

Addendum No. (1)

Reference: SEZAD Tender no. (05-2014) Consultancy Services for Design and Supervision of Road nos 5 and 1 and Drainage system at Duqm Port

Opening date: 21/09/2014

Original submission date : 21/10/2014
Extended submission date : 11/11/2014

Amendments to the Tender Document

We would like to include the following Table of Document as amendments to the Tender Document:

Sr. No.	Tender Document	Pages
1.	Section 3, Brief Description of the Services: - 3.1 General, - 3.2 Required Services, - 3.3 Scope of Design Services	26 - 30
2.	Schedule of Remuneration (A-1), Preliminary Design	65
3.	Schedule of Remuneration (A-2), Final Design	66

Note:

- All required documents need to be submitted at one time. No submission will be accepted pass the due time. Bidders that decide not to submit an offer should inform SEZAD in writing about their decision.
- All Bidders should endorse this Addendum and attach it as a part of their tender proposal.

Yours Sincerely,



SEZAD Tenders and Contracts

SECTION 3 BRIEF DESCRIPTION OF THE SERVICES

3.1 General

- (a) The project site is located in Duqm in the Al Wusta Governorate. The Project is part of the road infrastructure works in the Special Economic Zone in Duqm (SEZD). Other development works include a sea port and a fishing port, airport, and logistics, industrial, tourism, commercial and residential zones. The road network in the Port area is shown in Figure 1.
- (b) The Scope of the Services comprises the preparation of Preliminary Design and Final (Detailed) Design, preparation of construction tender documents and perform Construction Supervision for the following works:
- (i) Road No. 1 construction from the intersection of Road No. 1 and Road No. 2 to the intersection of Road No. 1 and National Road No. 32, including common corridors for utilities, street lighting and drainage systems. (See Figure 2).
 - (ii) Road No. 5 construction from the intersection of Road No. 1 and Road No. 6 to the proposed Liquid Berths at the sea side, including common corridors for utilities, street lighting and drainage systems. (See Figure 2).
 - (iii) Drainage systems from existing Road No. 2, and along proposed Road No. 1. and No. 5. (See Figure 3).
 - (iv) Wadi bridges, culverts and other related structures.
 - (v) Electrical distribution networks.
 - (vi) Telecommunication networks.
 - (vii) Potable water distribution networks.
 - (viii) Sewerage and irrigation systems.
 - (ix) Landscape.
 - (x) Site investigations (topographic surveys, geophysical surveys and soil investigation).
 - (xi) Ground improvement works for road construction.
 - (xii) Any other works necessary to complete the Project.
- (c) The intention of the Client is to tender and construct all categories listed above under a single Construction Contract. Tender documents should be prepared in such a way to allow the most efficient implementation of this objective. However, separate tender documents may be required for some categories of works to obtain information for design or to make it easier to get required approvals from the respected utility agencies.
- (d) The Consulting Engineer shall note that part of Road No. 1 near the intersection with Road No. 2 is partially constructed. The extent of the completed work shall be assessed and incorporated into the design.
- (e) Road No. 1 shall be designed for exceptional vehicles from the Port.

- (f) Besides serving the Port, both Road Nos. 1 and 5, when completed, will prevent wadi flows from entering the basins in the Port. As an interim measure to prevent wadi flows, a temporary earth bund will be constructed by others along the side of Road Nos. 1 and 5, prior to Road Nos. 1 and 5 construction. The bund will also serve as temporary access during the road construction. The Consulting Engineer shall incorporate this in his design and to assess its suitability after the road construction.
- (g) The right of way (ROW) for Road No. 5 is 80 m in width and Road No. 5 is categorized as a dual carriageway with two (2) lanes in each direction. However, the total ROW for Road No. 5 including utilities and reserve area is 200 m.
- (h) Road No. 1 is categorized as a dual carriageway with three (3) lanes in each direction. The total ROW for Road No. 1 including utilities and reserve area is 200m.
- (i) The Consulting Engineer shall note that Road No. 5 will end at the Liquid Berths. There is also a planned pipeline corridor ending at the Liquid Berths (see Figure 2). Close coordination among all parties i.e. pipeline corridor and Liquid Berths consultants etc., is needed.
- (j) The Consulting Engineer shall liaise with the third party consultant in designing the intersection between Road No. 1 and National Road 32.
- (k) The Consulting Engineer shall note that a branch of the proposed National Railway is planned alongside Road No. 1 and pass through Road No. 5 towards the Port. The Consulting Engineer shall coordinate with the National Railway and to take the future railway into his design consideration.
- (l) A number of culvert crossings at the proposed Road 1 and 5 have been constructed. The Consulting Engineer shall verify their adequacy in the anticipated traffic load such as exceptional vehicles.
- (m) When designing the roads the following elements should be considered among other things:
- Inner and outer shoulders
 - Traffic signs, traffic light signals, road markings, pedestrian crossings, safety barriers, protection works etc.
 - Sidewalks
 - Off street parking
 - Street lighting
 - Drainage system (with settlement monitoring system)
 - Irrigation system
 - Landscaping

