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**INVITATION TO TENDER**

TO:

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| --- | --- | --- | --- |
| **All interested registered construction companies and Solar Service Companies.** |  | **Date of issue:** | December– 24- 2024 |
|  | **Tender no.:** | RRAA-DRA-AFJR/Cordaid Pipe Scheme – 201330 - Nangarhar |
|  | **Contract title:** | Construction services for Pipe scheme network (Reservoir, bore well, stand tap, solar system and guardroom) in 4 village/districts of Nangarhar province   1. Ragha Abdul khil village Achin district. 2. Surobai Ghazi abad village Batikot district. 3. Said ahmad khil village kot district. 4. Kachkol lmasi village Nazyan district. |
|  | **Closing date:** | January-06-2024 4:00 PM |
|  | **Contracting Authority:** | House # 23, PD 02, Bibi Hawa Girls High School Street Reg-e-Shamard khan Jalalabad Afghanistan  Contact person: Zainuddin Alokozay  Tel: +93(0) 078 817 8701  Email: zainudin.alakozay@rraa.org.af  For Technical information  Tel: +93 (0) 777732709/ 0784656590  Email: [Muhammad.salihi@rraa.org.af](mailto:Muhammad.salihi@rraa.org.af) |

**RRAA** **invites you to attend the Bidding Process of** **Provision, Deliver Construction and installation of Solar System for Water Supply Networks in in 4 village/districts of Nangarhar province 1. Ragha Abdul khil village Achin district, 2. Surobai Ghazi abad village Batikot district, 3. Said ahmad khil village kot district, 4. Kachkol lmasi village Nazyan district.**

Please find enclosed the following documents, which constitute the tender record:

**A – Instructions to tenderers**

**B – Draft Contract including Annexes:**

**Annex 1: Technical data form** (to be completed by the tenderer)

**Annex 2: Tender Submission form** (to be completed by the tenderer)

**Annex 3: General Terms and Conditions for Supply Contracts**

**Annex 4: Code of Conduct for Contractors**

**C – Tender Guarantee**

If this document is a PDF format, upon request a complete copy of the above documents can be forwarded in a WORD format for electronic completion. It is forbidden to make alterations in the text.

We should be grateful if you would inform us by email of your intention to submit or not a proposal.

## A. Instructions to tenderERs

1. **Scope of supply**

The subject of the contract is the Provision and Construction services for Pipe scheme network (Reservoir, bore well, stand tap, solar system and guardroom) in 4 village/districts of Nangarhar province

1. Ragha Abdul khil village Achin district.
2. Surobai Ghazi abad village Batikot district.
3. Said ahmad khil village kot district.
4. Kachkol lmasi village Nazyan district.

as described in Annex#1. Technical Specifications.

The supplies to be purchased are for use by the Contracting Authority in its DRA-AFJR/Cordaid –Pipe Scheme 201330 – Nangarhar Project in Achin, Batikot, Nazyan and Kot Districts of Province Province - Afghanistan.

The supplies are described in more details in the technical data form, Annex 1.

1. **Delivery**

The above supplies shall be delivered to 4 villages of Kot, Achin, Nazyan and Batikot District of Nangarhar Province in the below villages.

1. Ragha Abdul khil village Achin district.
2. Surobai Ghazi abad village Batikot district.
3. Said ahmad khil village kot district.
4. Kachkol lmasi village Nazyan district.
5. **Validity**

Quotations shall remain valid and open for acceptance for 14 days from the date of issuance from December 24, 2024 – January,06, 2025, at 4:00 PM - Kabul time.

Collection date and time: December 24, 2024, time 8:00 am till 03:30 PM each day and at the last day of announcement 06, January 2025, time 4:00 PM.

Bide Opening date and time; 7, January 2025. Time from 10:00 PM- 03:30 PM in Jalalabad ERO office ate above-mentioned address. If the mentioned date falls on a holiday, the validity shall be extended to the next working day.

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1. **Specifications**

The supplies must comply fully with the technical specifications set out in the tender dossier (technical data form, Annex 1) and conform in all respects with the drawings, quantities, models, samples, measurements, and other instructions. Deviations from the specifications may be considered only if deemed to be in the best interest of the Contracting Authority.

1. **Cost of Tender**

The tenderer shall bear all costs associated with the preparation and submission of his tender and the Contracting Authority will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the tender process.

1. **Clarification of tender documents and additional information**

Tenderers may submit questions in writing at the latest on the date specified in the timetable in article A.4, specifying the tender no., and the contract title. Information regarding interpretation of this Invitation to tender must be requested in writing to the Contracting Authority’s contact person.

Tenderers are not allowed to approach the Contracting Authority for verbal clarification.

Any clarification of the tender dossier given by the Contracting Authority will be submitted to all tenderers at the latest on the date specified in the timetable. If the Contracting Authority provides additional information on the tender dossier, such information will be sent in writing to all other prospective tenderers at the same time.

**Any prospective tenderer seeking to arrange individual meetings during the tender period with either the Contracting Authority and/or any other organization with which the Contracting Authority is associated or linked may be excluded from the tender procedure.**

1. **Planned timetable.**

The Contracting Authority reserves the right to alter the dates and time in the following timetable, in which case all tenderers will be informed in writing and a new timetable will be provided.

|  |  |  |
| --- | --- | --- |
|  | **Date** | **Time** |
| Deadline for submission of tenders (closing date) | 24 Dec 2024 | 04:00 PM |
| Tender opening session, if it is a holiday, then the opening session will be held on the same time on the next working day. | 07 Jan 2025 | 09:00 AM |
| Contract award | 8 Jan 2025 | 09:00 AM |
| Contract start | 12 Jan 2025 | 09:00 AM |

All times are in the time zone of Afghanistan.

1. **Eligibility and qualification requirements**

Tenderers are not eligible if they are in one of the situations listed in article 15 of the General Terms and Conditions for Supply Contracts.

Tenderers shall in the Tender Submission Form attest that they meet the above eligibility criteria. If required by the Contracting Authority, the tenderer, which tender is accepted shall further provide evidence satisfactory to the Contracting Authority of its eligibility through certificates issued by competent authorities in its country of establishment or operation, or, if such certificates are not available, through a sworn statement.

Tenderers are also requested to certify that they comply with the Code of Conduct for Contractors.

To give evidence of their capability and adequate resources tenderers shall provide the information and the documents requested in the tender dossier.

1. **Exclusion from award of contracts**

Contracts may not be awarded to tenderers who, during the procurement procedure:

1. are subject to conflict of interest; and/or
2. are guilty of misrepresentation in supplying the information required as a condition of participation and eligibility in the tender procedure or fail to supply this information.
3. **Language of Tenders**

The tenders, all correspondence and documents related to the tender exchanged by the tenderer and the Contracting Authority must be written in English. Supporting documents and printed literature furnished by the tenderer may be in local language.

1. **Documents comprising the Tender.**

The tenderer shall complete and submit the following documents with his tender:

1. Tender submission form (Annex 2) with supporting documents, duly completed, stamped, and signed by the Candidate.
2. Compliance with Technical data form (Annex 1) with supporting documents

The following documents shall in addition be submitted with the tender.

1. Tenderer’s company valid registration certificate.
2. Previous experiences, the company should have completed 5-8 similar nature and complexity contracts within last 4 years with the value of at least 70% of bid price and include Goods Delivery Note or GRNs.
3. Bid security with total amount of 5% of bid price.
4. Financial capacity: Bank statement/letter of credit to be no older than 3 months prior to the bid release date of the RFQ. Plus show a minimum closing balance of at least 70% of the bid price.
5. Technical specifications for all equipment to which are stated in the ANNEX 1: Technical data form, i.e data sheets, warranty letter, quality certificates, test documents etc.
6. In case the proposal is singed by any other person than President or V-President of the company an original Power of Attorney (through a letter) should be provided which should clearly state the name of the authorized person and the authorities given.
7. The Applicant Company Should have the required machinery for the construction of Pipe Scheme from Borewell Drilling to construction of water reservoir (Water Tank) and Instalation of Solar Panels System if not the company will be not consider for contract.
8. The Applicant Company Should have an active Regional Office in Nangarhar Province if not the company will be not considered for further process.
9. The Contractro Company Must have experience of Eastern Region in the Same type of Projects (Pipe Schemes), if not the company will be not considered for further processing.
10. The Contractor Company Should have WASH Engineer and Have Enough Technical Experience in the Pipe Scheme Projects. If the company does not have technical experience and team will not be considered for further process.

and other relevant information that should be made known to the Contracting Authority.

1. **Tender Guarantee**

All tenders must be accompanied by a tender guarantee of minimum 5% of the total tender amount. The guarantee shall be issued in favour of the Contracting Authority and be valid for 45 days beyond the period of validity of the tender. The tender guarantee shall be issued in the form of a first demand guarantee, by an internationally recognised bank or other financial institution, and shall be in accordance with the text in the attached guarantee. The tender guarantee may also be issued in the form of a banker’s draft, a certified cheque, a bond provided by an insurance company or an irrevocable letter of credit, as long as it creates under the applicable law the same irrevocable, at-first-demand obligations for the guarantor as expressed in the wording of the attached guarantee.

1. **Price**

The price quoted by the supplier shall not be subject to adjustments except as otherwise provided in the conditions of the Contract.

Price shall be quoted in AFN.

The Contractor guarantees that the price specified in this Tender dossier, is the maximum price that shall remain firm and shall not be increased during the entire term of the Contract, provided however, that in the event that the successful supplier is able to offer the Contracting Authority a discounted price on placement of bulk contracts, the unit price shall be reduced for specific contracts.

**Tax**

**Withholding Tax on Subcontractor:**

Government withholding Tax: Pursuant to Article 72 in the Afghanistan Tax law effective March 21, 2009, RRAA is required withhold “contractor” taxes from the gross amount payable to all Afghan for-profit subcontractor/vendors with aggregate amount of AFN 500,000.00 or greater and transfer this to the Ministry of Finance. In accordance with this requirement, RRAA shall withhold 2% tax from all gross invoices from subcontractors/vendors under this Agreement with active AISA or Ministry of Commerce License. For subcontractors /vendors without active AISA or Ministry of Commerce license, RRAA shall withhold seven percent 7% “contractor” tax per current Afghanistan Tax law.

**VAT and/or any sales tax applicable to the purchase of supplies shall be indicated separately in the Quotation Submission Form.**

1. **Validity**

Tenders shall remain valid and open for acceptance for 45 days after the closing date for the submission of tenders.

Prior to the expiry of the original tender validity period, the Contracting Authority may ask tenderers in writing to extend this period. Tenderers that agree to do so will not be permitted to modify their tenders. If they refuse, their participation in the tender procedure will be terminated.

1. **Submission of tenders and closing date**

Tenders must be received at the address mentioned below by hand or post not later than the closing date and time specified in the timetable article A.5. Any tenders received after that time will not be considered.

Tenders shall be submitted in a sealed envelope bearing the following information:

RRAA-ERO Province

Attention: RRAA-ERO Logistic and Procurement Department

Address: House # 23, PD 02, Bibi Hawa Girls High School Street Reg-e-Shamard khan Jalalabad Afghanistan

Contact person: Zainuddin Alokozay

Tel: +93(0) 078 817 8701

Email: zainudin.alakozay@rraa.org.af

For Technical information

Tel: +93 (0) 777732709/ 0784656590

Email: [Muhammad.salihi@rraa.org.af](mailto:Muhammad.salihi@rraa.org.af)

Tender receipt: 6 January 2025 04:00 PM, Kabul Afghanistan Time.

