REQUEST FOR EXPRESSIONS OF INTEREST

(CONSULTING SERVICES - FIRMS SELECTION)

HASHEMITE KINGDOM OF JORDAN

JORDAN WATER SECTOR EFFICIENCY PROGRAM

IBRD Loan No. 9560-JO, CFF TF No. TF0C1892, AFD No. CJO 1141 01P

Assignment Title: Safawi New Proposed Transmission Pipeline Planning, Design and Construction Supervision.

Reference No.: JO-YWC-015-CS-QCBS

The Ministry of Water and Irrigation has received financing from the International Bank for Reconstruction and Development (World Bank), the Agence Française de Développement (AFD) and Global Concessional Financing Facility (GCFF) in the amount of US$300,000,000 to be managed by the World Bank, toward the cost of the Jordan Water Sector Efficiency Project, and it intends to apply part of the proceeds to payments for consulting services to be procured under this project.

The consulting services ("the Services") is provide professional technical services to support activities that will pave the way for the Ministry of Water and Irrigation (MWI)& Yarmouk Water Company (YWC) to effectively plan and manage water networks, as public resources, and enable provision of better-quality services alongside them, including better management and maintenance of water network. The aim of the assignment is to: to facilitate the smooth execution of a project by meticulously preparing engineering studies and tender documents, supervising works contracts, and ensuring compliance with approved designs and technical standards. The objective encompasses overseeing provisional taking-over and defects liability periods, including inspections, certifications, and reporting. Emphasizing adherence to schedules, budgets, and environmental standards, the project also prioritizes gender equality by actively promoting the inclusion of women in the workforce and fostering a safe, inclusive workplace environment.

The TOR full version can be found on Yarmouk Water Company (YWC) website at the following link http://www.yw.com.jo/Tenders.aspx

The Yarmouk Water Company (YWC) now invites eligible consulting firms ("Consultants") to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. Consultant Brochures may also be included in the EOI. The shortlisting criteria are:

1. Description of similar assignments, and in similar conditions
2. The firm's core business and general experience years in business and overall competence in relevance to this assignment.
3. The firm financial capability.

It is preferable to limit the EoI to a maximum of 50 pages.

Please note that at this shortlisting stage: Technical and financial proposals are not requested. Key Experts, if proposed for the assignment, will not be evaluated. Request for clarifications on the EOI shall not be replied to

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The shortlist will contain 6 to 8 firms.

The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" November 2020 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.

The Applicant's attention is drawn to the following:

a. National consulting engineering firms shall satisfy the requirements as defined in this request for Expression of Interest and the attached ToR and classified as 1st grade –A in water and sewage and 1st grade A in the field of environment by government tender department.
b. International consulting firms shall satisfy the requirements as defined in this request for Expression of Interest and the attached ToR. If awarded, the international consultant shall abide by the Country's tax laws as applicable;
c. A Joint Venture of national and international consulting firms or an international consulting firm with a local Sub-Consultant, all shall satisfy to the requirements under points a and b. The national consulting firm, regardless of whether JV member or Sub-Consultant, shall also meet of the requirements mentioned under a) as applicable.

Shortlisted Consultants will be invited to submit their proposals, upon which a Consultant will be selected in accordance with the (QCBS) described in the "World Bank Procurement Regulations for IPF Borrowers", dated November 2020" and to be specifically set out in the Request for Proposals.

Further information can be obtained in writing through the email address below at the address below during office hours (8:00 am to 4:00 pm Jordan Time).

Expressions of interest must be delivered in a hard copy to the address below and/or by below email(s) by Jan (20), 2025, 12 pm Jordan time.

Recipient(s):

To Bassam Jarboo, Procurement Manager

Email: bassam_jarboo@yw.com.jo

To AbdelHadi Bataineh Procurement Officer

abdelhadi_bataineh@yw.com.jo

with a copy (cc) to Eng. Dalal Eliwah, PMD Director

Email: dalal_eliwah@yw.com.jo

Address: **Tenders and Procurements Department EOI Title – Bidder Name**
Yarmouk Water Company Irbid, Baghdad St. P.O. Box 3798 Irbid 21110 Jordan

HASHEMITE KINGDOM OF JORDAN
MINISTRY OF WATER AND IRRIGATION
WATER AUTHORITY OF JORDAN
(YWC)

JORDAN WATER SECTOR EFFICIENCY PROGRAM

LOAN NO. 9560-JO, CFF TF No. TF0C1892, AFD No. CJO 1141 01P

TERMS OF REFERENCE

CONSULTANTCY SERVICES

FOR SAFAWI New Proposed Transmission Pipeline Planning, Design and Construction Supervision

JORDAN- MAFRAQ- NORTH BADIA

December - 2024

A. BACKGROUND

The Ministry of Water and Irrigation has received financing from the International Bank for Reconstruction and Development (World Bank), the Agence Française de Développement (AFD) and Global Concessional Financing Facility (GCFF) in the amount of US$300,000,000 to be managed by the World Bank, toward the cost of the Jordan Water Sector Efficiency Project, and it intends to apply part of the proceeds to payments for consulting services to be procured under this project.

The World Bank funded project will have the following components:

- **Component 1**: Sustainable Non-Revenue Water (NRW) Reduction
- **Component 2**: Increased energy efficiency and reduced energy supply costs
- **Component 3:** Water security measures to underpin efficiency improvements
- **Component 4**: Institutional strengthening for water sector Efficiency
- **Component 5**: Contingency Emergency Response

- Component 1 of the project "Sustainable Non-Revenue Water (NRW) Reduction -

Aims at (i) rehabilitation or replacement of the water supply network including reconfiguring the network into hydraulically isolated District Metered Areas (DMAs), replacement of household connections, installation of customer and bulk meters, regulation and maintenance of water pressure within the network, and systematic leakage identification and repairs, and (ii) support to preparatory studies and activities for NRW sub-projects.

- The works consist of the following parts:
  - a) Sustainable non-revenue water reduction
  - b) Modernized systems for sustaining NRW reduction
  - c) Community engagement to improve financial sustainability, collections efficiency, and demand control

A Project Management Unit (PMD) is established at the (Jordanian water companies / YWC) over the implementation period of five years. The PMU shall be responsible for the management of project activities including the fiduciary operations, contract management and the administration of the projects funds as well as implementation and monitoring of the environmental and social requirements and instruments.

The current Terms of Reference (ToR) are proposed under Component 1 of the project –NRW and will describe the assignment's requirements and objectives.

B. PROJECT LOCATION AND DESCRIPTION

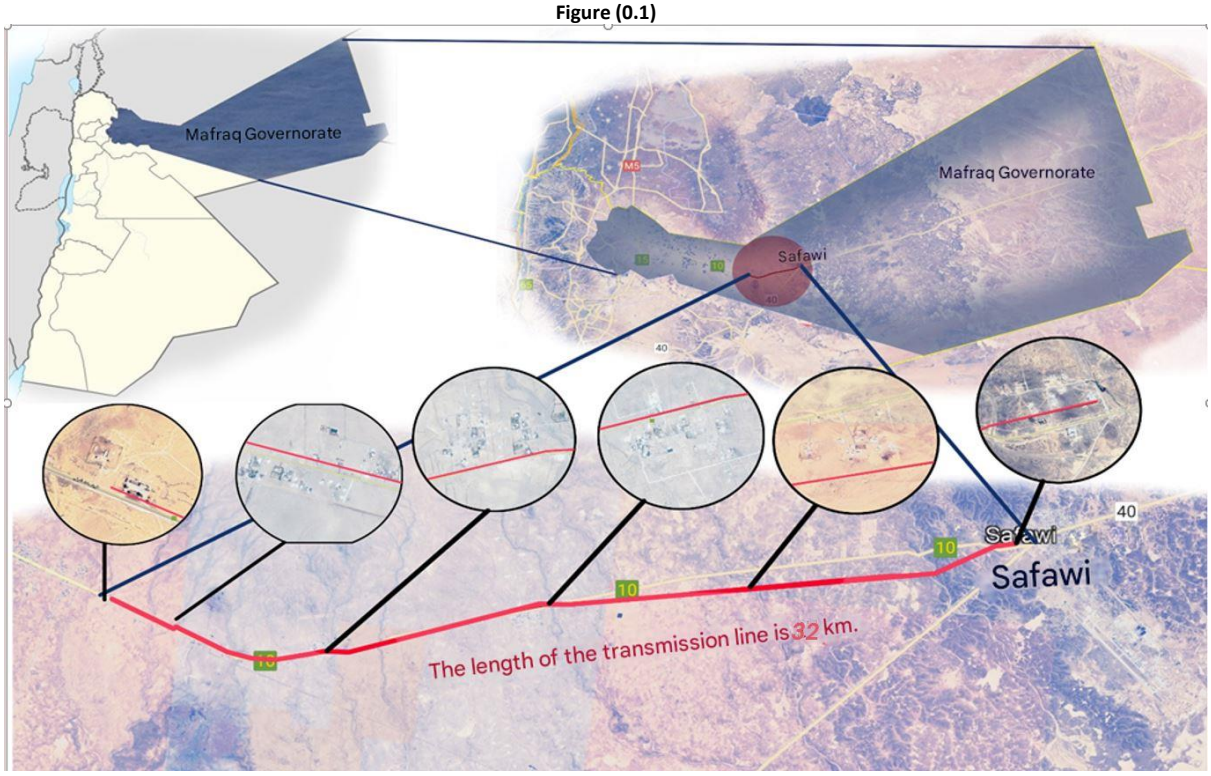
The project titled "Design and supervision of Transmission Pipeline from AL-Bashri to Safawi (32 km, 150-mm Diameter)" is ideally located in the Mafraq Governorate of Northern Badia, Jordan. This region, which covers an area of about 11,210 km2, is distinguished by its environment of dry desert, which is made up of large plains and low-lying hills that are typically 440 meters above sea level, it lies along the main highway that connects Amman and Baghdad. Safawi is almost 114 kilometers away from Amman, the capital of Jordan.

The northern Badia, which makes up 35.7% of Jordan's overall Badia region, has a severe climate with little to no annual rainfall (usually less than 200 mm) and substantial temperature variations. Notwithstanding these obstacles, there is potential for resource and agricultural development in the area, which would support local socioeconomic development.

In this project, a new, more efficient 150-mm diameter pipeline will be installed over a 32-kilometer instead of the current 400-mm diameter water transmission network as per Recommendations from the thorough analysis carried out in the Master Plan made by (Orient Consultancy) served as the foundation for the pipeline diameter reduction decision.

B.1: - Project overview Layout

Figure (0.1)



C. OBJECTIVE OF CONSULTANCY SERVICES:

The consultancy's primary objective is to ensure the successful design and supervision of the Safawi New Proposed Transmission Pipeline, spanning 32 kilometers with a 150-mm diameter. This includes assessing the current infrastructure and water distribution needs, conducting comprehensive engineering studies, preparing detailed pipeline designs, and conducting the environmental and social assessment for the subproject according to the World Bank Environmental and Social Framework (ESF) requirements and national regulations. Additionally, the consultancy will develop tender documents, manage the procurement process, and oversee construction activities to ensure adherence to design specifications, quality standards, and timelines. The consultancy will also manage the provisional take-over and oversee defect rectifications during the defects liability period. Ultimately, the goal is to enhance water supply efficiency and reliability in Northern Badia, Jordan, through effective delivery of design and supervision services

Prior to proceeding with detailed design work, the consultant shall present design options to the (YWC). These design options should include a comprehensive cost comparison for both construction and operation.

