirements;
4. Undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, to verify the Contractor's compliance with Environment, Health and Safety requirements with and without contractor and/or Employer relevant representatives, as necessary, but not less than once per month
5. Undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other Environment, Health and Safety related documentation, as necessary, to confirm the Contractor's compliance with Environment, Health and Safety requirements;
6. Agree remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's Environment, Health and Safety obligations.
7. Ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with Environment, Health and Safety obligations;
8. Check that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations.
9. Review and critique, in a timely manner, the Contractor's Environment, Health and Safety documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation.
10. Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential Environment, Health and Safety issues.
11. Establish and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality
12. [add any other tasks as appropriate ensuring consistency with the Consultant's contract conditions and the Contractor's contract].

Experts with EHS Experience

Key Expert/s with sufficient qualifications and experience to provide Environment, Health and Safety oversight shall be required.

The Key Expert/s academic and professional qualifications and experience to recognize and to deliver good international industry practice with respect to Environment, Health and Safety should be specified. The same expert positions should be included for evaluation in the SES and PES.

EHS Reporting Requirements

If the Services consist of or include the supervision of civil works, include the following on Environment, Health and Safety reporting:

1. Immediately notify the Client of any failure by the Contractor to comply with its Environment, Health and Safety obligations;
2. Immediately notify the Client of any allegation, incident or accident, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Client's Personnel, Contractor's Personnel or Experts. Confidentiality of full details should be maintained for sensitive cases. The Consultant shall provide full details of such incidents or accidents to the Client within the timeframe agreed with the Client;
3. Immediately inform and share with the Client any immediate notification related to Environment, Health and Safety incidents provided to the Consultant by the Contractor, and as required of the Contractor as part of the Progress Reporting.
4. Share with the Client in a timely manner the Contractor's Environment, Health and Safety metrics, as required of the Contractor as part of the Progress Reports.

EHS Code of Conduct Requirements

The Code of Conduct should be signed by each Expert to indicate that they have:

1. received a copy of the code;
2. had the code explained to them;
3. acknowledged that adherence to this Code of Conduct is a condition of employment; and
4. understood that violations of the Code can result in serious consequences, up to and including dismissal, or referral to legal authorities.

Standard Code of Conduct Form on next page. This form can be filled out, signed and submitted prior to contract negotiations.

ENVIRONMENTAL, HEALTH AND SAFETY CODE OF CONDUCT FOR CONSULTANT'S PERSONNEL

We are the Consultant, [enter name of Consultant]. We have signed a contract with [enter name of Client] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental, health and safety risks related to the Works.

This EHS Code of Conduct is part of our measures to deal with environmental, health and safety risks related to the Works. It applies to all our staff, laborers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each JV Partner, Sub-Consultant and any other personnel assisting us in the execution of the Works. All such persons are referred to as "Consultant's Personnel" and are subject to this EHS Code of Conduct.

This EHS Code of Conduct identifies the behavior that we require from all Consultant's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Consultant's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this EHS Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Consultant's Personnel and any other person;
3. maintain a safe working environment including by:
 - (a) ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - (b) wearing required personal protective equipment;
 - (c) using appropriate measures relating to chemical, physical and biological substances and agents; and
 - (d) following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. report violations of this EHS Code of Conduct; and
7. not retaliate against any person who reports violations of this EHS Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Consultant's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this EHS Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done by calling the Consultant's hotline (if any) and leaving a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will

investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

CONSEQUENCES OF VIOLATING THE ENVIRONMENTAL, HEALTH AND SAFETY CODE OF CONDUCT

Any violation of this EHS Code of Conduct by Consultant's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR SIGNATURE BY CONSULTANT'S PERSONNEL

I have received a copy of this EHS Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this EHS Code of Conduct, I can contact [enter name of Consultant's contact person(s) with relevant experience] requesting an explanation.

Name of Consultant's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Consultant:

Signature: _____

Date: (day month year): _____