Tender no.: RRAA-DRA-AFJR/Cordaid - Pipe Scheme – 201330 - Nangarhar

**NOT TO BE OPENED BEFORE THE tender opening session on 7 January 2025 at 9:00 AM.**

All tenders must be submitted in one original, marked “original”.

No tender may be changed or withdrawn after the deadline has passed.

1. **Tender opening and evaluation**

Prior to the detailed evaluation of the tenders, the evaluation committee, (established by the Contracting Authority for the purposes of this tender procedure), shall ascertain whether the tenders meet the eligibility requirements; have been properly signed, are substantially responsive to the tender documents; have any material errors in computation; and are otherwise generally in order.

If a tender is not substantially responsive i.e. it contains material deviations from or reservations to the terms, conditions and specifications in the tender dossier, it shall not be considered further.

After analysing the substantially responsive tenders, the evaluation committee will examine the technical admissibility of each tender, classifying it as technically compliant or non-compliant. Deviations from the specifications may be considered if deemed to be in the best interest of the Contracting Authority.

Tenders determined to be substantially responsive and technically compliant will be checked by the evaluation committee for any arithmetic errors. Where there is a discrepancy between the amounts in the figures and words, the amount in words will govern. Where there are discrepancies between the unit price and the line-item total, derived from multiplying the unit rate by the quantity, the unit rate as quoted will govern. If a tenderer refuses to accept the correction, his tender will be rejected.

1. **Award of Contract**

The Contracting Authority will award the contract to the tenderer whose tender has been determined to be substantially responsive to the tender dossier and technically compliant, and who has offered the lowest price, provided further that the tenderer has demonstrated the capability and resources to carry out the contract effectively.

The Contracting Authority aims to purchase goods that minimize the environmental impact. Therefore, RRAA reserves the right to choose a Supplier based on environmentally sustainable criteria such as packaging, life span, durability, availability of spare parts, recyclability, etc. over quotations that do not meet these standards.

The Contracting Authority reserves the right to accept all or part of your quotation, whichever is in its best financial interest.

1. **Signature and entry into force of the Contract**

Prior to the expiration of the period of the tender validity, the Contracting Authority will inform the successful tenderer in writing that its tender has been accepted.

Within 7 days of receipt of the contract, not yet signed by the Contracting Authority, the successful tenderer must sign and date the contract and return it,

If the successful tenderer fails to sign and return the contract within the days stipulated, the Contracting Authority may consider the acceptance of the tender to be cancelled without prejudice to the Contracting Authority's right to seize the tender guarantee, claim compensation or pursue any other remedy in respect of such failure, and the successful tenderer will have no claim whatsoever on the Contracting Authority.

1. **Cancellation for convenience**

The Contracting Authority may for its own convenience and without charge or liability cancel the tender process at any stage.

**Annex 1: Technical data Form**

**Tenderers are requested to complete the following template.**

The following technical specifications are provided in the format of a checklist. They are compulsory as a minimum standard and will be the only basis for the evaluators to assess the technical compliance of the equipment presented in the tenders. Deviations from the specifications may be considered only if deemed to be in the best interest of the Contracting Authority.

Manufacturers’ names, catalogue numbers and model designations appearing in the list are for reference only. Tenders for other equipment that is equal in function, quality and performance to that listed will be given full consideration.

To make sure that no single specification is left out from your tender by mistake, it is recommended that you use the checklist as a tool to present your tender.

Sample inspection of selected supplier will be carried out after evaluation, failure to provide appropriate sample will lead to the disqualification of the selected supplier.