D. THE CONSULTANT SHALL PROVIDE HIS SERVICE FOR THE FOLLOWING THREE TASKS:

1. **DESIGN SERVICES**
2. **PRE-CONSTRUCTION SERVICES**
3. **SUPERVISION SERVICES**

1. Design Services

For the project of implementing the Bishreyya to Safawi pipeline, the consultant should prepare the comprehensive engineering studies and tender documentation. This entails conducting a comprehensive analysis of the current pipeline system, gathering information on the flows of water being transmitted, assessing the 32 km pipeline's state, and pinpointing possible areas for improvement. A comprehensive hydraulic analysis will be part of the project to identify the ideal pipeline diameter and materials, guaranteeing improved durability, efficiency, and capacity to meet future demand. To solve issues with the dry climate, soil stability, and possible effects on the nearby ecology, the terrain and environmental circumstances will be thoroughly examined.

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Additionally, the consultant will conduct the required environmental and social assessments for the subproject, including conducting and finalizing the subproject's ES screening form and preparing the necessary environmental and social instruments in accordance with the Project’s ESMF, World Bank

ESF, and national requirements. The consultant will coordinate and communicate with the Ministry of Environment to obtain the environmental permit for the subproject, as well as coordinate with other local authorities and different stakeholders to ensure smooth consultation and effective community engagement.

2. Pre-construction Services

Provide support in reviewing and evaluating bids, preparing the bid evaluation report, and responding to contractors' inquiries related to the Environmental and Social Framework (ESF). Additionally, assist in assessing the qualifications of ESF personnel, evaluating ES aspects, and reviewing other project staff across all stages of design and supervision for tasks 1, 2, and 3.

3. Supervision services

- Ensure that the executed works comply with the approved design, internationally acceptable technical specifications and sound engineering practice; and that all deficiencies, outstanding and substandard items are corrected.
- Participate in provisional taking-over including inspection of the completed works, issuing a Provisional Take-over Certificate, compile as-built drawings, and prepare the Final Report.
- Provide inspection services during defects liability period for Remedying Defects, participate in the issuance of Defects Liability Certificate, certify Payment of retention, and prepare Final Completion Report.

The supervision services shall ensure that the works are executed with meticulous attention to detail, adhering strictly to predetermined schedules and budgetary constraints, while meeting the specifications and drawings outlined in the contract. Furthermore, the endeavor is committed to upholding environmental and social safeguard standards, as well as the requirements set forth by the Employer. **Additionally, the project endeavors to advance gender equality within the workforce by actively promoting the recruitment of women and fostering a safe and inclusive workplace environment for all project personnel.**

E. SCOPE OF WORK:

The objective of the Consultant's assignment is to provide engineering services, planning and design, and construction supervision to the YWC to ensure an effective preparation and implementation of the project and the consultant shall assist the Employer in the bidding process.

The Services under these terms of Reference are proposed to be carried out in three tasks as indicated below.

Task 1: Engineering Studies and the preparation of Tender Documents.

Task 1 include the following sub-Tasks:

- Task 1.1- Data collection, topographic survey.
- Task 1.2- Engineering Design: Detailed designs of the new proposed Bishreyyeh to the Safawi System.

Task 1.3 Environmental and Social Assessment.

Task 1.4 Preparation of Tender Documents

Task 1.1 Data collection and Topographic Survey

a- Available Data Collection

The Consultant shall review all existing studies and reports, if any, and evaluate the present condition of the current pipeline and public facilities and services and carry out surveys as required, all in the objective of not obstructing the routing of the new additional water line including (natural resources, biodiversity features, agricultural areas, archeological area along the route, or others). The Consultant shall also acquaint himself with any ongoing or proposed studies and programs supported by the Government or bilateral cooperation agencies in order to coordinate with them.

The Consultant shall define and evaluate all necessary complementary site investigations such as topographical surveys, network analysis and agree with the Client prior to initiation.

b- Topographic Survey

A topographic survey of the selected project roads shall be carried out for the production of necessary mapping at 1/2,000 scale of the selected locations (plan view) m addition to longitudinal profiles on a scale of H: 1/2,000, V: 1/200. This shall include:

- Establishment of a control network of inter-visible reference markers (traverse). Each marker shall be precisely surveyed, levelled and tied to the national grid and datum.
- Generation of digital mapping and on standard sheets at scale 1/2,000 which shall be used as base maps for the design.

c- Archaeological and Historical Sites Survey

Upon the completion of the E&S screening report and reviewing the Archaeological and Historical Sites Survey, the consultant will identify what ES measures and plans the contractor will prepare as part of its MSIP prior commencing the works including but not limited to: Archaeological Chance Find Procedure (ACFP), Occupational, Health and Safety (OHS) Plan, Traffic management Plans (TMP) -Conceptual layouts, Waste Management Plan.

Task 1.2 - Engineering Design: Detailed Design of the Transmission Pipeline and Baseline Survey.

The Consultant shall develop and submit a Method Statement outlining the approach to establish a baseline for Non-Revenue Water (NRW) measurements along the transmission pipeline. The Method Statement requires Employer review and approval prior to execution.

- Upon approval, the contractor shall implement the Method Statement, including the installation of water meters as necessary to obtain accurate measurements and readings. All activities required to establish the NRW baseline shall be carried out in coordination with the Employer and with their approval.

- In the final design deliverables, the Consultant shall specify the anticipated NRW reduction achievable upon implementation of the new transmission pipeline, along with projected energy savings.

a- Structural Design

Structures drawings shall be prepared for the Bashri to Safawi Systems including all structural design if needed and all details required for the construction of these structures.

b- Water Supply Design

The structures shall be shown on the plan, profile drawings, and shall be supported by the necessary standard details. Profile of all longitudinal water lines shall be prepared on scale H: 1/2000, V: 1/200.

For Task 1.2, The Consultant shall ensure that the submitted design fully complies with the environmental, social, health and safety (ESHS) considerations as set out in the Environment and Social (E&S) management instruments, and that the Water Company has obtained all required licensing at the appropriate time (i.e MoTA, MoEN).

Task 1.3 Environmental and Social Assessment

1. Subproject was initially screened against the Project Exclusion list and the available information (please see Appendix 3 **(Annex 1-B**)(the initial environmental and social screening for the subproject), the consultant shall conduct and finalize the environmental and social screening of the sub-project as per the ES screening template in the ESMF for client and World Bank review and clearance(Appendix 3 **Annex 1-C)**. The screening will identify the E&S instruments per each Environmental and Social Standards (ESS) and the consultant will draft those required instruments in accordance with the ESS's and the national guidelines. The consultant will submit the screening report for the ESSD and the Water Company for review, prior to submitting for the World Bank guidance. This process is further detailed here and in the ESMF:
    a. For ESS1, based on the findings of the screening, the consultant shall prepare the more stringent requirement among the World Bank and the Ministry of Environment requirements (i.e preliminary ESIA/ESMP full-fledged ESIA/ESMP, IEE/ESMP, detailed ESMP or ESMP checklist), and identify the ES instrument in accordance with the ESF requirements; in accordance with ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8, and ESS10, assessing each standard applying the ESF mitigation hierarchy. This process is described in detail in the ESMF and will be completed in close coordination with the ESSD, the water company and upon guidance from the World Bank. The consultant will draft E&S instruments per each ESS and the national guidelines and procedures, and submit to the World Bank and if needed according to the ESMF to the Ministry of Environment for their clearances. The IA with the support of consultant shall submit MoEv the approval application regarding the project activities, by which the MoEv will classify the risks according to Environmental Classification and Licensing System and its amendments No. 69 of 2020 and define the required ES instrument for high risk: comprehensive ESIA is required, for substantial (medium) risk preliminary ESIA is required). Then the consultant shall furnish the MoEv requirements Environmental License (MOEV Clearance) and Environmental Permit before project operation. Considering the ES instruments drafts will be reviewed by the World Bank, the feedback should be incorporated prior submitting the draft for the MoEnv approval.
    b. Upon the completion of the E&S screening report and reviewing the Archaeological and Historical Sites Survey, the consultant will identify what ES measures and plans the contractor will prepare as part of its MSIP prior commencing the works including but not limited to: Archaeological Chance Find Procedure (ACFP), Occupational, Health and Safety (OHS) Plan, Traffic management Plans (TMP) -Conceptual layouts, Waste Management Plan.
2. The ESIA or ESMP draft will be submitted for the World Bank review and clearance. The final draft will be furnished upon the satisfaction of the World Bank and the Ministry of Environment (if applicable).
3. The consultant is required to conduct stakeholder consultations as needed during the preparation of the different E&S instruments. The feedback received will be reflected in the different instruments before finalization mainly preparing SEP.
4. If a Resettlement Action Plan (RAP)/LAP is required, it will be coordinated closely with the ESSD and the Water company, and in accordance with the requirements of the project's Resettlement Framework (RF). Necessary consultations with project affected people (PAPs) will be conducted as required.

Task 1.4 Preparation of Tender Documents.

a- Final Engineering Report

The Consultant shall prepare a final engineering report including a description of the project, results of the reconnaissance study and all other studies, together with the design criteria adopted in the design of the various assignments' components. A clear description and details of the recommended design shall also be included.

The Consultant shall assist in integrating ESF requirements into the bidding documents. This includes drafting the ESF sections of the Standard Procurement Documents, ensuring the effective incorporation of the ESMP, and embedding ESF requirements into the identified contracts under the Management and Supervision of Infrastructure Projects (MSIP). Furthermore, the Consultant shall identify the necessary expertise and qualifications for ESF personnel to ensure compliance with all relevant standards and regulations.

b- Design Calculation Notes

All design calculation notes shall be compiled in a specific volume.

c- Quantities Calculation Notes

All quantities calculation notes of the various trades of the Project shall be compiled in a specific volume.

d- Confidential Fair Price Estimate

Fair price estimate shall be prepared and presented in a separate confidential document. In the preparation of the fair price estimate, the Consultant shall conduct a study of current unit prices of various work items from the contracts currently under construction and current market prices of materials and labor. The breakdown of the unit prices shall be presented on MS Excel spreadsheets.

e- Tender Documents

The Consultant shall prepare tender and contract-documents for each section of the project according to the WB's SBD. The documents shall include the following:

Volume 1: Conditions of contract

This document shall include:

a. Invitations to Bid
b. Instructions to Bidders
c. Qualification and Evaluation Criteria
c. Forms of Bid
d. Forms of Bid Bond and Performance Bond
e. Form of Advance Payment Guarantee
f. Schedule of Day Work Rates
g. Schedule of Basic Rates
h. Form of Contract
i. General and Special Conditions of Contract
j. Environmental, Social, Health and Safety (ESHS) obligations
k. Identified Plans under the MSIP (Traffic Management plans typical details and layout using international standards, OHS plans, Archaeological findings, and other plans identified per ESS's.
l. ESMP)

The Conditions of Contract shall be based on World Bank Standard Bidding Document. At such time, the Consultant shall coordinate with the Employer in order to finalize the conditions of contract.

