

Brief Scope of Work

Tender No: T/2452256/2022

Title: Consultancy Services for Water Supply and Sewer System & TE Networks for AI- Amerat Catchment (A10)

The scope of services under this contract comprises the following:

Stage 1: Concept Design and Associated Studies

Water Supply Projects:

The concept design is already available which was prepared by OWWSC and reviewed and validated by a Consultant. The new consultant is to study the concept design and identify any missing detail and confirm the suitability of this design.

Note: For Water Supply projects work scope, the Consultants' scope includes all items explained under Appendix – A and all such works shall be considered in his bid prices in the relevant sections.

Wastewater Projects:

- A. Flow assessment of the existing sewer networks by using plots numbers, population forecasting , sewer flow generation (2030,2040,2050) and hydraulic modeling to check the capacity of the existing sewer networks (d / D) to cater the flow from all entire existing area (A2, A3 ,A4) up to Horizon 2050, and propose the modification design if required also to define STP phase II capacity.
- B. Assess / Evaluate existing Pumping Stations in line with (A) above and propose upgradation detail design if required.
- C. Assessment studies for all future sub-zone areas (Sewer & TE networks, STPs, TE disposal strategy and Sludge disposal strategy) based on the ultimate sewage flow and ultimate TE production in the overall AI Amerat catchments and TE customers.
- D. **Concept design for the followings:**
 - i) AI Amerat STP Phase-II (A7),
 - ii) AI Hajir STP Phase-I (A5),
 - iii) A11 Area STP (11),
 - v) A11, A12, A14, A17, A18 and A19 Areas Sewer System and TE Networks,

Stage 2: Preliminary Design:

Water Supply Projects:

The Scope of Works includes but NOT limited to the following:

1. Determine design parameters including site survey, and studying available data or information. It is the responsibility of the Consultant to obtain all pertinent data and other information as shall be necessary and to carry out all surveys required to perform his obligations.
2. Providing updated MOHUP drawings for design works.
3. Drafts of all reports, drawings, tender documents, designs and design calculations shall be submitted to the Client for discussion and approval. After such discussions the Consultant shall amend and formally submit the reports, designs, design calculations including the hydraulic model and others documents to the Client. Tender Drawings shall be prepared in co-ordination with GIS Department in OWWSC. Consultant shall collect the requirements of GIS Department and complete the drawings to comply with their requirements.
4. Preparation of preliminary drawings, layout plans, proposed site facilities, engineering documents, cost estimates and outline design report of the different options (if any) for the Client's approval.
5. Upon approval of the draft detailed design and Draft Tender Documents, prepare of final design and technical specifications and Tender Documents including drawings, Hydraulic Model, specifications and Bill of Quantities to enable the Client to seek tenders.
6. Obtaining NOCs from concern sectors, approval of the routes of all pipelines.

Preliminary Design for the following:

Water:

- 2.1.1) Al Amerat Pump Station (APS2) at G1 reservoir site
- 2.1.2) Connect (APS2) PS with existing DN600 DI line by new DI 600mm line.
- 2.1.3) Connect New Al Amerat Heights Reservoir with existing DN600 DI line by new DI 600mm line.
- 2.1.4) Al Amerat Heights Reservoir
- 2.1.5) water distribution networks
- 2.1.6) Booster pump for water distribution network at New Al Amerat Heights Reservoir.

Note: For Water Supply projects work scope, the Consultants' scope includes all items explained under Appendix – A and all such works shall be considered in his bid prices in the relevant sections.

Wastewater:

For Sewer System & TE Network systems and the STPs for the following (as detailed in item 4.1.2 below):

- 2.2.1) Preliminary Design for Al Amerat STP Phase-II (A7).
- 2.2.2) Preliminary Design for Al Hajir STP Phase-I (A5).
- 2.2.3) Preliminary Design for A11 Area STP (A11).
- 2.2.4) Preliminary Design for A6 Area (Al-Hajir) Sewer System and TE Networks.
- 2.2.5) Preliminary Design for A11 Area Sewer System and TE Networks.

Stage 3: Detailed Design:

Water Supply Projects:

For **Water Supply System** for the following areas

- 3.1.1) Al Amerat Pump Station (APS2) at G1 reservoir site
- 3.1.2) Connect (APS2) PS with existing DN600 DI line by new DI 600mm line.
- 3.1.3) Connect New Al Amerat Heights Reservoir with existing DN600 DI line by new DI 600mm line.
- 3.1.4) Al Amerat Heights Reservoir
- 3.1.5) water distribution networks of areas AZ9 and part of AZ8
- 3.1.6) Booster pump for water distribution network at New Al Amerat Heights Reservoir.

Wastewater Projects:

For **Sewer System & TE Networks** for the following areas

- 3.2.1) Detailed Design for A6 Area (Al-Hajer) Sewer System and TE Networks.
- 3.2.2) Detailed Design for A11 Area Sewer System and TE Networks.

Note: consultant has to design TE network based on the potential customers and excess TE shall be design discharge TE pipeline to the approved wadi by EA and MAFWR.

Stage 4: Preparation of Tender Documents

Water Supply Projects:

- 4.1. Tender Documents for PC (Procurement and Construction) contracts for the following as a single Tender:

- 4.1.1) Al Amerat Pump Station (APS2) at G1 reservoir site
- 4.1.2) Connect (APS2) PS with existing DN600 DI line by new DI 600mm line.
- 4.1.3) Connect New Al Amerat Heights Reservoir with existing DN600 DI line by new DI 600mm line.
- 4.1.4) Al Amerat Heights Reservoir
- 4.1.5) water distribution networks of areas AZ9 and part of AZ8
- 4.1.6) Booster pump for water distribution network at New Al Amerat Heights Reservoir.

Note: For Water Supply projects work scope, the Consultants' scope includes all items explained under Appendix – A and all such works shall be considered in his bid prices in the relevant sections.

Wastewater Projects:

- 4.2. Tender Documents for EPC (Engineering, Procurement and Construction) contracts for the following **STP** contracts:
 - 4.2.1) Al Amerat STP Phase-II (A7).
 - 4.2.2) Al Hajir STP Phase-I (A5).
 - 4.2.3) A11 Area STP (A11)
- 4.3 Tender Documents for PC (Procurement and Construction) contracts for **Sewer System & TE Networks** for the following: consultant shall be prepare tender documents packages for A6 and A11
 - 4.3.1) A6 Area (Al-Hajer) Sewer System and TE Networks.
 - 4.3.2) A11 Area Sewer System and TE Networks.

NOTES: Consultants' scope also covers the following:

- 1) Respond to Bidders clarifications, evaluate the Bids technically and commercially, prepare award recommendations, and prepare Contract documents for the successful Bidder (As detailed in Section 4 below).
- 2) Post-award Design support during the construction stage: The scope of this design support includes corrections or modifications for any mistakes overlooked in the Design to be carried out without additional cost. For any additional design required it will be payable as per Daily rates in the contract and will be subject to approval by OWWSC.

Contract Duration / Time Schedule: 540 days