**Specifications of Solar System for Water Supply Network of Ragha Village Achin District**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Title** | **Item** | **Quantity** | **Unit** | **Unit cost Afs** | **Total costAfs** | **Remarks** |
| **A1** | **Site preparation** | **165.0** | **m2** |  |  |  |
| 1.01 | Site preparation, clearing site ect. | 49.5 | md |  |  |  |
| **A2** | **Excavation for Elevated RCC Water Tank ,Solar Panel stand &boundary wall** | **52.0** | **m3** |  |  |  |
| 2.01 | Unskilled labour | 104.0 | md |  |  |  |
| **A3** | **Shuttering for Elevated RCC Water Tank and boundary wall** | **298.0** | **m2** |  |  |  |
| 3.01 | Wooden timber | 6.0 | m3 |  |  |  |
| 3.02 | Wooden pole 4m long | 350.0 | pcs |  |  |  |
| 3.03 | Nail | 14.9 | kg |  |  |  |
| 3.04 | Skilled labour on site | 14.9 | md |  |  |  |
| 3.05 | Unskilled labour on site | 20.9 | md |  |  |  |
| **A4** | **PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4** | **53.3** | **m3** |  |  |  |
| 4.01 | Sand | 20.6 | m3 |  |  |  |
| 4.02 | Gravel | 41.1 | m3 |  |  |  |
| 4.03 | Cement | 12247.5 | kg |  |  |  |
| 4.04 | water | 6123.8 | liter |  |  |  |
| 4.05 | Skilled labor on site | 34.6 | md |  |  |  |
| 4.06 | Unskilled labour on site | 71.9 | md |  |  |  |
| **A5** | **Stone Masonry of boundary wall ,room,Gate valve box & Res with 35% mortar (M300, 1:4)** | **55.9** | **m3** |  |  |  |
| 5.01 | Stone with transportation | 55.9 | m3 |  |  |  |
| 5.02 | Sand | 22.0 | m3 |  |  |  |
| 5.03 | Cement | 5312.4 | kg |  |  |  |
| 5.04 | water | 2684.2 | liter |  |  |  |
| 5.05 | Skilled labour on site | 28.0 | md |  |  |  |
| 5.06 | Unskilled labour on site | 55.9 | md |  |  |  |
| **A6** | **Pointing with mortar (M300, 1:4)** | **55.9** | **m2** |  |  |  |
| 6.02 | Sand | 3.0 | m3 |  |  |  |
| 6.03 | Cement | 123.0 | kg |  |  |  |
| 6.04 | water | 55.9 | liter |  |  |  |
| 6.05 | Skilled labour on site | 9.5 | md |  |  |  |
| 6.06 | Unskilled labour on site | 2.8 | md |  |  |  |
| **A7** | **Bricks masonry with burned bricks with 25% mortar(M:300, 1:4)** | **28.6** | **m3** |  |  |  |
| 7.01 | Brick including transportation(Size, 22\*11\*7cm ) | 14872.0 | pcs |  |  |  |
| 7.02 | Sand | 7.7 | m3 |  |  |  |
| 7.03 | Cement | 2288.0 | kg |  |  |  |
| 7.04 | water | 1144.0 | liter |  |  |  |
| 7.05 | Skilled labour on site | 18.6 | md |  |  |  |
| 7.06 | Unskilled labour on site | 51.5 | md |  |  |  |
| **A8** | **Steel working (footing+column+slab )** | **4866.0** | **kg** |  |  |  |
| 8.02 | Steel bar 8 mm Khan Steel | 368.9 | kg |  |  |  |
| 8.03 | Steel bar 10 mm Khan Steel | 55.0 | Kg |  |  |  |
| 8.04 | Steel bar 12 mm Khan Steel | 1610.0 | Kg |  |  |  |
| 8.05 | Steel bar 14 mm Khan Steel | 1327.7 | Kg |  |  |  |
| 8.06 | Steel bar 16 mm Khan Steel | 742.8 | Kg |  |  |  |
| 8.07 | Steel bar 18 mm Khan Steel | 761.5 | Kg |  |  |  |
| 8.08 | Wire 1 mm | 28.0 | Kg |  |  |  |
| 8.09 | Skilled labour on site | 48.7 | md |  |  |  |
| 8.1 | Unskilled labour on site | 43.8 | md |  |  |  |
| **A9** | **RCC (footing+column+slab ) of Elevated Water reservoir and Guard room ( M:250,1:1:2)** | **35.0** | **m3** |  |  |  |
| 9.01 | Sand | 11.8 | m3 |  |  |  |
| 9.02 | Gravel | 23.7 | m3 |  |  |  |
| 9.03 | Cement | 14000.0 | kg |  |  |  |
| 9.04 | water | 7000.0 | liter |  |  |  |
| 9.05 | Skilled labour on site | 24.5 | md |  |  |  |
| 9.06 | Unskilled labour on site | 70.0 | md |  |  |  |
| **A10** | **Door and Windows for Guard room and bathroom( PVC)** | **40.0** | **m2** |  |  |  |
| 10.01 | I- beam (steel girder) 100mmX100mm, 5mm thick, 280cm long | 2.2 | M |  |  |  |
| 10.02 | T-iron galvanized steel 4mm thick & 370cm long | 18.0 | M |  |  |  |
| 10.01 | Bitumen cover for preventing leakage (ezogam) | 40 | m2 |  |  |  |
| 10.02 | PVC door (1mX2m)(08\*1.8)M | 2.0 | pcs |  |  |  |
| 10.03 | PVC window (1.5mX1.5m)(40\*40)Cm | 2.0 | pcs |  |  |  |
| 10.04 | First class burnt brick (chowka) | 60.0 | pcs |  |  |  |
| 10.05 | Skilled labour on site | 2.0 | md |  |  |  |
| 10.06 | Unskilled labour on site | 2.0 | md |  |  |  |
| **A11** | **Plastering of reservoir, boundary wall ,stand tap & guard room with cement mortar (M:300,1:4)** | **458.0** | **m2** |  |  |  |
| 11.01 | Sand | 11.5 | m3 |  |  |  |
| 11.02 | Cement | 2748.0 | kg |  |  |  |
| 11.03 | water | 3664.0 | liter |  |  |  |
| 11.04 | Skilled labour on site | 45.8 | md |  |  |  |
| 11.05 | Unskilled labour on site | 45.8 | md |  |  |  |
| **A12** | **Plastering 1:3 (chips) with padllow powder inside of reservoir** | **12.00** | **m2** |  |  |  |
| 12.01 | Sand | 0.26 | m3 |  |  |  |
| 12.02 | Cement | 105.60 | kg |  |  |  |
| 12.03 | padllow powder | 0.96 | kg |  |  |  |
| 12.04 | Skilled labor on site | 1.20 | md |  |  |  |
| 12.05 | Unskilled labor on site | 2.40 | md |  |  |  |
| **A13** | **Filling with gravel 15 cm of floor and compaction for solar stand and Guardroom** | **20.0** | **m3** |  |  |  |
| 13.01 | Local stone | 20.0 | m3 |  |  |  |
| 13.02 | Unskilled labour | 6.0 | md |  |  |  |
| **A14** | **Oil painting** | **24.0** | **m2** |  |  |  |
| 14.01 | Plastic Paint 50% inside | 12.0 | kg |  |  |  |
| 14.02 | white glue | 0.7 | kg |  |  |  |
| 14.03 | Marble powder | 12.0 | kg |  |  |  |
| 14.04 | Powder glue | 1.2 | kg |  |  |  |
| 14.05 | Oil paint | 5.3 | kg |  |  |  |
| 14.06 | Skilled labour | 1.3 | md |  |  |  |
| **A15** | **White washing inside with 30% emulsion** | **458.0** | **m2** |  |  |  |
| 15.01 | Plastic Paint 30% inside | 229.0 | kg |  |  |  |
| 15.02 | Skilled labour | 13.7 | md |  |  |  |
| 15.03 | Unskilled labour on site | 18.3 | md |  |  |  |
| **A16** | **Electrical work** | **25.0** | **m** |  |  |  |
| 16.01 | Main Switch | 1.0 | pcs |  |  |  |
| 16.02 | Switch for Bulb & Bulb 15w | 2.0 | pcs |  |  |  |
| 16.03 | Storage battery 100 amp made in thailand | 1.0 | pcs |  |  |  |
| 16.04 | Solar panel 250 watt made in china (with stand) | 1.0 | pcs |  |  |  |
| 16.05 | Solar fane | 1.0 | pcs |  |  |  |
| 16.06 | Guard room Carpet | 16.0 | m2 |  |  |  |
| 16.07 | Saket under plaster | 2.0 | pcs |  |  |  |
| 16.08 | Electric cable (4X6) | 15.0 | m |  |  |  |
| 16.09 | Wire (2x2.5) | 10.0 | m |  |  |  |
| 16.1 | Electrician | 3.0 | md |  |  |  |
| **A17** | **Hand Role and Stairs** | **1.0** | Lum Sum |  |  |  |
| 17.01 | Supply and installation of 2 inch Iron Ladder for reservoir with all required activites according to drawings. | 12.5 | m |  |  |  |
| 17.02 | Supply and installation of 1.5 inch Galvanised Iron Ladder for inter reservoir with all required activites according to drawings. | 2.5 | m |  |  |  |
| 17.03 | Steel Plate ( 32 x 4 ) mm L= 2.7 No.6 (safety ) | 18.0 | m |  |  |  |
| 17.04 | Steel pipe 1 inch diameter L= 6.5m) No.4 for tank | 25.0 | m |  |  |  |
| 17.05 | Steel pipe 0.5 inch diameter L= 0.5 m) no.8 for tank | 4.0 | m |  |  |  |
| 17.06 | Steel bar 20 mm dia l= 1.5 m no. 4 for tank | 6.0 | m |  |  |  |
| 17.07 | Angle iron ( 50 x 50 x 4 ) mm L= 1 m) No.4 | 4.0 | m |  |  |  |
| 17.08 | GI pipe 1.5 inch diameter ( hand role) L= 6.5 m) No.4 | 26.0 | m |  |  |  |
| 17.09 | Steel pipe 1 inch diameter ( hand role) L= 6.5 m) No.4 | 26.0 | m |  |  |  |
| 17.1 | Steel pipe 1 inch diameter ( hand role)L= 1 m) No.46 | 46.0 | m |  |  |  |
| 17.11 | Skilled labour on site | 3.0 | md |  |  |  |
| 17.12 | Unskilled labour on site | 6.0 | md |  |  |  |
| **A18** | **GI & PE pipe Fittings ( water supply system)** | **2447.0** | **m** |  |  |  |
| 18.01 | GI Pipe 2 1/2 inch( 63mm) ( inflow pipe ), thickness 2 - 3mm ,best quality | 18.0 | m |  |  |  |
| 18.02 | GI Pipe 2 1/2 inch ( 63mm)( outflow pipe ) thickness 2 - 3mm best quality | 6.0 | m |  |  |  |
| 18.03 | GI Pipe 2 1/2inch (63mm)( Supply pipe ) thickness 2 - 3mm with flange, best quality | 18.0 | m |  |  |  |
| 18.04 | GI Pipe 3 inch 75mm)( drainage or cleaning pipe ) thickness 2 - 3mm, best quality | 3.0 | m |  |  |  |
| 18.05 | Air vent pipe 2 inch (50mm)=1m | 1.0 | pcs |  |  |  |
| 18.08 | Coupling 2 inch (50mm) diameter, best quality | 6.0 | pcs |  |  |  |
| 18.09 | Coupling 3 inch (75mm) diameter, best quality | 4.0 | pcs |  |  |  |
| 18.1 | GI Joint 2 (50mm) and 2 1/2 inch ( 63mm) diameter,best quality | 8.0 |  |  |  |  |
| 18.11 | Joint 1,1.5,2.5 (25,40,50,63)mm and 2 inch diameter, best quality | 13.0 | pcs |  |  |  |
| 18.12 | Nipple 2 inch (50mm) diameter, best quality | 4.0 | pcs |  |  |  |
| 18.13 | Nipple 2.5 inch (63mm)diameter, best quality | 4.0 | pcs |  |  |  |
| 18.14 | Elbow 0.5 inch (12.5mm) diameter, best quality | 68.0 | pcs |  |  |  |
| 18.15 | Elbow 2.5 inch (63mm)diameter, quality | 5.0 | pcs |  |  |  |
| 18.16 | Glass wool insulation 2 layers t= 67.5 cm | 30.0 | m2 |  |  |  |
| 18.17 | PE Tee (T) 0.5 inch (12.5mm)diameter, best quality | 30.0 | pcs |  |  |  |
| 18.18 | PE Tee (T)1 1/2inch (40mm)diameter, best quality | 25.0 | pcs |  |  |  |
| 18.19 | PE Tee (T) 2 inch(50mm) diameter, best quality | 20.0 | pcs |  |  |  |
| 18.2 | PE Tee (T) 2 1/2 inch (63mm)diameter, best quality | 15.0 | pcs |  |  |  |
| 18.21 | PE pipe 1.5 inch (40mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0.297 kg/m, best quality | 179.0 | m |  |  |  |