Volume 2: Specifications

The Consultant shall prepare all specifications required as requested by the Employer,

Volume 3: Bill of Quantities
The bill of quantities shall be prepared as requested by the Employer. Clearly notifying the costs of implementing the E&S plans and measures shall be embedded in each unit cost as set out in the SPD.

Volume 4: Contract Drawings
The drawings shall comprise the following:

- Plans and profiles of the selected areas at 1/2,000 horizontal and 1/200 vertical scale. The drawings shall include all design data for the construction of the proposed water line

Contract Drawings listed above shall be presented in this order:

- **COVER SHEET**
- LIST OF DRAWINGS & ABBREVIATIONS
- **GENERAL DRAWINGS:**
- GENERAL LOCATION PLAN
- LAYOUT PLAN
- TOPOGRAPHICAL
- SURVEY PLAN
- **STRUCTURAL AND ARCHITECTURAL WORKS:**

Structural details for rehabilitation of the pumping station where it is needed.

Task 2: pre-construction services.

1) Bids Review and Award

Following receipt of bids for implementation of the works, the Consultant shall assist the client with the bid evaluation process as required by the client. The Consultant shall also assist in technical discussions during the pre-bid meeting with the bidders.
Where details within the scope of the design consultant's work require clarification and/or amendments, the consultant shall prepare such clarification/ amendments details and ensure timely dispatch to the client.
During the bid opening, the consultant shall be present to assist the client in the bid opening as needed and record the minutes of the bid opening.
After completion of the bid opening, the consultant shall prepare his bid evaluation report following the outline stated in the bidding document with sufficient details to determine the responsiveness of the bids and to evaluate and compare the financial bids of the responsive bids and provide price analysis of the lowest responsive bid.

Task 3: Supervision of works.
The Consultant shall develop a Project Management Plan to adopt during the project, which will be composed of 2 main phases: **Preconstruction or tendering stage**, **construction stage** and **defects liability.**
The services to be provided by the Consultant shall include, but shall not be limited to:

- Prepare initial site-handing over certificate in accordance with contract provisions
- Supervise the construction works
- Ensure that the contractor implement the project activities with utmost care in accordance to the bidding document requirement.
- Prepare, monitor and maintain cost estimates and planning schedules.
- Conduct daily supervision of work activities to ensure compliance with the E&S measures outlined in the subproject ESMP, with reference to the Project ESMF and Labor Management

Procedures (LMP). Perform monthly on-site audits covering environmental, social, health, and safety aspects.

- Supervise the contractor's daily performance regarding labor and working conditions.
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- Prepare a monthly report on environmental, social, health, and safety performance. Monitor and report on progress, including compliance with social and environmental requirements as specified in the subproject ESMP.
- Reporting and monitoring incidents as per the requirements of the project's ESCP (Environmental and social Commitment Plan)
- Administer a complaint log to register all received complaints, report them to the project owner, and provide details on how each complaint was addressed.
- Co-ordinate contractors
- Manage claims and variation in consultations with the Employer
- Certify contractors' monthly and progress payment certificates
- Ensure that as-built drawings are prepared, operation & maintenance manuals reviewed & updated
- Administer the construction contract
- Supervise rectification of defects during the defects liability period
- Certify final completion certificate in accordance with contract provisions.

3.1 PLANNING AND CO-ORDINATION

a- Review of Contractor's submitted Detailed Program

The Consultant shall review the contractor's submitted detailed work plan, including his methodology for ensuring the quality of the works, and computerized program of all activities and resources for the execution of the work included in his contract. The Contractor's plan and program shall include all activities that interface or otherwise relate to the work being done by the different contractors or other involved parties, including required dates of receipt of data and construction drawings, submittal dates for the various documents, appropriate periods for review etc.

The program shall be prepared using project management software such as "Primavera" or similar compatible software approved by the Consultant and shall be constantly updated throughout the period of the contract.

b- Progress Monitoring-During Construction

In order to fulfill the above objectives, the Consultant shall for all contracts, inter alia: At all times take necessary measures and provide appropriate advice to the Client to enable the construction contract to be completed in a timely and cost-effective manner, in conformity with contract conditions and specifications.

The Consultant shall monitor the Contractor's works to determine progress on a monthly basis and ensure that the construction program is maintained, and costs minimized by means of, but not limited to, the following activities:

- Review and, if in agreement, consent to the Contractor's proposed program of work to meet key dates established in the various tasks;
- Prepare and maintain progress programs for use in monitoring and reporting progress;
- Prepare consolidated monthly reports on physical and financial status, site meetings and contractual matters with particular reference to variation orders and contractors claims. The monthly reports shall deal specifically with monitoring and follow-up of agreed environmental and social mitigation measures and with the contractor's adherence to safety, health standards and anti-corruption measures as applicable under contract. Each monthly report should include recommendations if any, for action by the Client and the Contractor.

- Prepare control charts of the main activities and a project master schedule, indicating both past performance and forecasts for completion including time involved in each case.
- Analyze the variations of construction progress from the Contractor's program; and advise client in a timely manner.
- If and when progress falls behind program, develop in consultation with the Contractor, , appropriate modifications to programs and/or work methods to recover the original program. The Employer shall be informed of such changes and recovery activities.
- Ensure that the Contractor's reporting requirements identified in the management procedures developed by the Consultant are fulfilled.

c- Co-ordination

The Consultant shall organize co-ordination and site meetings with the Contractor on a regular basis and as necessary. The Consultant shall conduct these meetings on behalf of the Client, take minutes and report to all concerned parties.

d- Identify and Protect Antiquities

The Consultant shall examine the Contractor's MSIP prepared during the design phase to ascertain the probable location of antiquities which may be disturbed by construction of the works. If any antiquities are revealed during investigations of construction works, he shall instruct the Contractor to take necessary measures to protect the antiquities and shall notify the Employer without delay.

e- The Environmental and Social Monitoring.

Prior to construction stage, the Consultant shall review, provide feedback on, and approve site-specific ES documents developed by the contractor, including the CESMP. The CESMP should include all necessary plans such as method statements, HSE plan, WMP, TMP, and any other relevant plans as per the requirements of the ESF pertinent documents for the project.

During construction, the Consultant shall:

- Perform monitoring on ES specific indicators with reference to the project ESMF, and the metrics specified in the works bidding document.
- Conduct weekly site visits to monitor and evaluate the contractor's adherence to ES mitigation measures as outlined in the ESF documents, including but not limited to the ESMP, OHS plan, TMP, WMP, and ACF with reference to the ESMF and LMP. Upon identifying non-compliance, assess the associated risks and recommend corrective measures. Record these measures along with their implementation timeframe in the report. Follow up to ensure the implementation of corrective measures and report compliance.
- Ensure that the grievance mechanism of the project is implemented properly. This through ensuring if there is any complaint is submitted from any party and to whom is submitted and how it will be handled and closed. This is to be reflected in the monthly reports submitted to the employer (the WC/ESSD) and submit upon request to the World Bank.
- Assess any new impacts that emerge during the construction stage and propose mitigation measures based on the mitigation hierarchy in accordance with the ESSs. Provide feasible measures for their elimination, and if elimination is not feasible, propose mitigation measures to minimize risks and impacts, which should be implemented by the contractor.

3.2 COST CONTROL

a- Monitoring Contract Costs

The Consultant shall be responsible for monitoring of contract costs relative to budget. The consultant shall utilize a computerized Budget and Cost Forecast (BCF) system and shall prepare, with the Contractor, an estimate of the cost of the various contract items, and incorporate updated quantities, variation orders, day works, potential costs of claims, and projected expenditure from provisional sums. The estimated cash flow up to completion of the contracts

shall be prepared, updated based on the revised contract costs, and submitted each month in line with the management procedures.

b- Claims Management and Variation Orders

The Consultant shall anticipate potential claims and shall take steps to mitigate their effect. The Consultant shall assess the need for variations to the Contract and any claims submitted by the Contractor, review their merit and, where appropriate, prepare variation approval requests and submit them to the Employer for approval prior to preparing variation orders and issuing them to the Contractor.

c- Certify Contractors' Monthly Statements

The Consultant shall process in a timely manner and, as appropriate, certify for payment the Contractor's monthly interim statements to ensure that such statements reflect work completed.

The statements shall be based on measurements on site. The measurements on site shall be made jointly by the Contractor and the Consultant. The consultant shall prepare and submit to the Client the final cost for the measured completed works.

3.3 RECORD KEEPING

a- Preparation of Reports

The Consultant shall prepare all necessary reports for progress and record purposes. The preparation of these reports shall include, but not be limited to, the following activities:

- Prepare and agree with the Employer appropriate formats and review and approval of these formats, if required, as work proceeds;
- Collect and check daily and shift reports from the Contractor for labor (disaggregated by type of job, gender, location and nationality of worker) and equipment in anticipation of preparing weekly and monthly summary reports;
- Keep records of all measurements and agreements and incorporate measurement data in monthly progress reports and cost monitoring systems;
- Undertake the correct and timely distribution of all reports;
- Minutes of site and co-ordination meetings shall be distributed within the three days following the meeting;
- Monthly progress reports will be standardized as per the developed management procedure. The Consultant shall follow these standardized formats;
- The Consultant shall prepare and/or supervise the preparation of cost reports, progress reports, construction schedules, estimates of monthly cash requirements, Contractor's estimates for payments, and such other reports and data as may be desirable or as may be directed by the Employer. Monthly construction progress reporting will use the "Earned Value" technique requiring the provision of an activity completion report for each contract with an "S" curve, and a tabular cash flow report.

b- As-Built Drawings and Completion Report

The Consultant shall be responsible for ensuring that the Contractor maintains at the site a complete set of "as-built" drawings for the Contract as the work proceeds. To this end the Contractor shall:

- On a set of working drawings maintain a continuous reproducible "as-built" record of the actual alignments, levels, dimensions etc. to which the works have been constructed;
- On completion of the construction of each structure/section, transfer all recorded changes to a CAD file (original CAD files to be supplied by designer), or prepare new CAD drawings as required;
- Prepare completion reports for all major structures or elements of the contract works, incorporating as-built records and drawings, within 60 days of issue of any taking over

certificate. Completion reports shall also include details of construction methodology, test results, O&M recommendations etc.

- The Consultant shall audit on a monthly basis, and maintain audit records for review by the Client, the Contractor's performance in producing as-built details and completion reports.

c- Operating and Maintenance Manuals

The Consultant shall review detailed Operation and Maintenance Manuals prepared by the Contractor, finalize as appropriate and submit to the Employer.

The O&M manual shall include at least:

- Reference to all relevant design and other reports, specifications etc. in order to provide a complete bibliography on the structures and plant such that the operation and maintenance staff can understand the basis of their functions;
- Details of any problems encountered during construction which may have a bearing on the future safe operation and decommissioning of the facilities;
- Full operating instructions for all systems; drawings, diagrams, charts, notices etc. to facilitate understanding of safe operation and maintenance;
- A maintenance schedule and consumables required to give reliable operation of the facilities.