- Bus stops, vehicle parking areas and lay-bays
- Roundabouts and intersections

(n) Alignment

The proposed road construction works for Road No. 5 is approximately 5 km while that for part of Road No. 1 is 7 km, both distances measured from the intersection of Road No. 1 and Road No. 6.

(o) Roadway Type and Typical Section

The proposed roads will be classified as an Urban Boulevard with Service Roads. This is a modified classification from the Oman Highway Design Manual 2010 that refers to the Route Classification of National-Urban-Flat/Rolling – Design Group A7.

The proposed section shall have two (2) carriageways with two (2) / three (3) lanes (with shoulders) in each direction. Sidewalks with road furnishing and landscaping will complement the pedestrian realm. Dedicated bicycle lanes shall be incorporated into the roadway typical section if space permits. The centre median shall be landscaped and shall include pedestrian barrier/ fence to improve safety. The roads will need to accommodate mass transit facilities like bus stops and taxi lay-bays with safe access for pedestrians. Access from the adjacent properties need to be provided to the service roads.

(p) Junctions and Roundabouts

There are at least two major junctions in the proposed road construction and will be controlled by traffic signals. The junctions and roundabouts are to be aligned with the existing roads. All the proposed traffic signals shall be linked and timing should be coordinated by the Traffic Control Centre. In addition, traffic cameras shall be installed at each junction to monitor traffic and capture offenders that would jump red lights or otherwise violate traffic rules.

(q) Right-of-Way (ROW) and Utilities

The proposed total width of the Right of Way shall be as per the Master Plan and is generally 200 m or more, including space for new utilities such as electrical power lines, street lighting, telecommunication cables and services for water, and reserve area.

The locations of all existing utilities shall be surveyed prior to the design of the roads. Existing utilities in conflict with the proposed road alignment shall be relocated or protected as per standards of the utility companies. Any future planned and/or proposed utilities shall be identified with the respective utility companies and provisions shall be made to accommodate

these utilities accordingly to their respective requirements and implementation plans.

(r) Drainage System

The proposed road construction will consist of urban type road sections with curbs at each edge for the carriageways. The conveyance drainage system shall be designed to ensure that the road can operate for all-weather without flooding. The main road shall be slightly elevated above the existing ground to prevent any offsite flows to enter into the carriageways.

Drainage study is included and shall be performed as a part of the Scope of Work to determine the type, size and location of secondary channel crossings and structures to convey stormwater from one side of the road to the major drainage system.

Major drainage systems and structures shall be designed for Road No. 1 and Road No. 5. If necessary, they can be located within the Right of Way corridor, to properly control and discharge the stormwater to the sea. Outfall structure shall be designed for draining of stormwater to the sea.

In addition, this Project also involves the design and construction of major drainage systems and culverts along the existing Road No. 2 towards existing Road No. 1 to the intersection of Road No. 1 and Road No. 6. Stormwater from the drainage systems shall be discharged to the drainage system along Road No. 5. Hydrological studies shall be carried out to identify the catchment areas served by all the proposed drainage systems.

(s) Landscape

Landscape design including hardscape, street furnishing, trees, shrubs and perennial vegetation, and irrigation pipe network shall be part of the project scope.

3.2 Required Services

The Consultancy Services shall consist of the following stages:

- (a) Preliminary design and cost estimates.
- (b) Detailed design and cost estimates.
- (c) Preparation of tender documents and evaluation of tenders.
- (d) Supervision of construction works.
- (e) Project closure, commissioning and handing over.