| 18.22 | PE pipe 2.5 inch ( 63mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0721 kg/m, best quality | 423.0 | m |  |  |  |
| 18.21 | PE pipe 2 inch (50mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0.453 kg/m, best quality | 984.0 | m |  |  |  |
| 18.22 | PE pipe 1 1/4inch (32mm) (PE 100, PN10, SDR 17) 10 bar weight 0.187 kg/m, quality | 70.0 | m |  |  |  |
| 18.23 | PE pipe 1 inch (25mm) (PE 100, PN10, SDR 17) 10 bar weight 0.137 kg/m, quality | 785.0 | m |  |  |  |
| 18.24 | PE pipe 3 inch (75mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 1.02 kg/m, best quality | 55.0 | m |  |  |  |
| 18.25 | Gate valve 1.5"(40mm) Dia=1 1/4" best quality | 6.0 | pcs |  |  |  |
| 18.26 | Gate valve 2"(50mm) best quality | 1.0 | pcs |  |  |  |
| 18.27 | Check valve 2.5" (63mm)best quality | 1.0 | pcs |  |  |  |
| 18.28 | Gate valve 2"(50mm) for reservoir best quality | 4.0 | pcs |  |  |  |
| 18.29 | Socket 3 inch(75mm)dia best quality | 3.00 | pcs |  |  |  |
| 18.3 | Socket 2 inch (50mm)dia best quality | 15.00 | pcs |  |  |  |
| 18.31 | Socket 1 inch (25mm) dia best quality | 15.00 | pcs |  |  |  |
| 18.32 | Reducer 0.5 x3/4' (12.5\*19)mm best quality | 1.0 | pcs |  |  |  |
| 18.33 | Niple 0.5" = 12.5mm best quality | 68.0 | pcs |  |  |  |
| 18.34 | PE female adapter 20X0.5" best quality | 34.0 | pcs |  |  |  |
| 18.35 | Glass wool 2cm thick w=10, L=2m | 20.0 | m2 |  |  |  |
| 18.36 | GI pipe 0.5 inch (12.5mm) thickness 2 - 3mm, best quality | 68.0 | m |  |  |  |
| 18.37 | Top 0.5 (12.5mm) best quality | 34.0 | pcs |  |  |  |
| 18.38 | End cap, 40mm best quality | 8.0 | pcs |  |  |  |
| 18.39 | End cap, 50mm best quality | 6.0 | pcs |  |  |  |
| 18.4 | End cap, 63mm best quality | 4.0 | pcs |  |  |  |
| 18.41 | End cap,75mm best quality | 2.0 | pcs |  |  |  |
| 18.42 | Measurement meter for water , best quality | 34.0 | pcs |  |  |  |
| 18.43 | Meter box 4.2kg best quality | 34.0 | pcs |  |  |  |
| 18.44 | Supply and installation of water stopper for joint between floor slab and walls insulation (225 mm width, 15mm thick) | 12.8 | M |  |  |  |
| 18.45 | Supply and installation of best quality well probe sensor, for protection of submersible water pump with complete set | 1.0 | set |  |  |  |
| 18.46 | Power Cable 2\*1.5mm2 for sensor. (best quality) | 163.0 | M |  |  |  |
| 18.47 | Plumber | 15.0 | md |  |  |  |
| 18.48 | Unskilled labour on site | 15.0 | md |  |  |  |
| **A19** | **Water pump and Solar panels with stand (with guarantee)** | **1.0** | **Lum Sum** |  |  |  |
| 19.01 | "Supply, transportation of Submersible pump with its Compatible inverter, control box and Fuse box in stainless steel. EN 1.4301 (AISI  304).EN 1.4301 (AISI 304). EN 1.4539 (AISI 904L).  Rated power - P2= 3 kW, Rated voltage: 3 x 220-230 V  Compatible inverter: 4 KW, IP65-68, Pure sine wave, VFD and soft starter  Avg. water production per day: (7.7 m³/h) 61.3 m³/day, Total dynamic head: 70m , Pump Max head:100m Solar pump 3 KW according to the technical specification and requirement,  Contractor must submit manufacturer warranty for solar Pump for a period not less than 2 years. Contractor must submit all the required certificates for solar pump  Serial number of Solar pump should be certified by manufacturing company, Supply and transportation of solar pump set" | 1.0 | No |  |  | ظرفیت آب دهی پمپ = 7.7m3/hour باشد و در صورت پایین آمدن سطح آب پمپ بشکل اتوماتیک خاموش شود |
| 19.02 | "Supply and transportation of Solar panels 5000 watt internationaly certified by IEC, ISO, TUV and CE Range of ambient temperature: 233 .. 358 K  Temperature coefficient (Voc): -0.31% /Cº Power tolerance: +3 to 5 %  Maximum power voltage: 32 - 33.2V Open circuit voltage: 38 - 39.5V Max power point current: 8.5 - 9.5A Module shortcut current: 9 - 10 A Minimum power output: 5000 W  Solar module type: POLYCRYSTALLINE  Water proof PV junction boxes IP68 for each array including DC Fuses, DC switch disconnectors, bus bars ,terminals, ducts or trays, supports & labels suitable to the PV arrays loads.  Contractor must submit manufacturer warranty for solar panel for a period not less than 25 years. Contractor must submit all the required certificates for each PV solar panel from  Serial number of PV Panel should be certified by manufacturing company Supply and transportation of solar pump set and solar panels" | 5000.0 | Watt |  |  | سولر ساخت کشور جرمنی ویا 11 شرکت ثبت شده در وزارت انکشاف دهات بوده و در هر نوع آب و هوا سازگار بوده و بشترین بازدهی را دارا باشند |
| 19.03 | Fixed steel frame (stand) for Solar panels, with the adjustable tilt angle between 35 to 45 degree, for more details refer to drawing | 1.0 | No |  |  |  |
| 19.04 | Supply and installtion of metal box for Inverter and other Switches (best quality) | 1.0 | set |  |  |  |
| 19.05 | Best quality Submersible Drop Cable (4\*4)mm² from Inverter to Submersible water pump with clips, nails and complete installation | 250.0 | M |  |  |  |
| 19.06 | Submersible Drop Cable 4\*4mm² from Inverter to Submersible water pump | 250.0 | M |  |  |  |
| 19.07 | Best quality Power cable (2\*6)mm2 for solar panels connection and from solar panels to inverter icluding connectors, tape, plastic conduits and complete installation. | 100.0 | M |  |  |  |
| 19.08 | Power Cable 2\*1.5mm² for float switch ( Level switch from inverter to water tank) | 25.0 | M |  |  |  |
| 19.09 | Power Cable 2\*1.5mm2 for float switch (Level switch from inverter to water tank) with installation and clips. (best quality) | 250.0 | M |  |  |  |
| 19.1 | Installation of complete set of electrical system (solar panel, submersible pump, inverter) with complete requierment and system check, with Safty rope, plastic for holding of solar water pump | 1.0 | JOB |  |  |  |
| 19.11 | Supplying, installation, laying and fitting in place of High Density Polyethylene pipe (PE 100 PN 12.5 SDR 13.6), Outside Diameter: 50 mm, wall thickness ( 3.7- 4.2) mm, weight 0.55 kg/m, Conforming To ISO 4427,DIN8074&PrEN12201 Spesifications. | 80.0 | M |  |  |  |
| 19.12 | Grounding Rod with Copper Cable | 1.0 | set |  |  |  |
| **A20** | **Security wires above boundary wall** | **51.0** | **m** |  |  |  |
| 20.01 | Metal tube 50mm dia | 18.0 | m |  |  |  |
| 20.02 | Angle iron (3cmX3cm) 3mm thick | 51.0 | m |  |  |  |
| 20.03 | Concertina string (60cm circle dia) | 180.0 | m |  |  |  |
| 20.04 | Galvanized wire for concertina fixation | 270.0 | m |  |  |  |
| 20.05 | Skilled labour on site | 4.3 | md |  |  |  |
| 20.06 | Unskilled labour on site | 8.8 | md |  |  |  |
| **A21** | **Main Gate for boundary wall** | **1.0** | **pcs** |  |  |  |
| 21.01 | Main gate (Centenary 1.50mX1.40m) | 1.0 | pcs |  |  |  |
| **A22** | **Digging of bore well** | **1.0** | **Lum Sum** |  |  |  |
| 22.01 | Well drilling according to the type of earth layers with (cobai machine, diameter (16") depends on soil texture and taking sample of each Geological formation. | 80.0 | M |  |  |  |
| 22.02 | Supply and Installation of PVC casing pipe class -D, dia.8" Super Royal PVC pipe D Class10.5kg/m | 35.0 | M |  |  |  |
| 22.03 | Supply and installation of Filter pipe PVC Class-D. 8 inch dia. Total area for filter pipe openings should not be more than 25% of total area. Super Royal PVC pipe D Class10.5kg/m and AND CAP 8" | 45.0 | M |  |  |  |
| 22.02 | Saftey rope Ø10mm for holding of solar pump | 100.0 | M |  |  |  |
| 22.03 | Gravel Packing from sorted gravel round washed gravel the size of gravel should be determind after well drilling accordding to the sample of starta. | 8.0 | M3 |  |  |  |
| 22.04 | Back filling for casing pipe should be clay soil without gravel stone | 4.0 | m3 |  |  |  |
| 22.05 | Complete Water test( Complete physical, chemical and bacteriological tes) | 1.0 | no |  |  |  |
| 22.06 | Well and Network chlorination before used the drinking Water | 1.0 | no |  |  |  |
| 22.07 | Pump Test for the 8 hours with document .With Cleaning of Water | 1.0 | no |  |  |  |
| **A23** | **Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 6-7 land** | **612.0** | **m3** |  |  |  |
| 23.01 | Sand filling under and above water supply pipe | 242.0 | m3 |  |  |  |
| 23.02 | Unskilled labour | 400.0 | md |  |  |  |
| **A24** | **Site tools & Moblization** | **1.0** | **Lum Sum** |  |  |  |
| 24.01 | technical survey by third Parti in the RFQ (20000)AFN | 1.0 | Lum Sum |  |  |  |
| 24.02 | Safety kit for labour (the site of pipe Scheme ) | 40.0 | pcs |  |  |  |
| 24.03 | Salary for one foreman for implementation and arrangement of project work introduced by RRAA during implementation process.in the RFQ (60000)AFN | 3.0 | Months |  |  |  |
| 24.04 | Kit for maintenance specified in the RFQ (20000)AFN | 20.0 | pcs |  |  |  |
| 24.05 | Signboard for pipe scheme (40\*60)cm | 1.0 | pcs |  |  |  |
| 24.06 | Logos and massages | 1.0 | Lum Sum |  |  |  |
| 24.07 | Vase for the Pipe Scheme site | 40.0 | pcs |  |  |  |
| 24.08 | Mobilization on site Pipe Scheme site | 1.0 | Lum Sum |  |  |  |
| **Total cost of activities (A1+A2+……..+A24)** | | | |  |  |  |
|  |  |  |  |  |  |  |