3.4 SUPERVISION OF CONTRACT WORKS

a- Project Manager Function

The Conditions of Contract for the construction contracts are based on WB Conditions of Contract and special conditions. The Consultant will be required to obtain specific approval of the Employer before taking certain actions.

b- Construction Works and Materials Inspections and Approvals

The Consultant shall supervise and inspect the construction works including, but not limited to, the following activities:

- Supervising and inspecting the works of the contractors and suppliers for completion of the contracts in accordance with plans and specifications;
- Monitoring environmental, social, and health and safety requirements, whether specified or not, and ensuring that requirements are fulfilled;
- Taking photographs during construction and installation and keeping a daily diary of construction activities;
- Supervising and approve all tests to be carried out by the Contractor and suppliers;
- Supervising and approve final evaluation of all measurements made by the Contractor including the provision of all necessary measurement instruments;
- Supervising the assembly, installation, preliminary tests, initial operation and preparation for commissioning of all machinery and equipment on site;
- Supervising through qualified inspectors jointly with the Employer the execution of the acceptance tests prior to convening the taking over committee and issuing the Taking Over Certificate;
- Preparing and submitting to the Employer inspection and test reports and certificates of acceptance;
- Supervising the commissioning of all structures and plant. The Consultant shall assist in the involvement of concerned operating staff, co-ordinate testing and commissioning programs and prepare taking over certificates;
- Administer day works as required;
- Follow up on the manufacturing of all equipment to ensure compliance with the specifications, including monitoring of certificates of origin, and supervise their delivery to ensure compliance with contractual time schedules;

- Follow up on packing, transportation and delivery, as well as temporary storage, and supervise the storage at site of all equipment, materials and supplies, together with ensuring that Letters of Credit are opened by the Contractor where appropriate;
- Promote a good working environment and monitor labor relations, living and community relations to be able to identify potential problems and solve them promptly as set forth in the various contracts.
- Enforce the maintenance and protection of traffic procedures and schemes as detailed in the drawings
- Enforce the contract's Safety, Health and Environmental Regulations.
- Ensure that the Contractor complies with the contract in respect of insurance.

2.5 DEFECTS LIABILITY PERIOD

The objective of the services during the defects liability period is to oversee the maintenance activities during one year, by drawing the attention of the contractor on any defect and by inspection the remedial works. For purposes of carrying out these services the Consultant shall assign his Resident Engineer to make two visits (one Man Month input for both visits) to carry out the following;

- Inspections of Outstanding works and Remedying Defects
- Prepare and issue Defects Liability Certificate
- Review and certify Final Payment Certificate
- Prepare Final Completion Report

F. REPORTING REQUIREMENTS FOR DELIVERABLES

The Consultant shall carry out all required inspections and studies for the successful implementation of the project and shall therefore submit a complete package of Plans, Specifications and Estimates (PS&E). The reporting language should be English.

The Consultant reporting requirements shall include but not limited to the following:

For Task 1: Engineering Studies and the preparation of Tender Documents.

- **Task 1.1- Data collection, topographic survey:**
  - Preliminary Assessment Report
  - Draft Environmental & Social Safeguard instrument reports
- **Task 1.2- Engineering Design: Detailed designs of Safawi New Proposed Transmission Pipeline Planning, Designs and Construction Supervision. The** Consultant shall carry out all required studies and designs for the successful implementation of the Safawi New Proposed Transmission Pipeline Planning, Designs and Construction Supervision and shall therefore submit a complete package of plans, specifications and estimates (PS&E).

- **Task 1.3 Environmental and Social Assessment**
  - Detailed E&S Screening Report/Form
  - Environmental & Social Safeguard instruments including the following
  - ESIA/ESMP, or preliminary ESIA/ESMP, or site specific ESMP, or site specific ESMP checklist
  - Sub-project Stakeholder Consultation and Coordination Plan
  - Sub-project-level Grievance Procedure
  - Additional provisional E&S instruments, as needed

- **Task 1.4 Preparation of Tender Documents:**
  - Final Engineering Report (4 copies)

- Design Calculation Notes
- Quantities Calculation Notes
- Confidential Fair Price Estimate
- Final Tender Documents (10 copies): using the World Bank Standard Procurement Document – Request for Bid; Small Works, March 2021
- Volume 1: Conditions of Contract
- Volume 2: Specifications
- Volume 3: Bill of Quantities
- Volume 4: Contract Drawings
- Final E&S instruments reports as defined under Task 1.3 (approved by the Client and cleared by the World Bank).
-

The Client shall first review and approve draft final documents submitted. Once these documents are approved, the Consultant shall submit the required number of copies of together with two soft copies on computer CD-ROM. The drawings shall be in AutoCAD version 2017 format or later and all text reports in MS Word and excel. Tender documents shall be submitted in editable format and in Adobe Acrobat PDF format.

For Task 2: Pre-construction services

After completion of the bid opening, the consultant shall prepare his bid evaluation report following the outline stated in the bidding document with sufficient details to determine the responsiveness of the bids and to evaluate and compare the financial bids of the responsive bids and provide price analysis of the lowest responsive bid. The consultant bid evaluation report shall be submitted in non-editable format and two (2) hard copies to the client.

For Task 3: Supervision of works.
Reporting for Construction Period Services

INCEPTION REPORT

The Consultant shall submit the Inception Report within four weeks of commencement of the works contract. This report shall include results of the review of the contractor's work program, the contractors E&S submittals, any modifications thereto, status of the contractor's mobilization, advance payment, Bank guarantees and any matter requiring the Employer's attention and action. This report shall be also being submitted in 5 copies.

MONTHLY PROGRESS REPORTS

The Consultant shall prepare monthly progress reports for the duration of the contract. These are to be submitted in 5 hard copies and 1 electronic editable version by email and should reach the Client not later than 10 days after the end of the month being reported on.

The format of the monthly progress reports shall be agreed with the Client. The report will include but not be limited to the following:

- useful information regarding the implementation of the contract allowing a technical and financial follow up of the project;
- recording of any agreed changes on the original envisaged technical solutions;
- major changes of quantities compared to contractual Bill of Quantities;
- suggestions for resolution of any technical and other problems (a separate section will be given to cover issues, problems and solutions) which occur and those affecting the progress of the work such as variation orders and claims of the contractors;
- financial status of both the construction and the supervision of the works;
- progress charts including percentages of completion of individual main work items and overall project/contract;

- weather information and charts; and,
- Construction and supervision data.
- Monitoring of E&S requirements which include, but are not limited to, assessment of the degree of compliance of the contractor to all Environmental and Social instruments but not limited to the Contractors' Environmental and Social Monitoring Plan (CESMP), Occupational Health and Safety (OHS), Traffic Management Plans (TMP), requirements of the archeological & Historical chance find procedure, The reporting shall cover implementation status of mitigation measures, results of environmental and social monitoring and evaluation, compliance with the environmental and social requirements including the Health and Safety measures, immediate reporting on any related incident/accidents. Corrective actions implemented, records of any archeological & Historical artifacts found during construction, etc. A section on the Consultant progressing of the activities, including schedule at the site to conduct monitoring and evaluating of the ES work, and the planned activities.

QUARTERLY PROGRESS REPORTS

The Consultant shall prepare quarterly monthly progress reports for the duration of the contract following the same format of the monthly progress report and summarizing the past 3 monthly progress reports. These are to be submitted in 5 hard copies and 1 electronic editable version by email and should reach the Client not later than 10 days after the end of the month being reported on.

FINAL REPORT

The Final Report in five (5) hard copies and 1 electronic editable version by email and should reach the Client no later than one month after the substantial completion of construction works. The report should enable the Client to know the type, quality and quantity of materials used and all information which together with the as-built drawings (original and 6 copies and 1 CD containing the as-built in electronic editable and non-editable format) and specifications will help in the maintenance of the works.

The report shall also include a summary of the principal difficulties encountered during construction and the means employed to overcome them, changes (if any) made in the original designs, modifications to specifications and conditions of contract, all variation orders, assessment of claims by the contractor, utilization of provisional and price variation and physical contingency sums, cumulative monthly payments to the Contractor, by date and number of payment certificate and break down into foreign and local currencies and including a similar payment schedule for supervision services in addition to overall assessment of the environmental and social requirements compliance. The details of the overall project costs (construction and supervision) with justification for any significant differences with the original shall be given in the final report.

Reporting for Defect Liability Period Services

Final Completion Report: Upon issuance of the defect's liability and the final payment certificates, the Consultant shall prepare within 30 days the Project Final Completion Report in five (5) hard copies and 1 electronic editable version by email and should reach the Client no later than one month after the end of Defect Liability Period. The report shall include a separate section on proposed future maintenance activities and related arrangements for the road sections supervised.

G. TEAM COMPOSITION & QUALIFICATION REQUIREMENTS FOR THE KEY EXPERTS

For Task 1:

The Consultant shall employ such staff as may be necessary to fulfill his obligations under the agreement. An assessment of the minimum staff required is set out here below. However, the Consultant shall make his own assessment of the staff necessary to fulfill his obligations. All such

staff are to be fluent in the written and spoken use of the English Language and shall also be fully computer literate.

The Consultant's key personnel proposed shall include but not necessarily limited to :

a) *Position K-1: [Team Leader]*
- The proposed Project Manager shall be a qualified civil engineer, shall have a university degree and shall have a minimum of 15 years of increasingly responsible experience, at least five of which in a similar management position on comparable projects, and shall have broad knowledge of infrastructure projects.
- Languages: English and Arabic.

b) *Position K-2 : [Hydraulic Modelling / Drainage Engineer]*
- A minimum of B.Sc. degree in Civil Engineering or Hydraulic Engineering, or related field, with at least 12 years' drainage design experience in water and waste water networks, road infrastructure design projects including hydrological analysis and experience in mitigation measures.
- Languages: English and Arabic.

c) *Position K-3[Environmental Specialist]*
- A minimum of B.Sc. degree in Engineering or Environmental Science, with minimum experience of at least 7 years in preparation of environmental and social safeguard instruments (ex. ESIA/ESMP's), and monitoring for relevant projects. Familiarity with environmental standards of international financial institutions (IFI) is a must while previous experience with preparing safeguard instruments according to World Bank safeguard policies is a plus.
- Languages: English and Arabic.

d) *Position K-4 [Social Specialist]*
- Advanced degree in social sciences, anthropology, sociology, or a related field, with minimum experience of at least 7 years. Experience in conducting social assessments, preferably in the context of water projects. Knowledge of and experience with the social and cultural context under the project area. Ability to identify and address risks and impacts on disadvantaged or vulnerable individuals or groups. Familiarity with environmental and social standards, such as those of the World Bank or similar institutions. Strong analytical skills to understand complex social issues and to develop appropriate mitigation measures. Experience in preparing and reviewing social impact assessments, social management plans, and resettlement action plans. Excellent communication and stakeholder engagement skills to work effectively with a wide range of stakeholders, including local communities, government officials, and non-governmental organizations.
- Languages: English and Arabic.

e) *Position K-5 : [Procurement and Contract Management Expert]*
- A minimum of B.Sc. degree in civil engineering (contract management): General professional experience: At least 10 years of relevant experience of tender documents preparation and contracts management. Experience in preparing tender documents using FIDICS or other IFI standard bidding documents is a must, knowledge with world Bank Standard Bidding Document is a plus.

