

Implementation Concept

RO System Jubail - Fallujah

GIZ – ARILA Construction Component

Project Sector:	Construction and Infrastructure
Title of Project:	Rehabilitation of RO System Jubail Fallujah
Executing Entity:	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Project Number:	21.1811.5-002.00
Funding Recipient:	Fallujah District Government - Anbar
Estimated Project Cost:	USD xxx.xxx, -
Estimated Construction Completion Date:	January 2024

A. Project Background and Context:

Part of the ARILA project (Assisting Reconstruction and Improving Living Conditions in Anbar) is the possible improving of infrastructure in the project area. This is part of the construction component and will be executed by them. The identification of possible projects will be done by cooperating organizations like Mercy Corps and NRC. Through them the project received several possible projects which could be implemented by ARILA.

The Rehabilitation of RO System Jubail Fallujah will be one of the projects which is then described in this document.

B. Project Objectives:

- i. Improving infrastructure conditions in Anbar.
- ii. Support the regional Government in Anbar through infrastructure projects.
- iii. Improving living conditions in Anbar.

C. Project Scope

Rehabilitation and renewing of the existing Rehabilitation of RO System Jubail Fallujah district. The work includes equipping and connecting pumps, submersibles, and all accessories for the rehabilitation of the water project. This will include among others the following issues:

- i. Refurbishing of RO Unit
- ii. Procurement or repairing of pumps (Replace the non-working pumps)
- iii. Exchange of leaking filter units (Replace the leaking filter units)
- iv. Maintain the intake with adding the missing submersible pumps
- v. Rehabilitate the electrical system
- vi. Clean up the area
- vii. Conduct short training in Operation and Maintenance

It is to mention, that we have rough information's only based on given documents from DoW and a site assessment. Due to the usual issues with rehabilitation, certain additional work might be required. This is due to possible invisible defects which can only be seen at the point of dismantling devices and equipment due to course of implementation. However, this is usual and gives us only the possibility to plan 90% of the scope of work and make more precise/detailed steps during the course of implementation.

D. Site Information

Existing Site:	Rehabilitation of RO System Jubail Fallujah
Current Zoning:	Open zone
Number of Beneficiaries	3.000 people according DoW Fallujah
Total Site Area:	100 m2
Allowable Maximum Coverage:	N.A.
Allowable Maximum Storeys:	N.A.
Land Ownership of Site:	DoW Fallujah



Area for the RO System

E. Concept of Implementation

As mentioned above the implementation will be the Rehabilitation of RO System Jubail Fallujah. With an available budget of maximum of xxx.xxx, - USD, this will be the option GIZ can implement this construction.

The contract will be awarded via a tender process to identify a suitable contractor which will execute the work ahead. This will be done mainly by providing the labor, materials, and equipment necessary to complete the work in accordance with the BOQ and available sketches/drawings. The work consists of rehabilitating and supplying of the RO Unit, water pumps and related equipment, rehabilitating and maintaining of piping system and establishing of Solar System for the power supply, rehabilitating the electrical board, all accessories and everything that the work requires. The work should be carried out in accordance with the scope of work and BOQ.

Several things should be put in consideration as such:

General considerations:

1. All works should be in accordance with the adopted specifications of the Directorate of Water and the supervisor engineer's instructions.
2. All prices include supply of all accessories needed to complete the work. It needs also to be considered possible risings of marked prices to be included.
3. All materials used shall be new, of approved brands, the contractor should submit samples for approval before commencing the works
4. The contractor should include in his prices cleaning of the building and removal of all debris from the site to an approved location, any removed materials should be delivered to the beneficiary with documentation
5. All items supplied should be tested in adopted by the supervisor engineer and the resident engineer.

The works will involve but not be limited to the following:

- Communicate with the supervising engineers from the Water Directorate, receive the work site, determine work priorities, and start work.
- Purchase and processing of materials
- Performing the necessary laboratory tests for materials.
- Installing and connecting a RO System Unit, with all facilities for mechanical and electrical Connection.
- Supplying and installing of Solar System for Power supply
- 1.10 Electrical works include as follow:
 - a - Supplying and connecting of all electrical cables to run the unit.
 - b - Supplying and connecting an electrical board with all its electrical parts, a type of Schneider

All the work will be implemented according to the provided BoQ and available drawings (based on the information provided by the DoW). The site supervision will be done by a contracted supervising engineer by GIZ. Cost controlling and documentation of the ongoing construction will be followed up by the GIZ engineers.

F. Photos of the site and work ahead (samples)



Impression at the site 001



Impression at the site 002