**Specifications of Solar System for Water Supply Network of Kachkol Lmasi Village Nazyan District**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Title** | **Item** | **Quantity** | **Unit** | **Unit cost Afs** | **Total costAfs** | **Remarks** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **A1** | **Site preparation** | **186.0** | **m2** |  |  |  |
| 1.01 | Site preparation, clearing site ect. | 55.8 | md |  |  |  |
| **A2** | **Excavation for Elevated RCC Ground Reservoir,Solar Panel stand &boundary wall** | **100.0** | **m3** |  |  |  |
| 2.01 | Unskilled labour | 100.0 | md |  |  |  |
| **A3** | **Shuttering for RCC Ground Reservoir and boundary wall** | **153.0** | **m2** |  |  |  |
| 3.01 | Wooden timber | 3.1 | m3 |  |  |  |
| 3.02 | Wooden pole 4m long | 350.0 | pcs |  |  |  |
| 3.03 | Nail | 7.7 | kg |  |  |  |
| 3.04 | Skilled labour on site | 7.7 | md |  |  |  |
| 3.05 | Unskilled labour on site | 10.7 | md |  |  |  |
| **A4** | **PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4** | **52.0** | **m3** |  |  |  |
| 4.01 | Sand | 20.1 | m3 |  |  |  |
| 4.02 | Gravel | 40.1 | m3 |  |  |  |
| 4.03 | Cement | 11960.0 | kg |  |  |  |
| 4.04 | water | 5980.0 | liter |  |  |  |
| 4.05 | Skilled labor on site | 33.8 | md |  |  |  |
| 4.06 | Unskilled labour on site | 70.2 | md |  |  |  |
| **A5** | **Stone Masonry of boundary wall ,room & Res with 35% mortar (M300, 1:4)** | **58.0** | **m3** |  |  |  |
| 5.01 | Stone with transportation | 58.0 | m3 |  |  |  |
| 5.02 | Sand | 22.9 | m3 |  |  |  |
| 5.03 | Cement | 5513.8 | kg |  |  |  |
| 5.04 | water | 2785.9 | liter |  |  |  |
| 5.05 | Skilled labour on site | 29.0 | md |  |  |  |
| 5.06 | Unskilled labour on site | 58.0 | md |  |  |  |
| **A6** | **Pointing with mortar (M300, 1:4)** | **58.0** | **m2** |  |  |  |
| 6.02 | Sand | 3.1 | m3 |  |  |  |
| 6.03 | Cement | 127.6 | kg |  |  |  |
| 6.04 | water | 58.0 | liter |  |  |  |
| 6.05 | Skilled labour on site | 9.9 | md |  |  |  |
| 6.06 | Unskilled labour on site | 2.9 | md |  |  |  |
| **A7** | **Bricks masonry with burned bricks with 25% mortar(M:300, 1:4)** | **29.2** | **m3** |  |  |  |
| 7.01 | Brick including transportation(Size, 22\*11\*7cm ) | 15184.0 | pcs |  |  |  |
| 7.02 | Sand | 7.9 | m3 |  |  |  |
| 7.03 | Cement | 2336.0 | kg |  |  |  |
| 7.04 | water | 1168.0 | liter |  |  |  |
| 7.05 | Skilled labour on site | 19.0 | md |  |  |  |
| 7.06 | Unskilled labour on site | 52.6 | md |  |  |  |
| **A8** | **Steel working (footing+column+slab )** | **2400.0** | **kg** |  |  |  |
| 8.02 | Steel bar 10 mm Khan Steel | 432.0 | Kg |  |  |  |
| 8.03 | Steel bar 12 mm Khan Steel | 1968.0 | Kg |  |  |  |
| 8.04 | Wire 1 mm | 30.0 | Kg |  |  |  |
| 8.05 | Skilled labour on site | 15.0 | md |  |  |  |
| 8.06 | Unskilled labour on site | 20.0 | md |  |  |  |
| **A9** | **RCC (footing+column+slab ) of RCC Ground Reservoir and Guard room ( M:250,1:1:2)** | **19.0** | **m3** |  |  |  |
| 9.01 | Sand | 6.4 |  |  |  |  |
| 9.02 | Gravel | 12.8 | m3 |  |  |  |
| 9.03 | Cement | 7600.0 | kg |  |  |  |
| 9.04 | water | 3800.0 | liter |  |  |  |
| 9.05 | Skilled labour on site | 13.3 | md |  |  |  |
| 9.06 | Unskilled labour on site | 38.0 | md |  |  |  |
| **A10** | **Door and Windows for Guard room and Bath room ( PVC) and roof** | **19.0** | **m2** |  |  |  |
| 10.01 | Bitumen cover for preventing leakage (ezogam) | 40 | m2 |  |  |  |
| 10.02 | PVC door (1mX2m) (0.8mX1.8m) | 2.0 | pcs |  |  |  |
| 10.03 | PVC window (1.5mX1.5m)(0.4mX0.4m) | 2.0 | pcs |  |  |  |
| 10.04 | I- beam (steel girder) 100mmX100mm, 5mm thick, 280cm long | 16.0 | M |  |  |  |
| 10.05 | T-iron galvanized steel 4mm thick & 370cm long | 100.0 | M |  |  |  |
| 10.06 | First class burnt brick (chowka) | 220.0 | pcs |  |  |  |
| 10.07 | Skilled labour on site | 4.0 | md |  |  |  |
| 10.08 | Unskilled labour on site | 4.0 | md |  |  |  |
| **A11** | **Plastering ofRCC Ground Reservoir , boundary wall ,stand tap & guard room with cement mortar (M:300,1:4)** | **477.0** | **m2** |  |  |  |
| 11.01 | Sand | 11.9 | m3 |  |  |  |
| 11.02 | Cement | 2862.0 | kg |  |  |  |
| 11.03 | water | 3816.0 | liter |  |  |  |
| 11.04 | Skilled labour on site | 47.7 | md |  |  |  |
| 11.05 | Unskilled labour on site | 47.7 | md |  |  |  |
| **A12** | **Plastering 1:3 (chips) with padllow powder inside of RCC Ground Reservoir** | **16.00** | **m2** |  |  |  |
| 12.01 | Sand | 0.35 | m3 |  |  |  |
| 12.02 | Cement | 140.80 | kg |  |  |  |
| 12.03 | padllow powder | 1.28 | kg |  |  |  |
| 12.04 | Skilled labor on site | 1.60 | md |  |  |  |
| 12.05 | Unskilled labor on site | 3.20 | md |  |  |  |
| **A13** | **Filling with gravel 15 cm of floor and compaction for solar stand and guard room** | **25.0** | **m3** |  |  |  |
| 13.01 | Local stone | 25.0 | m3 |  |  |  |
| 13.02 | Unskilled labour | 7.5 | md |  |  |  |
| **A14** | **Oil painting** | **8.0** | **m2** |  |  |  |
| 14.01 | Plastic Paint 50% inside | 4.0 | kg |  |  |  |
| 14.02 | white glue | 0.2 | kg |  |  |  |
| 14.03 | Marble powder | 4.0 | kg |  |  |  |
| 14.04 | Powder glue | 0.4 | kg |  |  |  |
| 14.05 | Oil paint | 1.8 | kg |  |  |  |
| 14.06 | Skilled labour | 0.4 | md |  |  |  |
| **A15** | **White washing inside with 30% emulsion** | **477.0** | **m2** |  |  |  |
| 15.01 | Plastic Paint 30% inside | 238.5 | kg |  |  |  |
| 15.02 | Skilled labour | 14.3 | md |  |  |  |
| 15.03 | Unskilled labour on site | 19.1 | md |  |  |  |
| **A16** | **Electrical work** | **25.0** | **m** |  |  |  |
| 16.01 | Main Switch | 1.0 | pcs |  |  |  |
| 16.02 | Switch for Bulb | 2.0 | pcs |  |  |  |
| 16.03 | Storage battery 100 amp made in thailand | 1.0 | pcs |  |  |  |
| 16.04 | Solar panel 250 watt made in china (with stand) | 1.0 | pcs |  |  |  |
| 16.05 | Solar fane | 1.0 | pcs |  |  |  |
| 16.06 | Guard room Carpet | 16.0 | m2 |  |  |  |
| 16.07 | Saket under plaster | 2.0 | pcs |  |  |  |
| 16.08 | Electric cable (4X6) | 15.0 | m |  |  |  |
| 16.09 | Wire (2x2.5) | 10.0 | m |  |  |  |
| 16.1 | Electrician | 3.0 | md |  |  |  |
| **A17** | **Hand Role for RCC Ground Reservoir** | **6.0** | **m** |  |  |  |
| 17.01 | Supply and installation of 2 inch Galvanised Iron Ladder both site for reservoir with all required activites according to drawings . | 6.0 | m |  |  |  |
| 17.14 | Skilled labour on site | 1.0 | md |  |  |  |
| 17.15 | Unskilled labour on site | 3.0 | md |  |  |  |
| **A18** | **GI & PE pipe Fittings ( water supply system)** | **2117.0** | **m** |  |  |  |
| 18.01 | GI Pipe 2 1/2 inch( 63mm) ( inflow pipe ), thickness 2 - 3mm ,best quality | 8.0 | m |  |  |  |
| 18.02 | GI Pipe 2 1/2 inch ( 63mm)( outflow pipe ) thickness 2 - 3mm best quality | 8.0 | m |  |  |  |
| 18.03 | GI Pipe 2 1/2inch (63mm)( Supply pipe ) thickness 2 - 3mm with flange, best quality | 4.0 | m |  |  |  |
| 18.04 | GI Pipe 3 inch 75mm)( drainage or cleaning pipe ) thickness 2 - 3mm, best quality | 3.0 | m |  |  |  |
| 18.05 | Air vent pipe 2 inch (50mm)=1m | 1.0 | pcs |  |  |  |
| 18.08 | Coupling 2 inch (50mm) diameter, best quality | 4.0 | pcs |  |  |  |
| 18.09 | Coupling 3 inch (75mm) diameter, best quality | 2.0 | pcs |  |  |  |
| 18.1 | GI Joint 2 (50mm) and 2 1/2 inch ( 63mm) diameter,best quality | 4.0 |  |  |  |  |
| 18.11 | Joint 1,1.5,2.5 (25,40,50,63)mm and 2 inch diameter, best quality | 6.0 | pcs |  |  |  |
| 18.12 | Nipple 2 inch (50mm) diameter, best quality | 4.0 | pcs |  |  |  |
| 18.13 | Nipple 2.5 inch (63mm)diameter, best quality | 4.0 | pcs |  |  |  |
| 18.14 | Elbow 0.5 inch (12.5mm) diameter, best quality | 80.0 | pcs |  |  |  |
| 18.15 | Elbow 2.5 inch (63mm)diameter, quality | 5.0 | pcs |  |  |  |
| 18.17 | Glass wool insulation 2 layers t= 67.5 cm | 30.0 | pcs |  |  |  |
| 18.18 | PE Tee (T) 0.5 inch (12.5mm)diameter, best quality | 25.0 | pcs |  |  |  |
| 18.19 | PE Tee (T)1 1/2inch (40mm)diameter, best quality | 15.0 | pcs |  |  |  |
| 18.2 | PE Tee (T) 2 inch(50mm) diameter, best quality | 10.0 | pcs |  |  |  |
| 18.21 | PE Tee (T) 2 1/2 inch (63mm)diameter, best quality | 140.0 | m |  |  |  |
| 18.22 | PE pipe 2.5 inch ( 63mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0721 kg/m, best quality | 729.0 | m |  |  |  |
| 18.21 | PE pipe 2 inch (50mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0.453 kg/m, best quality | 395.0 | m |  |  |  |
| 18.22 | PE pipe 1 1/4inch (32mm) (PE 100, PN10, SDR 17) 10 bar weight 0.187 kg/m, quality | 495.0 | m |  |  |  |
| 18.23 | PE pipe 1 inch (25mm) (PE 100, PN10, SDR 17) 10 bar weight 0.137 kg/m, quality | 317.0 | m |  |  |  |
| 18.24 | PE pipe 3 inch (75mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 1.02 kg/m, best quality | 41.0 | m |  |  |  |
| 18.25 | Gate valve 1.5"(40mm) Dia=1 1/4" best quality | 3.0 | pcs |  |  |  |
| 18.26 | Gate valve 2"(50mm) best quality | 2.0 | pcs |  |  |  |
| 18.27 | Gate valve 1" (25mm) best quality | 1.0 | pcs |  |  |  |
| 18.28 | Check valve 2.5" (63mm)best quality | 1.0 | pcs |  |  |  |
| 18.29 | PRV Pressure Reduce valve 2"and 1.5" (50 &63)mm best quality | 3.0 | pcs |  |  |  |
| 18.3 | Gate valve 2"(50mm) for reservoir best quality | 2.0 | pcs |  |  |  |
| 18.31 | Socket 3 inch(75mm)dia best quality | 3.00 | pcs |  |  |  |
| 18.32 | Socket 2 inch (50mm)dia best quality | 15.00 | pcs |  |  |  |
| 18.33 | Socket 1 inch (25mm) dia best quality | 15.00 | pcs |  |  |  |
| 18.34 | Reducer 0.5 x3/4' (12.5\*19)mm best quality | 1.0 | pcs |  |  |  |
| 18.35 | Niple 0.5" = 12.5mm best quality | 68.0 | pcs |  |  |  |
| 18.36 | PE female adapter 20X0.5" best quality | 40.0 | pcs |  |  |  |
| 18.37 | Glass wool 2cm thick w=10, L=2m | 20.0 | m2 |  |  |  |
| 18.38 | GI pipe 0.5 inch (12.5mm) thickness 2 - 3mm, best quality | 80.0 | m |  |  |  |
| 18.39 | Top 0.5 (12.5mm) best quality | 40.0 | pcs |  |  |  |
| 18.4 | End cap, 40mm best quality | 8.0 | pcs |  |  |  |
| 18.41 | End cap, 50mm best quality | 6.0 | pcs |  |  |  |
| 18.42 | End cap, 630mm best quality | 4.0 | pcs |  |  |  |
| 18.43 | End cap,75mm best quality | 2.0 | pcs |  |  |  |
| 18.44 | Measurement meter for water , best quality | 40.0 | pcs |  |  |  |
| 18.45 | Meter box Sedaqat Mohmand 4.2kg best quality | 40.0 | pcs |  |  |  |
| 18.46 | Supply and installation of water stopper for joint between floor slab and walls insulation (225 mm width, 15mm thick) | 15.2 | M |  |  |  |
| 18.47 | Supply and installation of best quality well probe sensor, for protection of submersible water pump with complete set | 1.0 | set |  |  |  |
| 18.48 | Power Cable 2\*1.5mm2 for sensor. (best quality) | 200.0 | M |  |  |  |
| 18.49 | Plumber | 15.0 | md |  |  |  |
| 18.5 | Unskilled labour on site | 15.0 | md |  |  |  |
| **A19** | **Water pump and Solar panels with stand (with guarantee)** | **1.0** | **Lum Sum** |  |  |  |
| 19.01 | "Supply, transportation of Submersible pump with its Compatible inverter, control box and Fuse box in stainless steel. EN 1.4301 (AISI  304).EN 1.4301 (AISI 304). EN 1.4539 (AISI 904L).  Rated power – P2= 4 kW, Rated voltage: 3 x 220-230 V  Compatible inverter: 5 KW, IP65-68, Pure sine wave, VFD and soft starter  Avg. water production per day: (7.6 m³/h) 61 m³/day, Total dynamic head: 90m , Pump Max head:100m Solar pump 4 KW according to the technical specification and requirement,  Contractor must submit manufacturer warranty for solar Pump for a period not less than 2 years. Contractor must submit all the required certificates for solar pump  Serial number of Solar pump should be certified by manufacturing company, Supply and transportation of solar pump set" | 1.0 | No |  |  | ظرفیت آب دهی پمپ = 7.68m3/hour باشد و در صورت پایین آمدن سطح آب پمپ بشکل اتوماتیک خاموش شود |
| 19.02 | "Supply and transportation of Solar panels 6500 watt internationaly certified by IEC, ISO, TUV and CE Range of ambient temperature: 233 .. 358 K  Temperature coefficient (Voc): -0.31% /Cº Power tolerance: +3 to 5 %  Maximum power voltage: 32 - 33.2V Open circuit voltage: 38 - 39.5V Max power point current: 8.5 - 9.5A Module shortcut current: 9 - 10 A Minimum power output: 6500 W  Solar module type: POLYCRYSTALLINE  Water proof PV junction boxes IP68 for each array including DC Fuses, DC switch disconnectors, bus bars ,terminals, ducts or trays, supports & labels suitable to the PV arrays loads.  Contractor must submit manufacturer warranty for solar panel for a period not less than 25 years. Contractor must submit all the required certificates for each PV solar panel from  Serial number of PV Panel should be certified by manufacturing company Supply and transportation of solar pump set and solar panels"certified by manufacturing company Supply and transportation of solar pump set and solar panels | 6500.0 | Watt |  |  | سولر ساخت کشور جرمنی ویا 11 شرکت ثبت شده در وزارت انکشاف دهات بوده و در هر نوع آب و هوا سازگار بوده و بشترین بازدهی را دارا باشند |
| 19.03 | Fixed steel frame (stand) for Solar panels, with the adjustable tilt angle between 35 to 45 degree, for more details refer to drawing | 1.0 | No |  |  |  |
| 19.04 | Supply and installtion of metal box for Inverter and other Switches (best quality) | 1.0 | set |  |  |  |
| 19.05 | Best quality Submersible Drop Cable (4\*4)mm² from Inverter to Submersible water pump with clips, nails and complete installation | 100.0 | M |  |  |  |
| 19.06 | Submersible Drop Cable 4\*4mm² from Inverter to Submersible water pump | 100.0 | M |  |  |  |
| 19.07 | Best quality Power cable (2\*6)mm2 for solar panels connection and from solar panels to inverter icluding connectors, tape, plastic conduits and complete installation. | 100.0 | M |  |  |  |
| 19.08 | Power Cable 2\*1.5mm² for float switch ( Level switch from inverter to water tank) | 25.0 | M |  |  |  |
| 19.09 | Power Cable 2\*1.5mm2 for float switch (Level switch from inverter to water tank) with installation and clips. (best quality) | 100.0 | M |  |  |  |
| 19.1 | Installation of complete set of electrical system (solar panel, submersible pump, inverter) with complete requierment and system check, with Safty rope, plastic for holding of solar water pump | 1.0 | JOB |  |  |  |
| 19.11 | Supplying, installation, laying and fitting in place of High Density Polyethylene pipe (PE 100 PN 12.5 SDR 13.6), Outside Diameter: 50 mm, wall thickness ( 3.7- 4.2) mm, weight 0.55 kg/m, Conforming To ISO 4427,DIN8074&PrEN12201 Spesifications. | 80.0 | M |  |  |  |
| 19.12 | Grounding Rod with Copper Cable | 1.0 | set |  |  |  |
| **A20** | **Security wires above boundary wall** | **51.0** | **m** |  |  |  |
| 20.01 | Metal tube 50mm dia | 18.0 | m |  |  |  |
| 20.02 | Angle iron (3cmX3cm) 3mm thick | 51.0 | m |  |  |  |
| 20.03 | Concertina string (60cm circle dia) | 180.0 | m |  |  |  |
| 20.04 | Galvanized wire for concertina fixation | 270.0 | m |  |  |  |
| 20.05 | Skilled labour on site | 4.3 | md |  |  |  |
| 20.06 | Unskilled labour on site | 8.8 | md |  |  |  |
| **A21** | **Main Gate for boundary wall** | **1.0** | **pcs** |  |  |  |
| 21.01 | Main gate (Centenary 1.50mX1.40m) | 1.0 | pcs |  |  |  |
| **A22** | **Digging of bore well** | **1.0** | **Lum Sum** |  |  |  |
|  | Well drilling with Rotaray machine with diameter of 12" | 100.0 | m |  |  |  |
|  | Supply and Installation of PVC casing pipe class -D, dia.8" Super Royal PVC pipe D Class10.5kg/m | 60.0 | M |  |  |  |
| 22.01 | Supply and installation of Filter pipe PVC Class-D. 8 inch dia. Total area for filter pipe openings should not be more than 25% of total area. Super Royal PVC pipe D Class10.5kg/m and AND CAP 8" | 40.0 | M |  |  |  |
| 22.02 | Compressor test of Well up to cleannig of water | 1.0 | No |  |  |  |
| 22.03 | Saftey rope Ø10mm for holding of solar pump | 120.0 | M |  |  |  |
| 22.04 | Gravel Packing from sorted gravel round washed gravel the size of gravel should be determind after well drilling accordding to the sample of starta. | 8.0 | M3 |  |  |  |
| 22.05 | Back filling for casing pipe should be clay soil without gravel stone | 4.0 | m3 |  |  |  |
| 22.06 | Complete Water test( Complete physical, chemical and bacteriological tes) | 1.0 | no |  |  |  |
| 22.07 | Well and Network chlorination before used the drinking Water | 1.0 | no |  |  |  |
| 22.08 | Pump Test for the 8 hours with document . Cleaning and compressor Work | 1.0 | no |  |  |  |
| **A23** | **Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 5-6 land** | **700.0** | **m3** |  |  |  |
| 23.01 | Sand filling under and above water supply pipe | 200.0 | m3 |  |  |  |
| 23.02 | Unskilled labour | 700.0 | md |  |  |  |
| **A24** | **Site tools & Moblization** | **1.0** | **Lum Sum** |  |  |  |
| 24.02 | technical survey by third Parti in the RFQ (20000)AFN | 1.0 | Lum Sum |  |  |  |
| 24.03 | Salary for one foreman for implementation and arrangement of project work introduced by RRAA during implementation process.in the RFQ (60000)AFN | 3.0 | Months |  |  |  |
| 24.04 | Safety kit for labour (the site of pipe Scheme ) | 40.0 | pcs |  |  |  |
| 24.05 | Kit for maintenance specified in the RFQ (20000)AFN | 20.0 | pcs |  |  |  |
| 24.06 | Signboard for pipe scheme (40\*60)cm | 1.0 | pcs |  |  |  |
| 24.07 | Logos and Massages | 1.0 | Lum Sum |  |  |  |
| 24.08 | Vase for the Pipe Scheme site | 40.0 | pcs |  |  |  |
| 24.02 | Mobilization on site Pipe Scheme site | 1.0 | Lum Sum |  |  |  |
| **Total cost of activities (A1+A2+……..+A24)** | | | |  |  |  |