- Languages: English and Arabic.

f) Position K-6: [Occupational Health & Safety Expert]

- A minimum of a graduate degree in related field with minimum proven experience of at least 10 years in monitoring Occupational Health & Safety relevant projects (water/sewer/road projects) including international experience. Experience should include workplace health and safety practices, strong knowledge of OSHA or similar regulations, analysis of potentially dangerous workplace practices/conditions and preparation/implementation of recommendations, incidents fact-finding and root cause analysis. Certification from an international body in OSHA or similar is a must.
- Languages: English and Arabic.

*g) Position K-7: [*Cost Estimator/Quantity Surveyor*]*

- Bachelor's degree in Quantity Surveying, Civil Engineering, , with at least 8 years of experience in cost estimation and the preparation of Bills of Quantities (BoQ) for infrastructure projects. Proficiency in cost estimation software and tools is required.
- Languages: English and Arabic

The CV's of all the positions mentioned above shall be submitted for conformity with qualifications. Evaluations will be conducted for the CVs of positions K1, K2, K4 and K6 only.

For Task 2:

[Procurement and Contract Management Expert]

- A minimum of B.Sc. degree in civil engineering (contract management): General professional experience: At least 10 years of relevant experience of tender documents preparation and contracts management. Experience in preparing tender documents using FIDICS or other IFI standard bidding documents is necessary; knowledge with World Bank Standard Bidding Document is a plus.
- Languages: English and Arabic.

For Task 3:

The Consultant shall employ such staff as may be necessary to fulfill his obligations under the agreement. An assessment of the minimum staff required is set out here below. However, the Consultant shall make his own assessment of the staff necessary to fulfill his obligations. All such staff are to be fluent in the written and spoken use of the English Language and shall be fully computer literate.

Office Backup Staff

The Consultant's key personnel proposed shall include but not necessarily limited to:

a) **Structural Engineer**

- A minimum of B.Sc. degree in Civil Engineering or Structural Engineering, with at least 15 years' experience in pre-stressed bridge design, retaining walls and culvert design. With experience in reinforced concrete bridge strengthening and maintenance.

- Languages: Arabic, English is a plus.

b) **Hydraulic Modeling / Drainage Engineer**

- A minimum of B.Sc. degree in Civil Engineering or Hydraulic Engineering, or related field, with at least 12 years' drainage design experience in water and waste water networks , road infrastructure design projects including hydrological analysis and experience in mitigation measures.
- Languages: Arabic, English is a plus.

c) **Traffic Safety Engineer**

- A minimum of B.Sc. degree in Civil Engineering, with at least 10 years' experience in traffic engineering to include junction and intersection design, traffic management, road safety measures, intersection channelization, signing and marking and preparation of maintenance and protection of traffic plans.
- Languages: Arabic, English is a plus.

d) **Procurement and Contract Management Expert**

- A minimum of B.Sc. degree in civil engineering (contract management): General professional experience: At least 10 years of relevant experience of tender documents preparation and contracts management. Experience in preparing tender documents using FIDICS or other IFI standard bidding documents is necessary; knowledge with World Bank Standard Bidding Document is a plus.
- Languages: English and Arabic.

The CV's of all the positions mentioned above shall be submitted for conformity with qualifications. No Evaluations will be conducted.

Construction Supervision Staff

The Consultant shall make his own assessment for the staff needed and their time participation for carrying out the work but this must comprise at least the minimum specified here. The Consultant shall also make his own assessment of the staff necessary to perform the supervision of the contractor during construction and the defects liability period. However, upon construction start-up the consultant shall seek client's approval on the Field staff in case of changes since proposal submission and their number.

No staff shall be mobilized until the Consultant has received formal written approval from the employer for each member of staff. Such approval shall be provisional. During the first three months of their duties, performance of each member of the Consultant's staff will be monitored. If the performance of a member of the Consultants' staff is deemed inadequate by the client, the Consultants shall provide a replacement.

An indicative list of Key (K) and Non-Key (NK) staff is presented below:

(i) Position K-1: One Resident Engineer (Full Time)

- A minimum of B.Sc. degree in Civil Engineering with He must have at least 15 years of experience out of which 10 years of experience as a Resident Engineer in infrastructure construction projects using FIDIC contract or equivalent. He shall be a Registered Engineer or equivalent membership (for local engineers) with extensive experience in infreastructure and contract administration. Duties include overall responsibility for

management of staff. Maintaining contact with Employer and Consultant's head office. Liaison with public authorities and general members of the public. Ensuring adequate supervision of works and maintaining control of programming, claims and variations. Issuing instructions to Contractor.

- Languages : English and Arabic.

(ii) Position K-2: One Sr. Site Engineer Road and Infrastructure (Full Time)

- A minimum of B.Sc. degree in Civil Engineering with 10 years of experience in similar works. Responsible for Supervision of site works, pipelaying , materials and workmanship. Maintaining records of the Contractor's activities, plant and labour. Maintaining records of complete works.
- Languages : English and Arabic.

(iii) Position K-3: One Traffic Safety Engineer (Half Time)

- A minimum of B.Sc. degree in Civil Engineering with 10 years of experience in similar works. The appointed Traffic Safety Specialist shall Review the traffic management plans and traffic diversions during construction and ensuring all temporary traffic diversions are maintained in a safe clean condition for the road users, monitor all temporary road networks on the construction site to ensure safe use, Including intersections, speed limits, visibility, signage, etc.
- Languages: English and Arabic.

(iv) Position K-4: One Environmental Specialist (Half Time)

- A minimum of B.Sc. degree in Engineering or Environmental a Science with minimum experience of at least 7 years in preparation of environmental and social safeguard instruments, and monitoring for relevant projects. Familiarity with environmental and social standards of international financial institutions (IFI) is a must while previous experience with preparing safeguard instruments according to World Bank Environmental and Social Framework is a plus.
  Languages: English and Arabic.

(v) Position K-5: One Social Specialist (Half Time)

- Advanced degree in social sciences, anthropology, sociology, or a related field, with minimum experience of at least 7 years. Experience in conducting social assessments, preferably in the context of water projects. Knowledge of and experience with the social and cultural context under the project area. Ability to identify and address risks and impacts on disadvantaged or vulnerable individuals or groups. Familiarity with environmental and social standards, such as those of the World Bank or similar institutions. Strong analytical skills to understand complex social issues and to develop appropriate mitigation measures. Experience in preparing and reviewing social impact assessments, social management plans, and resettlement action plans. Excellent communication and stakeholder engagement skills to work effectively with a wide range of stakeholders, including local communities, government officials, and non-governmental organizations.
- Languages: English and Arabic.

(vi) Position K-6: Occupational Health & Safety Expert (Full Time)

- A minimum of a graduate degree in related field with minimum proven experience of at least 10 years in monitoring Occupational Health & Safety relevant projects (water/sewer/road projects) including international experience. Experience should include workplace health and safety practices, strong knowledge of OSHA or similar regulations, analysis of potentially dangerous workplace practices/conditions and

preparation/implementation of recommendations, incidents fact finding and root cause analysis. Certification from an international body in OSHA or similar is a must.

- Languages: English and Arabic.

(vii) Position NK-1one Site Inspector (Full Time)

- At least seven (7) years experience works out of which at least five (5) years as Site Inspectors in similar infrastructure projects

(viii) Position NK-2: One Topographic Surveyor (Part-Time)

- Diploma in Land Surveying. 7 years of experience of similar works. Responsible for checking the Contractor's setting out, establishing control systems and temporary bench marks. Checking line and level of completed works.

(ix) Position NK-3: One Quantities surveyor (Part-Time)

- Deploma degree in civil engineering or land surveying with minmum of (7)years experience of similar projects
- The above staffing is an indication of the requirements, but the consulting firm has the ultimate responsibility to staff the supervision teams adequately to take full responsibility for quality of the works and timely implementation.

(X) Position NK-4: Coordination Officer (Full-Time)

The Coordination Officer will manage communication and coordination between the Client, Consultant, and Contractors, ensuring smooth project implementation. Responsibilities include monitoring progress, facilitating meetings, preparing reports, coordinating site activities, and addressing issues to maintain timelines. The candidate must hold a Bachelor's degree in a relevant field, have at least 5 years of experience in infrastructure projects, and be fluent in English and Arabic.

The CV's of all the positions mentioned above shall be submitted for conformity with qualifications. Evaluations will be conducted for the CVs of positions K1, K2, K3, K4, K5 and K6 only.

H. WORKING HOURS

During site construction and installation works the Consultant shall ensure that his staff are on site at all times when the Contractor is working.

I. CONSULTANT'S FACILITIES

During design phase Office accommodation of a reasonable standard and of approximately 10 square meters for each expert working on the contract and reasonably accessible by phone, fax and e-mail over the duration of the assignment is to be provided by the Consultant.
In principle, the costs of the facilities should be included the in the Consultant's experts fee rates. The Consultant must ensure that experts are adequately supported and equipped. In particular, the Consultant must ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support their work under the contract and to ensure that its employees are paid regularly and in a timely fashion.

J. DURATION AND PAYMENT SCHEDULE

Estimated duration of the services is 7 (Seven) months during design phase, 3 (Three) months for Pre-construction services and 12 (Twelve) Months for Construction and Supervision.
In view of the tasks to be achieved, it is anticipated that staff input will be 58 key-staff months, as well as 49 Non Key Staff months. As follows `

FOR TASK 1

The Consultant shall complete the services of Task 1 according to the following timetable:

Submittal		Duration
Task 1: Engineering Studies and the preparation of Tender Documents.		
Task 1.1- Data collection, topographic survey		+ND 4 Weeks
Task 1.2- Engineering Design: Detailed designs of networks		+ND 8 Weeks
Task 1.3 Draft ES Instruments in accordance with the ESS's relevant for the subproject: - Detailed E&S Screening Report / Form - E&S instruments, including one of the following: o ESIA/ESMP o Preliminary ESIA/ ESMP o Site specific ESMP - Site Specific ESMP Checklist: Sub-project Stakeholder Consultation and Coordination Plan - Sub-project-level Grievance Procedure a) Additional provisional instruments, as needed. . Based on the final ES screening, one or more of the above E&S instruments will be prepared. Furthermore, additional E&S instruments/mitigation measures would be requested and prepared based on the findings of the E&S screening and assessment.		+ND 18 Weeks*
Task 1.4 Preparation of Tender Documents and final E&S Instruments as prepared under task 1.3		+ND 24 Weeks

The duration includes preparing E&S instruments that meet the requirements of both World Bank requirements and national legislation. In addition, it includes the review periods by the Ministry of Environment to reflect their comments and feedback in the final English versions of the E&S instruments to be approved by the Bank.