Note: All cost estimates, or the budget sum shall be kept strictly confidential and shall not be revealed to third (3rd) parties, the public or to the prospective Bidders or any employee of the Client except for the Technical Committee for the Design Review.

Important Note: Each stage shall be considered as separate and the Consulting Engineer shall not proceed to the next stage without a written approval from the Client and stakeholders. The Client shall have the right to discontinue this Contract after the completion of any stage without giving the right to the Consulting Engineer to any claims whatsoever as a consequence of discontinuation of the Contract.

3.3 Scope of Design Services

Before carrying out the Services, the Consulting Engineer shall review all the drawings from previous design carried out by others on Road No. 1 and Road No. 5, as well as their alignment with other existing and planned roads and buildings, for his design.

The Consulting Engineer shall assess the physical works carried out on Road No. 1 by others and incorporate them into his design.

The Consulting Engineer shall show on the design drawings general layout limits of the build-up areas (fences, walls, buildings, etc.) and the land topography and any other utilities or other items likely to be affected by the road alignment corridors.

Although the road corridors have been decided upon and shown on the Master Plan document, the Consulting Engineer may, however, be required to carry out local realignments for unexpected or unforeseen reasons.

The proposed roads shall be designed as “all-weather roads”. The Consulting Engineer shall study the proper drainage structures including the provision of culverts and/or wadi bridges. The Consulting Engineer shall be responsible for the design of road crossings with gas and oil pipes, railroad, and any other services. Any industrial utility lines crossing the proposed roads will require special considerations.

The proposed local roads, if applicable, are expected to have a posted speed of 60 km/hr or as decided by the roadway safety auditor. Other roads (non-local) will have posted speed established by the design team and based on road category, safety, expected traffic conditions and other criteria.

The Consulting Engineer shall adhere to the following guidelines:

- (a) The Duqm Port roads shall be designed as per approved typical cross-sections as defined in the Master Plan document. However, the Design Engineer may be required to prepare the Final Tender Documents for various options e.g. single carriageway or dual carriageway or for sub-sections of the whole road project, including the link roads.

SCHEDULE OF REMUNERATION (A-1) (PRELIMINARY DESIGN)

No.	Description	Unit	Estimated Quantity	Rate/Unit (R.O.)		Total Amount (R.O.)
				Words	Figures	
1.	Traffic Study and Modelling	LS	1			
2.	Topographic Survey	LS	1			
3.	Soil and Construction Material Investigation & Tests	LS	1			
4.	Sub-surface Soil & Geophysical Investigations	LS	1			
5.	Preliminary Hydrological Studies	LS	1			
6.	Preliminary Design for all Primary, Secondary, and Local Roads; Utilities and Drainage Systems; Ground Improvement Works for Road Construction; Hydrological Study etc. and Cost Estimates.	LS	1			
7.	Preliminary Design Report	LS	1			
8.	Environmental Impact Assessment Scoping Study	LS	1			
9.	Other costs that are not included in the above items but are necessary to complete the Preliminary Design	LS	1			
10.	Contingency - Fifteen Percent (10%) of subtotal of the items from 1 to 9 above	LS	1			
Sub-Total Remuneration for Preliminary Design Carried to Total (Words/Figures)						

SCHEDULE OF REMUNERATION (A-2) (Final Design)

No.	Description	Unit	Estimated Quantity	Rate/Unit (R.O.)		Total Amount (R.O.)
				Words	Figures	
1.	Additional Topographic Survey, Location and Alignment Staking-out	LS	1			
2.	Additional Sub-surface Soil and Geophysical Investigations	LS	1			
3.	Detailed Hydrological Studies	LS	1			
4.	Final Design for Primary, Secondary, and Local Roads; Utilities and Drainage Systems; Ground Improvement Works for Road Construction; Hydrological Study etc. and Cost Estimates etc.	LS	1			
5.	Final Design Report	LS	1			
6.	Environmental Impact Assessment Study	LS	1			
7.	Other costs that are not included in the above items but are necessary to complete the Final Design	LS	1			
8.	Contingency - Ten Percent (10%) of subtotal of the items from 1 to 7 above	LS	1			
Sub-Total Remuneration for Final Design Carried to Total (Words/Figures)						