**Specifications of Solar System for Water Supply Network of Said Ahmad Khil Village Kot District**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Title** | **Item** | **Quantity** | **Unit** | | **Unit cost Afs** | | **Total costAfs** | | **Remarks** | |
| **A1** | **Site preparation** | **150.0** | | **m2** |  |  | |  | |
| 1.01 | Site preparation, clearing site ect. | 30.0 | | md |  |  | |  | |
| **A2** | **Excavation for Elevated RCC Water Tank ,valve box,Solar Panel stand &boundary wall** | **70.0** | | **m**3 |  |  | |  | |
| 2.01 | Unskilled labour | 70.0 | | md |  |  | |  | |
| **A3** | **Shuttering for Elevated RCC Water Tank and boundary wall** | **298.0** | | **m**2 |  |  | |  | |
| 3.01 | Wooden timber | 6.0 | | m3 |  |  | |  | |
| 3.02 | Wooden pole 4m long | 350.0 | | pcs |  |  | |  | |
| 3.03 | Nail | 14.9 | | kg |  |  | |  | |
| 3.04 | Skilled labour on site | 14.9 | | md |  |  | |  | |
| 3.05 | Unskilled labour on site | 20.9 | | md |  |  | |  | |
| **A4** | **PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4** | **52.2** | | **m**3 |  |  | |  | |
| 4.01 | Sand | 20.1 | | m3 |  |  | |  | |
| 4.02 | Gravel | 40.2 | | m3 |  |  | |  | |
| 4.03 | Cement | 12006.0 | | kg |  |  | |  | |
| 4.04 | water | 6003.0 | | liter |  |  | |  | |
| 4.05 | Skilled labor on site | 33.9 | | md |  |  | |  | |
| 4.06 | Unskilled labour on site | 70.5 | | md |  |  | |  | |
| **A5** | **Stone Masonry of boundary wall ,room,Gate valve box & Res with 35% mortar (M300, 1:4)** | **49.4** | | **m**3 |  |  | |  | |
| 5.01 | Stone with transportation | 49.4 | | m3 |  |  | |  | |
| 5.02 | Sand | 19.5 | | m3 |  |  | |  | |
| 5.03 | Cement | 4696.8 | | kg |  |  | |  | |
| 5.04 | water | 2373.1 | | liter |  |  | |  | |
| 5.05 | Skilled labour on site | 24.7 | | md |  |  | |  | |
| 5.06 | Unskilled labour on site | 49.4 | | md |  |  | |  | |
| **A6** | **Pointing with mortar (M300, 1:4)** | **49.4** | | **m**2 |  |  | |  | |
| 6.02 | Sand | 2.7 | | m3 |  |  | |  | |
| 6.03 | Cement | 108.7 | | kg |  |  | |  | |
| 6.04 | water | 49.4 | | liter |  |  | |  | |
| 6.05 | Skilled labour on site | 8.4 | | md |  |  | |  | |
| 6.06 | Unskilled labour on site | 2.5 | | md |  |  | |  | |
| **A7** | **Bricks masonry with burned bricks with 25% mortar(M:300, 1:4)** | **29.6** | | **m**3 |  |  | |  | |
| 7.01 | Brick including transportation(Size, 22\*11\*7cm ) | 15392.0 | | pcs |  |  | |  | |
| 7.02 | Sand | 8.0 | | m3 |  |  | |  | |
| 7.03 | Cement | 2368.0 | | kg |  |  | |  | |
| 7.04 | water | 1184.0 | | liter |  |  | |  | |
| 7.05 | Skilled labour on site | 19.2 | | md |  |  | |  | |
| 7.06 | Unskilled labour on site | 53.3 | | md |  |  | |  | |
| **A8** | **Steel working (footing+column+slab )** | **5059.0** | | **kg** |  |  | |  | |
| 8.02 | Steel bar 8 mm Khan Steel | 368.0 | | kg |  |  | |  | |
| 8.03 | Steel bar 10 mm Khan Steel | 55.0 | | Kg |  |  | |  | |
| 8.04 | Steel bar 12 mm Khan Steel | 1410.0 | | Kg |  |  | |  | |
| 8.05 | Steel bar 14 mm Khan Steel | 870.0 | | Kg |  |  | |  | |
| 8.06 | Steel bar 16 mm Khan Steel | 1603.0 | | Kg |  |  | |  | |
| 8.07 | Steel bar 18 mm Khan Steel | 753.0 | | Kg |  |  | |  | |
| 8.08 | Wire 1 mm | 28.0 | | Kg |  |  | |  | |
| 8.09 | Skilled labour on site | 50.6 | | md |  |  | |  | |
| 8.1 | Unskilled labour on site | 45.5 | | md |  |  | |  | |
| **A9** | **RCC (footing+column+slab ) of Elevated Water reservoir,Gate valve box and Guard room ( M:250,1:1:2)** | **60.0** | | **m**3 |  |  | |  | |
| 9.01 | Sand | 20.3 | |  |  |  | |  | |
| 9.02 | Gravel | 40.6 | | m3 |  |  | |  | |
| 9.03 | Cement | 24000.0 | | kg |  |  | |  | |
| 9.04 | water | 12000.0 | | liter |  |  | |  | |
| 9.05 | Skilled labour on site | 42.0 | | md |  |  | |  | |
| 9.06 | Unskilled labour on site | 120.0 | | md |  |  | |  | |
| **A10** | **Door and Windows for Guard room and bathroom( PVC)** | **6.9** | | **m**2 |  |  | |  | |
| 10.01 | I- beam (steel girder) 100mmX100mm, 5mm thick, 280cm long | 2.2 | | M |  |  | |  | |
| 10.02 | T-iron galvanized steel 4mm thick & 370cm long | 18.0 | | M |  |  | |  | |
| 10.01 | Bitumen cover for preventing leakage (ezogam) | 40 | | m2 |  |  | |  | |
| 10.02 | PVC door (1mX2m)(0.8mX1.8m) | 2.0 | | pcs |  |  | |  | |
| 10.03 | PVC window (1.5mX1.5m) (0.4mX0.4m) | 2.0 | | pcs |  |  | |  | |
| 10.04 | First class burnt brick (chowka) | 60.0 | | pcs |  |  | |  | |
| 10.05 | Skilled labour on site | 2.0 | | md |  |  | |  | |
| 10.06 | Unskilled labour on site | 2.0 | | md |  |  | |  | |
| **A11** | **Plastering of reservoir, boundary wall ,stand tap & guard room with cement mortar (M:300,1:4)** | **458.0** | | **m**2 |  |  | |  | |
| 11.01 | Sand | 11.5 | | m3 |  |  | |  | |
| 11.02 | Cement | 2748.0 | | kg |  |  | |  | |
| 11.03 | water | 3664.0 | | liter |  |  | |  | |
| 11.04 | Skilled labour on site | 45.8 | | md |  |  | |  | |
| 11.05 | Unskilled labour on site | 45.8 | | md |  |  | |  | |
| **A12** | **Plastering 1:3 (chips) with padllow powder inside of reservoir** | **12.00** | | **m2** |  |  | |  | |
| 12.01 | Sand | 0.26 | | m3 |  |  | |  | |
| 12.02 | Cement | 105.60 | | kg |  |  | |  | |
| 12.03 | padllow powder | 0.96 | | kg |  |  | |  | |
| 12.04 | Skilled labor on site | 1.20 | | md |  |  | |  | |
| 12.05 | Unskilled labor on site | 2.40 | | md |  |  | |  | |
| **A13** | **Filling with gravel 15 cm of floor and compaction for solar stand and guard room** | **20.0** | | **m**3 |  |  | |  | |
| 13.01 | Local stone | 20.0 | | m3 |  |  | |  | |
| 13.02 | Unskilled labour | 6.0 | | md |  |  | |  | |
| **A14** | **Oil painting for Hand Role,door and Stairs** | **24.0** | | **m**2 |  |  | |  | |
| 14.01 | Plastic Paint 50% inside | 12.0 | | kg |  |  | |  | |
| 14.02 | white glue | 0.7 | | kg |  |  | |  | |
| 14.03 | Marble powder | 12.0 | | kg |  |  | |  | |
| 14.04 | Powder glue | 1.2 | | kg |  |  | |  | |
| 14.05 | Oil paint | 5.3 | | kg |  |  | |  | |
| 14.06 | Skilled labour | 1.3 | | md |  |  | |  | |
| **A15** | **White washing inside with 30% emulsion** | **458.0** | | **m**2 |  |  | |  | |
| 15.01 | Plastic Paint 30% inside | 229.0 | | kg |  |  | |  | |
| 15.02 | Skilled labour | 13.7 | | md |  |  | |  | |
| 15.03 | Unskilled labour on site | 18.3 | | md |  |  | |  | |
| **A16** | **Electrical work** | **25.0** | | **m** |  |  | |  | |
| 16.01 | Main Switch | 1.0 | | pcs |  |  | |  | |
| 16.02 | Switch for Bulb | 2.0 | | pcs |  |  | |  | |
| 16.03 | Storage battery 100 amp made in thailand | 1.0 | | pcs |  |  | |  | |
| 16.04 | Solar panel 250 watt made in china (with stand) | 1.0 | | pcs |  |  | |  | |
| 16.05 | Solar fane | 1.0 | | pcs |  |  | |  | |
| 16.06 | Guard room Carpet | 16.0 | | m2 |  |  | |  | |
| 16.07 | Saket under plaster | 2.0 | | pcs |  |  | |  | |
| 16.08 | Electric cable (4X6) | 15.0 | | m |  |  | |  | |
| 16.09 | Wire (2x2.5) | 10.0 | | m |  |  | |  | |
| 16.1 | Electrician | 3.0 | | md |  |  | |  | |
| **A17** | **Hand Role and Stairs** | **1.0** | | **Lum Sum** |  |  | |  | |
| 17.01 | Supply and installation of 2 inch Iron Ladder for reservoir with all required activites according to drawings. | 12.5 | | m |  |  | |  | |
| 17.02 | Supply and installation of 1.5 inch Galvanised Iron Ladder for inter reservoir with all required activites according to drawings. | 2.5 | | m |  |  | |  | |
| 17.03 | Steel Plate ( 32 x 4 ) mm L= 2.7 No.6 (safety ) | 18.0 | | m |  |  | |  | |
| 17.04 | Steel pipe 1 inch diameter L= 6.5m) No.4 for tank | 25.0 | | m |  |  | |  | |
| 17.05 | Steel pipe 0.5 inch diameter L= 0.5 m) no.8 for tank | 4.0 | | m |  |  | |  | |
| 17.06 | Steel bar 20 mm dia l= 1.5 m no. 4 for tank | 6.0 | | m |  |  | |  | |
| 17.07 | Angle iron ( 50 x 50 x 4 ) mm L= 1 m) No.4 | 4.0 | | m |  |  | |  | |
| 17.08 | GI pipe 1.5 inch diameter ( hand role) L= 6.5 m) No.4 | 26.0 | | m |  |  | |  | |
| 17.09 | Steel pipe 1 inch diameter ( hand role) L= 6.5 m) No.4 | 26.0 | | m |  |  | |  | |
| 17.1 | Steel pipe 1 inch diameter ( hand role)L= 1 m) No.46 | 46.0 | | m |  |  | |  | |
| 17.11 | Skilled labour on site | 3.0 | | md |  |  | |  | |
| 17.12 | Unskilled labour on site | 6.0 | | md |  |  | |  | |
| **A18** | **GI & PE pipe Fittings ( water supply system)** | **1895.0** | | **m** |  |  | |  | |
| 18.01 | GI Pipe 2 1/2 inch( 63mm) ( inflow pipe ), thickness 2 - 3mm ,best quality | 18.0 | | m |  |  | |  | |
| 18.02 | GI Pipe 2 1/2 inch ( 63mm)( outflow pipe ) thickness 2 - 3mm best quality | 6.0 | | m |  |  | |  | |
| 18.03 | GI Pipe 2 1/2inch (63mm)( Supply pipe ) thickness 2 - 3mm with flange, best quality | 18.0 | | m |  |  | |  | |
| 18.04 | GI Pipe 3 inch 75mm)( drainage or cleaning pipe ) thickness 2 - 3mm, best quality | 3.0 | | m |  |  | |  | |
| 18.05 | Air vent pipe 2 inch (50mm)=1m | 1.0 | | pcs |  |  | |  | |
| 18.08 | Coupling 2 inch (50mm) diameter, best quality | 6.0 | | pcs |  |  | |  | |
| 18.09 | Coupling 3 inch (75mm) diameter, best quality | 4.0 | | pcs |  |  | |  | |
| 18.1 | GI Joint 2 (50mm) and 2 1/2 inch ( 63mm) diameter,best quality | 8.0 | |  |  |  | |  | |
| 18.11 | Joint 1,1.5,2.5 (25,40,50,63)mm and 2 inch diameter, best quality | 13.0 | | pcs |  |  | |  | |
| 18.12 | Nipple 2 inch (50mm) diameter, best quality | 4.0 | | pcs |  |  | |  | |
| 18.13 | Nipple 2.5 inch (63mm)diameter, best quality | 4.0 | | pcs |  |  | |  | |
| 18.14 | Elbow 0.5 inch (12.5mm) diameter, best quality | 86.0 | | pcs |  |  | |  | |
| 18.15 | Elbow 2.5 inch (63mm)diameter, quality | 5.0 | | pcs |  |  | |  | |
| 18.16 | Glass wool insulation 2 layers t= 67.5 cm | 30.0 | | m2 |  |  | |  | |
| 18.17 | PE Tee (T) 0.5 inch (12.5mm)diameter, best quality | 30.0 | | pcs |  |  | |  | |
| 18.18 | PE Tee (T)1 1/2inch (40mm)diameter, best quality | 25.0 | | pcs |  |  | |  | |
| 18.19 | PE Tee (T) 2 inch(50mm) diameter, best quality | 20.0 | | pcs |  |  | |  | |