Submittal	Payment Schedule
Task 1: Engineering Studies and the preparation of Tender Documents.	
Task 1.1- Data collection, topographic survey:	40% of the total Lump Sum amount of tasks 1.1 + 1.2 + 1.4 due upon submission
Task 1.2- Engineering Design: Detailed designs of networks and house connections	30% of the total Lump Sum amount of tasks 1.1 + 1.2 + 1.4 due upon Acceptance by Client
Task 1.3 Draft ES Instruments in accordance with the ESS's relevant for the subproject: - Finalized E&S Screening Report / Form - E&S instruments, including one of the following: o ESIA/ESMP o Preliminary ESIA/ ESMP o Site specific ESMP o Site Specific ESMP Checklist - Sub-project Stakeholder Consultation and Coordination Plan - Sub-project-level Grievance Procedure Additional provisional instruments, as needed Based on the final ES screening, one or more of the above E&S instruments will be prepared. Furthermore, additional E&S instruments/mitigation measures would be requested and prepared based on the findings of the E&S screening and assessment	100% of Lump Sum amount for instrument prepared a), b) or c) 100% of Lump Sum amount for instrument prepared d) due upon Acceptance by Client

Task 1.3 Preparation of Tender Documents and final E&S Instruments as prepared under task 1.3	30% of the total Lump Sum amount of tasks 1.1 + 1.2 + 1.4 due upon Acceptance by Client

FOR TASK 2:

Task 2: Pre-construction Services	
Assistance during tendering and preparation of bid evaluation report	12 Weeks

Submittal	**Payment Schedule**
Task 2: Pre-construction Services	
Assistance during tendering and preparation of bid evaluation report	100% of the total Lump Sum amount of task 2

FOR TASK 3:

The Consultant shall quote the cost of his staff, technical, equipment and other costs as he deems to be required. He shall summarize his monthly costs and accompany the same with a schedule showing the involvement of project staff.

Staff Remuneration

Staff remuneration covering the monthly remuneration rates for each local and expatriate personnel.

Staffing (Task 3)	**Input in staff-months**
Key Staff	
K-1 Resident Engineer	12 staff-months + 1 staff-month during DLP
K-2 Sr. Site Engineer	12staff-months
K-3 Traffic safety Engineer	6 staff-months + 1 staff-month during DLP
K-4 Environmental Expert	6 staff-months + 1 staff-month during DNP
K-5: One Social Specialist	6 staff-months + 1 staff-month during DNP
K-6 Occupational Health & Safety Expert	12 staff months
Total	**58 staff-month**
Non-Key Staff	
Site Inspectors	12staff-months+ 1 staff-month during DLP;
One Topographic Surveyor	15 staff-months +1 staff-month during DLP;
Quantity Surveyor Engineer	8 staff-months
Coordination Officer	12staff-months
Total	**49 staff-month**

The Consultant is required to review and adapt and rationalize the outlined staff input in his proposal, such that there will be as much continuity of employment as is practicable in the teams it proposes to assign. The Consultant should consider the prospective peaks of construction activity and ensure the

adequacy of staffing levels during such periods, and, at the same time, periods with low productivity levels should not be un-economically over-staffed. The objective is that the Consultant should propose to assign team that will be best suited to the methodology of its supervision and management systems. The Consultant should also consider the added value that will be provided by its organization.

Depending on the works currently in progress, details of staffing levels will be agreed through the course of the assignment with the Client.

It should be noted that the Consultant shall work according to the contractor's work schedule, which may include work during 7 (seven) days a week

Appendix 1. General description of the construction project and area

The "Design and Supervision of Transmission Pipeline from Al-Bashri to Safawi" project involves the installation of a new 32-kilometer water transmission pipeline with a 150-mm diameter. Located in the Mafraq Governorate of Northern Badia, Jordan, the project addresses a critical need to enhance water supply reliability and efficiency in this arid region.

The Northern Badia, which encompasses about 11,210 square kilometers and represents 35.7% of Jordan's Badia area, is characterized by dry desert conditions, including expansive plains and gentle, low-lying hills at approximately 440 meters above sea level. The area has minimal annual rainfall, usually below 200 mm, and experiences significant temperature fluctuations. Despite these environmental challenges, the region has development potential, particularly in resource management and agriculture, which can contribute to the local socioeconomic growth.

The project's site lies along a strategic highway connecting Amman to Baghdad, making it a vital location for infrastructure that supports not only local communities but also regional transit and logistics. Safawi, a key community in this project, is located around 114 kilometers from Amman.

The pipeline replacement is part of a broader effort to optimize water resources based on recommendations from a comprehensive Master Plan. The decision to reduce the pipeline diameter from the current 400 mm to 150 mm is a calculated measure aimed at improving efficiency by adjusting the pipeline's capacity to match actual demand and minimizing water loss.

Through this new pipeline, the project aims to provide a more reliable, sustainable, and efficient water transmission network that aligns with the region's needs. The project also includes the supervision of construction, ensuring that all work complies with design standards and environmental safeguards to support long-term water management in Northern Badia.

Appendix 2. List of available documentation (design and studies) (Master plan for North – conducted by Orient Consultant –under final stage)

As of the present moment, Orient Consultant is actively engaged in conducting the Master Plan for North. While the study is nearing its final stage estimated to be submitted end of JAN-2024 and the documents will be provided to consultant

Appendix 3. Initial Environmental and Social Screening for the Sub-project

ES Annex 1-B: Preliminary Environmental and Social Screening Form

The Screening Form is gives the PIUS opportunity to ensure sub-project are not excluded, and identify the main risks that can be identified with the available information at the time of drafting Consultants ToR.

Subproject Name	**SAFAWI New Proposed Transmission Pipeline Planning, Designs and Construction Supervision**
Subproject Location	Mafraq - North Badia
Estimated Cost	
Date of screening	

SECTION 1: Exclusion list:

The first step in addressing a subproject's environmental and social risks and impacts is to check the project against the Project's Exclusion List as per the ESMF :

Exclusion List	Yes	No
a. Sub-projects that with high ES risk classification as per the World Bank ESF:		NO
b. The Sub-project is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature of the Project, the scale (large to very large) or the sensitivity of the location(s) of the Project. This would take into account whether the potential risks and impacts associated with the Project have the majority or all of the following characteristics: (i) long term, permanent and/or irreversible (e.g., loss of major natural habitat or conversion of wetland), and impossible to avoid entirely due to the nature of the Project; (ii) high in magnitude and/or in spatial extent (the geographical area or size of the population likely to be affected is large to very large); (iii) significant adverse cumulative impacts; (iv) significant adverse transboundary impacts; and (v) a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.);		No No

c. The area likely to be affected is of high value and sensitivity, for example sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), lands or rights of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and other vulnerable minorities, intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas.		No
d. Some of the significant adverse ES risk and impacts of the Project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.		
e. There are significant concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security. Sub-projects with excavation activities at areas known with water networks containing ACM pipes		No No
f. Sub-projects include activities within or affecting protected areas this includes (a) sites of the Alliance for Zero Extinction (AZE), (b) natural and mixed sites on the UNESCO World Heritage List and (c) legally protected areas (IUCN categories) and, (ii) Any operation leading to an adverse and irreversible residual impact on a critical habitat; (iii) Any forest project or agricultural project with broad coverage (>100 ha) that does not implement a methodology ensuring zero-deforestation.		No No
g. Sub-projects that will cause adverse significant degradation or pollution of the water resources.		
h. Sub-projects that have a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.)		No
i. Sub-projects that include any removal or impact on archaeological remains or cultural heritage sites		

Recommendations:

If the answer to any of the questions above is yes, the subproject should be excluded from financing.

If all the answers are no, proceed with the subproject Environmental and Social Screening below and list the appropriate E&S mitigation measures/ instruments.

National permitting requirements:

An environmental application must be submitted to the Ministry of Environment during the design stage to classify the subproject in accordance with Environmental Classification and Licensing Regulation No. 69 of 2020. The Consultant is responsible for obtaining the necessary environmental permit/clearance for the subproject and for preparing the Environmental and Social (ES) assessment reports as required by the Ministry.

SECTION 2: ENVIRONMENTAL AND SOCIAL SCREENING

Question	**Construction**			**Relevant ESS**	**E&S Due Diligence (instruments)**
	Yes	**No**	**TBD**		
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of existing infrastructure?	Yes			ESS1/ESS2/ ESS3/ ESS4/ESS4/ESS5/ ESS6/ESS8/ESS10	The more stringent ES assessment requirements among the World Bank and the Ministry of Environment (MoEnv.) requirements, which may include: preliminary ESIA/ESMP, or full-fledged ESIA/ESMP, or IEE/ESMP, or detailed ESMP. Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan OHS Plan, WMP, TMP, Archaeological Chance Find Procedures during

					the construction satge
Does the project pass through or nearby sensitive areas (natural, water, archaeological)		No		ESS1/ESS2/ ESS3/ ESS4/ESS4/ ESS5 ESS6/ESS8/ESS10	Risks to be verified by the Consultant during the design stage, adequate measure to be included in the more stringent ES assessment requirements among the World Bank and the Ministry of Environment (MoEnv.) requirements. The Consultant will engage with local community members during the design stage to gather feedback on the subproject and address their concerns. The Contractor shall develop and implement specific community health and safety procedures
Would the project be implemented in area with public facilities nearby (schools, hospital, mosques, city centers, etc)	YES			ESS1/ESS2/ ESS3/ ESS4/ESS4/ ESS5 ESS6/ESS8/ESS10	Risks to be evaluated by the Consultant during the design stage, adequate measure to be included in the more stringent ES assessment requirements among the World Bank and the Ministry of Environment

					(MoEnv.) requirements. Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan. OHS Plan, WMP, TMP during the construction satge
Does the subproject involve the recruitment of workers including direct, contracted, primary supply, and/or community workers?	**Yes**			ESS1, ESS2, ESS10	Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan Project's Labor Management Procedure (LMP), which includes a Grievance Mechanism (GM) for workers. OHS Plan, Code of Conduct for workers, Project GM (including SEA/SH during the construction satge
Has the subproject included a review of applicable labour national requirements?	**Yes**			ESS1, ESS2, ESS10	Project SEP including community Grievance Mechanism Subproject-specific

					Community Consultation plan Project's Labor Management Procedure (LMP), which includes a Grievance Mechanism (GM) for workers. OHS Plan, WMP, TMP Code of Conduct for workers, Project GM (including SEA/SH during the construction satge
Will the activity require a larger contractor workforce?		**No**		ESS1, ESS2, ESS10	Associated risks to be verified and evaluated by the Consultant during the design stage. Adequate mitigation measures to be included in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements. Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan Project's Labor Management Procedure (LMP), which includes a

					Grievance Mechanism (GM) for workers. Code of Conduct for workers, Project GM (including SEA/SH during the construction satge
Does the subproject have appropriate OHS procedures in place, road safety measures and an adequate supply of PPE (where necessary)?	**Yes**			ESS1, ESS2, ESS4,ESS10	Site specific associated risks to be determined and evaluated by the Consultant during the design stage. Site specific mitigation measures to be included in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements OHS Plan and TMP during the construction satge
Does the subproject include a risk of child and/or forced labour?		No		ESS1, ESS2, ESS4/ESS10	Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan Project LMP including GM for workers and Code of Conduct for wokrers