| 18.2 | PE Tee (T) 2 1/2 inch (63mm)diameter, best quality | 15.0 | | pcs |  |  | |  | |
| 18.21 | PE pipe 1.5 inch (40mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0.297 kg/m, best quality | 121.0 | | m |  |  | |  | |
| 18.22 | PE pipe 2.5 inch ( 63mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0721 kg/m, best quality | 158.0 | | m |  |  | |  | |
| 18.21 | PE pipe 2 inch (50mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0.453 kg/m, best quality | 633.0 | | m |  |  | |  | |
| 18.22 | PE pipe 1 1/4inch (32mm) (PE 100, PN10, SDR 17) 10 bar weight 0.187 kg/m, quality | 155.0 | | m |  |  | |  | |
| 18.23 | PE pipe 1 inch (25mm) (PE 100, PN10, SDR 17) 10 bar weight 0.137 kg/m, quality | 770.0 | | m |  |  | |  | |
| 18.24 | PE pipe 3 inch (75mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 1.02 kg/m, best quality | 58.0 | | m |  |  | |  | |
| 18.25 | Gate valve 2"(50mm) best quality | 1.0 | | pcs |  |  | |  | |
| 18.26 | Gate valve 1.5"(40mm) Dia=1 1/4" best quality | 4.0 | | pcs |  |  | |  | |
| 18.27 | Check valve 2" (50mm)best quality | 1.0 | | pcs |  |  | |  | |
| 18.29 | Gate valve 2"(50mm) for reservoir best quality | 2.0 | | pcs |  |  | |  | |
| 18.31 | Socket 3 inch(75mm)dia best quality | 3.00 | | pcs |  |  | |  | |
| 18.32 | Socket 2 inch (50mm)dia best quality | 15.00 | | pcs |  |  | |  | |
| 18.33 | Socket 1 inch (25mm) dia best quality | 15.00 | | pcs |  |  | |  | |
| 18.34 | Reducer 0.5 x3/4' (12.5\*19)mm best quality | 1.0 | | pcs |  |  | |  | |
| 18.35 | Niple 0.5" = 12.5mm best quality | 86.0 | | pcs |  |  | |  | |
| 18.36 | PE female adapter 20X0.5" best quality | 45.0 | | pcs |  |  | |  | |
| 18.37 | Glass wool 2cm thick w=10, L=2m | 20.0 | | m2 |  |  | |  | |
| 18.38 | GI pipe 0.5 inch thickness 2 - 3mm, best quality | 45.0 | | m |  |  | |  | |
| 18.39 | Top 0.5 Zahid best quality | 45.0 | | pcs |  |  | |  | |
| 18.4 | End cap, 40mm best quality | 8.0 | | pcs |  |  | |  | |
| 18.41 | End cap, 50mm best quality | 6.0 | | pcs |  |  | |  | |
| 18.42 | End cap, 630mm best quality | 4.0 | | pcs |  |  | |  | |
| 18.43 | End cap,75mm best quality | 2.0 | | pcs |  |  | |  | |
| 18.44 | Measurement meter for water , best quality | 45.0 | | pcs |  |  | |  | |
| 18.45 | Meter box Sedaqat Mohmand 4.2kg best quality | 45.0 | | pcs |  |  | |  | |
| 18.46 | Supply and installation of water stopper for joint between floor slab and walls insulation (225 mm width, 15mm thick) | 12.8 | | M |  |  | |  | |
| 18.47 | Supply and installation of best quality well probe sensor, for protection of submersible water pump with complete set | 1.0 | | set |  |  | |  | |
| 18.48 | Power Cable 2\*1.5mm2 for sensor. (best quality) | 115.0 | | M |  |  | |  | |
| 18.49 | Plumber | 15.0 | | md |  |  | |  | |
| 18.5 | Unskilled labour on site | 15.0 | | md |  |  | |  | |
| **A19** | **Water pump and Solar panels with stand (with guarantee)** | **1.0** | | **Lum Sum** |  |  | |  | |
| 19.01 | "Supply, transportation of Submersible pump with its Compatible inverter, control box and Fuse box in stainless steel. EN 1.4301 (AISI  304).EN 1.4301 (AISI 304). EN 1.4539 (AISI 904L).  Rated power – P2 = 3 kW, Rated voltage: 3 x 220-230 V  Compatible inverter: 4 KW, IP65-68, Pure sine wave, VFD and soft starter  Avg. water production per day: (7.72 m³/h) 70 m³/day, Total dynamic head: 50m , Pump Max head:100m Solar pump 3 KW according to the technical specification and requirement,  Contractor must submit manufacturer warranty for solar Pump for a period not less than 2 years. Contractor must submit all the required certificates for solar pump  Serial number of Solar pump should be certified by manufacturing company, Supply and transportation of solar pump set" | 1.0 | | No |  |  | | ظرفیت آب دهی پمپ = 7.72m3/hour باشد و در صورت پایین آمدن سطح آب پمپ بشکل اتوماتیک خاموش شود | |
| 19.02 | "Supply and transportation of Solar panels 5000 watt internationaly certified by IEC, ISO, TUV and CE Range of ambient temperature: 233 .. 358 K  Temperature coefficient (Voc): -0.31% /Cº Power tolerance: +3 to 5 %  Maximum power voltage: 32 - 33.2V Open circuit voltage: 38 - 39.5V Max power point current: 8.5 - 9.5A Module shortcut current: 9 - 10 A Minimum power output: 5000 W  Solar module type: POLYCRYSTALLINE  Water proof PV junction boxes IP68 for each array including DC Fuses, DC switch disconnectors, bus bars ,terminals, ducts or trays, supports & labels suitable to the PV arrays loads.  Contractor must submit manufacturer warranty for solar panel for a period not less than 25 years. Contractor must submit all the required certificates for each PV solar panel from  Serial number of PV Panel should be certified by manufacturing company Supply and transportation of solar pump set and solar panels" | 5000.0 | | Watt |  |  | | سولر ساخت کشور جرمنی ویا 11 شرکت ثبت شده در وزارت انکشاف دهات بوده و در هر نوع آب و هوا سازگار بوده و بشترین بازدهی را دارا باشند | |
| 19.03 | Fixed steel frame (stand) for Solar panels, with the adjustable tilt angle between 35 to 45 degree, for more details refer to drawing | 1.0 | | No |  |  | |  | |
| 19.04 | Supply and installtion of metal box for Inverter and other Switches (best quality) | 1.0 | | set |  |  | |  | |
| 19.05 | Best quality Submersible Drop Cable (4\*4)mm² from Inverter to Submersible water pump with clips, nails and complete installation | 250.0 | | M |  |  | |  | |
| 19.06 | Submersible Drop Cable 4\*4mm² from Inverter to Submersible water pump | 250.0 | | M |  |  | |  | |
| 19.07 | Best quality Power cable (2\*6)mm2 for solar panels connection and from solar panels to inverter icluding connectors, tape, plastic conduits and complete installation. | 100.0 | | M |  |  | |  | |
| 19.08 | Power Cable 2\*1.5mm² for float switch ( Level switch from inverter to water tank) | 25.0 | | M |  |  | |  | |
| 19.09 | Power Cable 2\*1.5mm2 for float switch (Level switch from inverter to water tank) with installation and clips. (best quality) | 250.0 | | M |  |  | |  | |
| 19.1 | Installation of complete set of electrical system (solar panel, submersible pump, inverter) with complete requierment and system check, with Safty rope, plastic for holding of solar water pump | 1.0 | | JOB |  |  | |  | |
| 19.11 | Supplying, installation, laying and fitting in place of High Density Polyethylene pipe (PE 100 PN 12.5 SDR 13.6), Outside Diameter: 50 mm, wall thickness ( 3.7- 4.2) mm, weight 0.55 kg/m, Conforming To ISO 4427,DIN8074&PrEN12201 Spesifications. | 80.0 | | M |  |  | |  | |
| 19.12 | Grounding Rod with Copper Cable | 1.0 | | set |  |  | |  | |
| **A20** | **Security wires above boundary wall** | **51.0** | | **m** |  |  | |  | |
| 20.01 | Metal tube 50mm dia | 18.0 | | m |  |  | |  | |
| 20.02 | Angle iron (3cmX3cm) 3mm thick | 51.0 | | m |  |  | |  | |
| 20.03 | Concertina string (60cm circle dia) | 180.0 | | m |  |  | |  | |
| 20.04 | Galvanized wire for concertina fixation | 270.0 | | m |  |  | |  | |
| 20.05 | Skilled labour on site | 4.3 | | md |  |  | |  | |
| 20.06 | Unskilled labour on site | 8.8 | | md |  |  | |  | |
| **A21** | **Main Gate for boundary wall** | **1.0** | | **pcs** |  |  | |  | |
| 21.01 | Main gate (Centenary 1.50mX1.40m) | 1.0 | | pcs |  |  | |  | |
| **A22** | **Digging of bore well** | **1.0** | | **Lum Sum** |  |  | |  | |
| 22.01 | Well drilling according to the type of earth layers with (cobai machine, diameter (16") depends on soil texture and taking sample of each Geological formation. | 80.0 | | m |  |  | |  | |
| 22.02 | Supply and Installation of PVC casing pipe class -D, dia.8" Super Royal PVC pipe D Class10.5kg/m | 50.0 | | M |  |  | |  | |
| 22.03 | Supply and installation of Filter pipe PVC Class-D. 8 inch dia. Total area for filter pipe openings should not be more than 25% of total area. Super Royal PVC pipe D Class10.5kg/m and AND CAP 8" | 30.0 | | M |  |  | |  | |
| 22.04 | Saftey rope Ø10mm for holding of solar pump | 100.0 | | M |  |  | |  | |
| 22.05 | Gravel Packing from sorted gravel round washed gravel the size of gravel should be determind after well drilling accordding to the sample of starta. | 8.0 | | M3 |  |  | |  | |
| 22.06 | Back filling for casing pipe should be clay soil without gravel stone | 4.0 | | m3 |  |  | |  | |
| 22.07 | Complete Water test( Complete physical, chemical and bacteriological tes) | 1.0 | | no |  |  | |  | |
| 22.08 | Well and Network chlorination before used the drinking Water | 1.0 | | no |  |  | |  | |
| 22.09 | Pump Test for the 8 hours with document .With Cleaning of Water | 1.0 | | no |  |  | |  | |
| **A23** | **Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 3-4 land** | **537.0** | | **m3** |  |  | |  | |
| 23.01 | Sand filling under and above water supply pipe | 160.0 | | m3 |  |  | |  | |
| 23.02 | Unskilled labour | 200.0 | | md |  |  | |  | |
| **A24** | **Site tools & Moblization** | **1.0** | | **Lum Sum** |  |  | |  | |
| 24.02 | technical survey by third Parti in the RFQ (20000)AFN | 1.0 | | Lum Sum |  |  | |  | |
| 24.03 | Safety kit for labour (the site of pipe Scheme ) | 40.0 | | pcs |  |  | |  | |
| 24.04 | Salary for one foreman for implementation and arrangement of project work introduced by RRAA during implementation process.in the RFQ (60000)AFN | 3.0 | | Months |  |  | |  | |
| 24.05 | Kit for maintenance specified in the RFQ (20000)AFN | 20.0 | | pcs |  |  | |  | |
| 24.06 | Signboard for pipe scheme (40\*60)cm | 1.0 | | pcs |  |  | |  | |
| 24.07 | Logos and Massages | 1.0 | | Lum Sum |  |  | |  | |
| 24.08 | Vase for the Pipe Scheme site | 40.0 | | pcs |  |  | |  | |
| 24.02 | Mobilization on site Pipe Scheme site | 1.0 | | Lum Sum |  |  | |  | |
| **Total cost of activities (A1+A2+……..+A24)** | | | |  |  |  | |  | |