Is there any other security risk to project workers triggered by project activities?		**No**		ESS1, ESS2,ESS4, ESS10	Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan Project LMP including GM for workers and Code of Conduct for wokrers
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?		**No**		ESS1, ESS2, ESS4, ESS10	Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan Project LMP including GM for workers and Code of Conduct for wokrers
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant?		No		ESS, ESS3, ESS6	WMP during the construction stage
Does the subproject have an adequate system in place (capacity, processes and management) to address waste (hazardous and non hazardous)?	**Yes**			ESS1, ESS3	Associated risks to be evaluated by the Consultant during the design stage. Adeqaute mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment

					(MoEnv.) requirements. WMP during the cosntrauciton stage
Would the potential outcomes of the project be sensitive or vulnerable to potential impacts of climate change?		**No**		ESS1, ESS3	Associated risks to be verified and evaluated by the Consultant during the design stage. Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements
Will the subproject result in the release of pollutants to air during construction and operation (including nuisances)?	**Yes**			ESS1, ESS3	The more stringent ES assessment requirements among the World Bank and the Ministry of Environment (MoEnv.) requirements, which may include: preliminary ESIA/ESMP, or full-fledged ESIA/ESMP, or IEE/ESMP, or detailed ESMP
Will the subproject result in the release of pollutants (solid and/or liquid) construction and operation to land and environment and natural resources?		**No**		ESS1, ESS3	The more stringent ES assessment requirements among the World Bank and the Ministry of Environment (MoEnv.) requirements, which may include: preliminary ESIA/ESMP, or full-fledged ESIA/ESMP, or IEE/ESMP, or

					detailed ESMP: WMP during the construction stage.
Is the subproject expected to be associated with generation of Hazardous waste during construction and operation?		**No**		ESS1, ESS3	Associated risks to be verified and evaluated by the Consultant during the design stage. Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements. WMP during the construction stage
Is the subproject expected to be associated with generation of substantial quantities of construction/demolition waste?		**No**		ESS1, ESS3	Associated risks to be verified and evaluated by the Consultant during the design stage. Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements. WMP during the construction stage
Is the subproject expected to generate dust/noise/excessive exhaust emissions?	**Yes**			ESS1, ESS3	The more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements

Will the project will result in increasing the use or depletion of resources?		**No**		ESS1, ESS3, ESS6	Associated risks to be verified and evaluated by the Consultant during the design stage. Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements.
Will the project result in increasing the use the shared water resources?		No		ESS1, ESS3	Associated risks to be verified and evaluated by the Consultant during the design stage. Adeqaute mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements.
Is there a risk that the selection of the activity location or beneficiaries will lead to community tensions or conflict, including discrimination?		**No**		ESS1, ESS4, ESS10	Associated risks to be verified and evaluated by the Consultant during the design stage. Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment

					(MoEnv.) requirements. project SEP, GM Subproject-specific Community Consultation plan
Can the activity contribute to the spread of disease (e.g., health facilities)?		**No**		ESS1, ESS3, ESS4	
Is there any other security risk to the community triggered by project activities, including exposure to road accidents and incidents caused by project workers?		**No**		ESS1, ESS4	Associated risks to be verified and evaluated by the Consultant during the design stage. Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan OHS Plan and TMP during the construction stage
Could the project expose more people to natural hazards or make some people more vulnerable to natural hazards?		**No**		ESS1, ESS3, ESS4	

Will the Project require land acquisition, resettlement?		**No**		ESS1, ESS5	Associated risks to be verified and evaluated by the Consultant during the design stage if risks identified, RAP/LRP
Will the project require physical displacement (relocation , loss of residential land or loss of shelter)		**No**		ESS1, ESS5	Associated risks to be verified and evaluated by the Consultant during the design stage if risks identified, RAP/LRP
Will the project cause impacts on livelihood that cause loss of income of the affected persons (including commercial tenants, or assets temporarily or permanently loss of crops, fruits, trees …etc.),		**No**		ESS1, ESS5	Associated risks to be verified and evaluated by the Consultant during the design stage. if risks identified, RAP/LRP
Will the subproject implementation affects assets or access to assets such as access of individuals to their houses and owners / customers to business shops or access to to natural or community resources (e.g. pasture, fishing locations, forests, water sources, places of worship, or public spaces)		**No**		ESS5	Associated risks to be verified and evaluated by the Consultant during the design stage. if risks identified, RAP/LRP
Are there any squatters or encroachers on the site?		**No**		ESS5	Associated risks to be verified and evaluated by the Consultant during the design stage. if risks identified, RAP/LRP

Is the project located within or nearby an area that is legally protected, designated for protection, or regionally or internationally recognized as an area of high biodiversity value?		**No**		ESS6	Associated risks to be evaluated by the Consultant during the design stage. if any risks idnetifed, Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements .
Will subproject activities have adverse impact on sensitive or protected areas?		**No**		ESS6	Associated risks to be evaluated by the Consultant during the design stage. if any risks idnetifed, Adeqaute mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements .
Will project activities have any adverse impacts or risks to any category of habitats defined under the standard: - Modified habitat : biodiversity effect is negligiable - Natural Habitat : biodiversity effect is natural - Critical Habitat biodiversity effect is critical due to extinction thratened species.		**No**		ESS6	Associated risks to be evaluated by the Consultant during the design stage. if any risks idnetifed, Adequate mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment

					(MoEnv.) requirements .
Will the subproject be located or close to a site of cultural value or social heritage of local communities?		No		ESS8	Associated risks to be evaluated by the Consultant during the design stage. if any risks idnetifed, Adeqaute mitigation measures in the more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements .
Does the sub-project have a plan to incorporate measures to allow meaningful, effective and informed consultation of stakeholders, such as community engagement activities; particularly in a way that informs project design and identification of environmental and social mitigation measures?	**Yes**			ESS10	Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan
Does the sub-project have a plan to coordinate with government agencies and municipalities and utilities about the design, construction and operation as relevant?	**Yes**			ESS10	Project SEP including community Grievance Mechanism Subproject-specific Community Consultation plan
Has there been previous cases of exclusion of persons with disabilities or other marginalized related to the project's implementation? Groups (women, children, ethnic minorities, elderly) in the area?		**No**		ESS10	Project SEP including community Grievance Mechanism
Does the sub-project have a plan to disclose and disseminate information to stakeholders in an	**Yes**			ESS10	Subproject-specific Community Consultation plan

accessible, understandable and culturally appropriate format?					
Does the sub-project have a plan to consult with women and women's groups to ensure they can anticipate in decision-making processes regarding the activity and to understand safety and security risks including SEA/SH?	**Yes**			ESS10	Project SEP including community Grievance Mechanism
Is there a risk that exclusion of beneficiaries will lead to grievances?		**No**		ESS10	Project SEP including community Grievance Mechanism
Does the subproject have a GM in place, to which community and stakeholders have access, designed to respond quickly and effectively and transparently?	**Yes**			ESS10	Subproject-specific Community Consultation plan

Conclusions of the screening: (Fill the below table responding to the below questions)

1. Indicate the proposed environmental and social risk ratings (Substantial, Moderate or Low), and provide justifications. For risks that are known in terms of (spatial influence, duration, intensity of risk, probability and significance) assess the risk rating based on the methodology in the comprehensive ES screening template.

2. Indicate the proposed environmental and social risk management requirements (responsibilities: PIU or contractor).

ESS	Risk rating (if identified)	Plans/measures
ESS1	Moderate	The more stringent ES assessment instrument among the World Bank and the Ministry of Environment (MoEnv.) requirements, which may include: preliminary ESIA/ESMP, or full-fledged ESIA/ESMP, or

		IEE/ESMP, or detailed ESMP
ESS2	Moderate	Project's Labor Management Procedure (LMP), which includes a Grievance Mechanism (GM) for workers. Conduct of Conduct for workers.
ESS3	Low to moderate	The Subproject ES assessment instrument shall include adequate measures covering the air emission, noise, and generated waste impacts. The Consultant shall assess further the associated impacts and provide proper mitigation measures under the subproject ES assessment instrument
ESS4	Moderate	The ES assessment instrument includes adequate mitigation measures to address anticipated risks on local communities. The Consultant will further assess and provide proper mitigation measures under the subproject ES assessment instrument. Site-specific Community Consultation and Coordination plan The Contractor shall develop and implement specific community health and safety procedures.
ESS5	TBD	The Consultant shall further assess the subproject activities and

		targeted areas where construction activities will take place to identify any risks associated with the subproject, including land ownership issues and impacts on assets and livelihoods, in accordance with WB ESS5 requirements. The Consultant shall develop a Resettlement Action Plan and/or Livelihood Restoration Plan as required by WB ESS5 and national legislation to mitigate any identified risks..
ESS6	TBD	The Consultant shall assess and verify that these areas have no vegetation cover or wildlife habitats and confirm that no risks to biodiversity conservation or natural resources are anticipated. If any risks are identified, the Consultant will include appropriate mitigation measures in the subproject ES assessment instrument.
ESS8	TBD	Chance find procedures should be applied during the subproject implementation. Also, the Consultant shall further assess the project activities and the targeted areas where construction activities will occur to identify any risks related to cultural values or social heritage. If any risks are identified, the Consultant will include appropriate mitigation measures in the subproject ES assessment instrument.
ESS10	moderate	Project SEP including community Grievance Mechanism

		Subproject-specific Community Consultation plan Incident Reporting according to the ESCP requirements
Overall Risk rating	**Moderate**	

Observations/Comments	
Signature of responsible ESS Specialist	
Approved by management Dep Rep/Section Chief	

Appendix 3. Annex 1-C finalEnvironmental and Social Screening template for the Sub-project

SECTION 1: ACTIVITY OUTLINE

Component	
Sub-Project Name	
Location Governorate/City	
Implementing Agency	
Activities by the Sub-Project	
Expected Start Date and Expected Duration of Sub-Project Implementation Phase	
Environmental / Social Specialist:	

SECTION 2: SCREENING PROCESS

Objective of the Screening Process	
ESMF Risk Classification and Sub-Project Applicable ESSs per the ESMF	
Date and Day of Screening	
Description of Screened Site Location	
Coordinates of Site Location/s	“

SECTION 3: PROJECT & ACTIVITY DESCRIPTION

Sub-Project Brief	
Activity Description	.

SECTION 4: SUBPROJECT ELEGIBILITY SCREENING

Exclusion List	Yes	
• Sub-projects with high ES risks according to Environmental Classification and Licensing System No. 69 of 2020 • Sub-projects that with high ES risk classification as per the World Bank ESF: • The Sub-project is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature of the Project, the scale (large to very large) or the sensitivity of the location(s) of the Project. This would take into account whether the potential risks and impacts associated with the Project have the majority or all of the following characteristics: (i) long term, permanent and/or irreversible (e.g., loss of major natural habitat or conversion of wetland), and impossible to avoid entirely due to the nature of the Project; (ii) high in magnitude and/or in spatial extent (the geographical area or size of the population likely to be affected is large to very large); (iii) significant adverse cumulative impacts; (iv) significant adverse transboundary impacts; and (v) a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.); • The area likely to be affected is of high value and sensitivity, for example sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), lands or		

rights of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and other vulnerable minorities, intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas. • Some of the significant adverse ES risk and impacts of the Project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.		

• d. There are significant concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security. Sub-projects with excavation activities at areas known with water networks containing ACM pipes • Sub-projects include activities within or affecting protected areas this includes (a) sites of the Alliance for Zero Extinction (AZE), (b) natural and mixed sites on the UNESCO World Heritage List and (c) legally protected areas (IUCN categories) and, (ii) Any operation leading to an adverse and irreversible residual impact on a critical habitat; (iii) Any forest project or agricultural project with broad coverage (>100 ha) that does not implement a methodology ensuring zero-deforestation. • Sub-projects that will cause adverse significant degradation or pollution of the water resources. • Sub-projects that have a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.) • Sub-projects that include any removal or impact on archaeological remains or cultural heritage sites		

Recommendations:

If the answer to any of the questions above is yes, the subproject should be excluded from financing.

If all the answers are no, proceed with the subproject Environmental and Social Screening below and list the appropriate E&S mitigation measures/ instruments.

SECTION 5: RATING CRITERIA TO ASSESS RISKS OF SUBPROJECT

Parameter	Evaluation Description	Rating

Spatial Influence	Within the project site	**Low (1)**
	Impact beyond site boundary; Local	**Medium (2)**
	Widespread impact beyond site boundary; Local	**Substantial (3)**
	Impact widespread far beyond site boundary; Regional/national	**High (4)**
Duration	Quickly reversible, less than project life, short term (0- 2 years)	**Low (1)**
	Reversible overtime; medium term to life of project (2-4years)	**Medium (2)**
	Of difficult reversibility overtime; medium term to life of project (4-6years)	**Substantial (3)**
	Beyond closure; permanent; irreplaceable or irretrievable commitment of resources	**High (4)**
Intensity	Minor deterioration, nuisance or irritation, minor change in species/habitat/diversity or resource or very little quality deterioration; very little improvement	**Low (1)**
	Moderate deterioration, discomfort. Partial loss of habitat biodiversity/resource or slight or alternation, moderate improvement.	**Medium (2)**
	Alteration or disturbance is significant	**Substantial (3)**
	Habitat/diversity or resource, severe alteration or disturbance important processes; severe improvement	**High (4)**
Probability	Unlikely, low likelihood, No known risk or vulnerability to natural or induced hazards. Unlikely, low likelihood, Seldom, No known risk or vulnerability	**Low (1)**

	to natural or induced hazards.	
	Possible, distinct possibility, frequent Low to medium risk or vulnerability to natural or induced hazards.	**Medium (2)**
	Possible, distinct possibility, frequent substantial risk or vulnerability to natural or induced hazards.	**Substantial (3)**
	Definite (regardless of prevention measures), highly likely, continuous high risk or vulnerability to natural or induced hazards.	**High (4)**
Significance	Deduced from the summation of the ratings with the range defined as follows:	

	Below 4 **low Risk**, (Risk is acceptable and can be managed easily by the IA & Contractor) 4-7 Low to moderate, (Risk can be managed, but need mitigation based on ESMP checklist) 7-9 Moderate Risk, (Risk can be managed, but need further management (mitigation measures and monitoring plan and other ESHS plans proportionate to the risk) 10-12 **Substantial Risk**, (risk can be managed, but need further detailed and comprehensive management of proposed mitigation measures, monitoring plans and other ESHS plans. 13-16 **High Risk,** (screened of high, irreversible risk as identified in the Project exclusion criteria, and will be excluded at the pre-screening stage)

Below is a guidance to determine what action would be taken before proceeding to the next step based on the risks classification results?

Low Risk	These types of subprojects would be labeled as '**activities of low environmental and social risk.** Those activities will require no further action needed to proceed with the sub-project implementation.
Low to Moderate Risk	These types of subprojects would be labeled as 'activities of low to moderate environmental and social risk. In this case, incorporate potential mitigation measures into the design of the subprojects would be integrated and Environmental and Social Checklist would be prepared based on the ESMP checklists at annex 5.
Moderate Risk	These types of subprojects would be labeled as '**activities of moderate environmental and social risk.** In this case, incorporate potential mitigation measures into the

	design of the subprojects would be integrated and site-specific ESMP would be prepared based on the ESMP samples provided at ESMF.
Substantial Risk	These types of subprojects would be labeled as '**activities of substantial environmental and social risk.** In this case, site-specific ESMP/ESIA would be prepared.
High Risk (Exclusion)	The activities screened to fall under the exclusion criteria will be excluded.

SECTION 6: ENVIRONMENTAL AND SOCIAL SCREENING

Recreate the table below for both ***(i) construction (ii) operation phases.***

POTENTIAL ENVIRONMENTAL / SOCIAL RISKS	Yes	No		Recommended Mitigation Measures
ESS1: Assessment and Management of Environmental and Social Risks and Impacts				
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation environmental risks and impacts they are mostly temporary,? predictable and/or reversible?				
Are there any anticipated potential impacts and risks to the physical environment, including water resources, natural habitat, atmospheric emissions, noise, solid waste, or ecological degradation?				
Is there likelihood that the activities would have inequitable or discriminatory adverse impacts on affected communities? Or to exclude individuals or groups? Including vulnerable and marginalized groups?				
Does the subproject management have the institutional environmental and social capacity to manage and implement the E&S risks and mitigation measures?				
ESS2: Labor Rights and Working Conditions				
Does the subproject involve recruitment of workers including direct, contracted, primary supply, and/or community workers?				
Does the subproject have potential GBV/SEA/SH risks? Are the financed activities expected to be sensitive to such risks?				

Is there a risk that any employment resulting from the execution of subproject activities will be biased towards marginalized and vulnerable groups (e.g., women, people withdisability)				

POTENTIAL ENVIRONMENTAL / SOCIAL RISKS	Yes	No		Recommended Mitigation Measures
Is there a risk of unfair recruitment process if subproject activities will require recruitment activities?				
ESS3: Resource Efficiency and Pollution Prevention and Management				
Will the subproject result in the release of pollutants to air during construction and operation (including nuisances)?				
Will the subproject result in the release of pollutants (solid and/or? liquid) construction and operation to land and environment and natural resources?				
Is the subproject expected to be associated with generation of? Hazardous waste during construction and operation?				
Is the subproject expected to be associated with generation of? substantial quantities of construction/demolition waste?				
Is the subproject expected to generate dust/noise/excessive? exhaust emissions?				
Will the project will result in increasing the use or depletion of resources?				
Will the project result in increasing the use the shared water? resources?				
ESS4: Community Health and Safety				
Is the design of subproject may potential risks during construction and operation on				

closest sensitive receptors or nearby communities				
Does the sub-project include structural elements? If yes, do they incorporate ESHGs and other good international industry practice? Do they take into account climate change considerations as appropriate?				
Is implementation of subproject would impact other utilities services provide for the community i.e. electricity and communication.				

POTENTIAL ENVIRONMENTAL / SOCIAL RISKS	Yes	No		Recommended Mitigation Measures
Is subproject implementation potential traffic and road safety? risks to affected communities and road users throughout the project life cycle				
Are the construction and operational equipment and machineries would affect public roads and other public services.				
Are subprojects activities during construction and operation affect ecosystem service that may result with health and safety impacts on affected communities.				
Does implementation of subproject would expose community to health risks with water-born, water related, communicable and non-communicable diseases during construction and operation, particularly for vulnerable groups				
Is subproject implementation will expose community to hazardous materials that would be released during construction and operation				
Would subproject implementation generate emergency events i.e. Fire, spills, etc. that could impact health and safety of the public.				

Are subproject activities expected to include measures to facilitate the access of vulnerable or disadvantaged persons to the benefits of the project				
Do subproject activities carry any high or substantial risks of causing incidents to the population and neighboring communities? Is there a risk of increasing the probability				
creating GBV potential impacts due to the execution of financed activities:				
Will the sub-project result in labor influx				

POTENTIAL ENVIRONMENTAL / SOCIAL RISKS	**Yes**	**No**		**Recommended Mitigation Measures**
• Is the sub-project being implemented in rural, peri- urban, or urban areas?				
• Will the sub-project be in hard to supervise areas				
• Will the sub-project construction near school route or other pedestrian access that women and girls use for their daily activities				
Does the subproject have the potential to upset community? dynamics? (Impacts on community culture, and values)				
Will subproject activities present hazards to community members on the sub-project site? Also consider risks and accessibility for people with disabilities applying the principle of universal access where technically and financially feasible				
Will the subproject activities pose traffic and road safety hazards?				
Will the technical assistance studies (Feasibility studies/design) include rehabilitation of dams?				
ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement				
Will the project cause impacts on livelihood that cause loss of income of the				

affected persons (including commercial? tenants, or assets temporarily or permanently loss of crops, fruits, trees …etc.),				
Will the subproject implementation affects assets or access to assets such as access of individuals to their houses and owners / customers to business shops or access to natural				

POTENTIAL ENVIRONMENTAL / SOCIAL RISKS	**Yes**	**No**		**Recommended Mitigation Measures**
or community resources (e.g. pasture, fishing locations, forests, water sources, places of worship, or public spaces)				
Are there any squatters or encroachers on the site?				
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources				
Is the project located within or nearby an area that is legally protected, designated for protection, or regionally or internationally recognized as an area of high biodiversity value?				
Will subproject activities have adverse impact on sensitive or protected areas?				
Will project activities have any adverse impacts or risks to any category of habitats defined under the standard: • Modified habitat • Natural Habitat • Critical Habitat				
ESS8: Cultural Heritage				
Will the subproject be located or close to a site of cultural value or social heritage of local communities?				
ESS10: Stakeholder Engagement and Information Disclosure				
Does the sub-project have a plan to to incorporate measures to allow meaningful, effective and informed consultation of stakeholders, such as community				

engagement activities; particularly in a way that informs project design and identification of environmental and social mitigation measures?				
Does the sub-project have a plan to coordinate with government agencies and municipalities and utilities about the design, construction and operation as relevant?				
Has there been previous cases of exclusion of persons with				

POTENTIAL ENVIRONMENTAL / SOCIAL RISKS	Yes	No		Recommended Mitigation Measures
disabilities or other marginalized related to the project's implementation? Groups (women, children, ethnic minorities, elderly) in the area?				
Does the sub-project have a plan to disclose and disseminate information to stakeholders in an accessible, understandable and culturally appropriate format				
Does the sub-project have a plan to consult with omen and women's groups to ensure they can anticipate in decision- making processes regarding the activity and to understand safety and security risks including SEA/SH?				
Is there a risk that exclusion of beneficiaries will lead to grievances?				
Does the subproject have a GM in place, to which community and stakeholders have access, designed to respond quickly and effectively and transparently?				

SECTION 7: SUMMARY OF THE SCREENING PROCESS

	E&S Screening	Results and Recommendations		
	Relevant ESSs for this subproject	List ESSs		
Phase (Construction/Operations)	Summary of Critical Risks and Impacts identified	Risk / Impact	Individual Risk/ Impact Rating (low, moderate, substantial, High)	Summary of Mitigation Measures
Construction				
	1.			

Additional Assessment Requirements	
Screening Result	
Is this activity excluded under the Project	
Required Mitigation Measures	1.

List of management plans and E&S instruments: _____

E&S Specialist Conducted the Screening: _____

Signature: Yarmouk Water Company_____Date: ___/____/_____

Subproject Manager: _____

Signature: _____Date: ___/____/_____