**Specifications of Solar System for Water Supply Network of Surobai Ghazi Abad Village BatiKot District**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Title** | **Item** | **Quantity** | **Unit** | **Unit cost Afs** | **Total costAfs** | **Remarks** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **A1** | **Site preparation** | **150.0** | **m2** |  |  |  |
| 1.01 | Site preparation, clearing site ect. | 30.0 | md |  |  |  |
| **A2** | **Excavation for Elevated RCC Water Tank ,valve box ,Solar Panel stand &boundary wall** | **70.0** | **m**3 |  |  |  |
| 2.01 | Unskilled labour | 70.0 | md |  |  |  |
| **A3** | **Shuttering for Elevated RCC Water Tank and boundary wall** | **298.0** | **m**2 |  |  |  |
| 3.01 | Wooden timber | 6.0 | m3 |  |  |  |
| 3.02 | Wooden pole 4m long | 350.0 | pcs |  |  |  |
| 3.03 | Nail | 14.9 | kg |  |  |  |
| 3.04 | Skilled labour on site | 14.9 | md |  |  |  |
| 3.05 | Unskilled labour on site | 20.9 | md |  |  |  |
| **A4** | **PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4** | **55.6** | **m**3 |  |  |  |
| 4.01 | Sand | 21.5 | m3 |  |  |  |
| 4.02 | Gravel | 42.9 | m3 |  |  |  |
| 4.03 | Cement | 12788.0 | kg |  |  |  |
| 4.04 | water | 6394.0 | liter |  |  |  |
| 4.05 | Skilled labor on site | 36.1 | md |  |  |  |
| 4.06 | Unskilled labour on site | 75.1 | md |  |  |  |
| **A5** | **Stone Masonry of boundary wall ,room,Gate valve box & Res with 35% mortar (M300, 1:4)** | **53.8** | **m**3 |  |  |  |
| 5.01 | Stone with transportation | 53.8 | m3 |  |  |  |
| 5.02 | Sand | 21.2 | m3 |  |  |  |
| 5.03 | Cement | 5107.2 | kg |  |  |  |
| 5.04 | water | 2580.5 | liter |  |  |  |
| 5.05 | Skilled labour on site | 26.9 | md |  |  |  |
| 5.06 | Unskilled labour on site | 53.8 | md |  |  |  |
| **A6** | **Pointing with mortar (M300, 1:4)** | **53.0** | **m**2 |  |  |  |
| 6.02 | Sand | 2.9 | m3 |  |  |  |
| 6.03 | Cement | 116.6 | kg |  |  |  |
| 6.04 | water | 53.0 | liter |  |  |  |
| 6.05 | Skilled labour on site | 9.0 | md |  |  |  |
| 6.06 | Unskilled labour on site | 2.7 | md |  |  |  |
| **A7** | **Bricks masonry with burned bricks with 25% mortar(M:300, 1:4)** | **29.6** | **m**3 |  |  |  |
| 7.01 | Brick including transportation(Size, 22\*11\*7cm ) | 15392.0 | pcs |  |  |  |
| 7.02 | Sand | 8.0 | m3 |  |  |  |
| 7.03 | Cement | 2368.0 | kg |  |  |  |
| 7.04 | water | 1184.0 | liter |  |  |  |
| 7.05 | Skilled labour on site | 19.2 | md |  |  |  |
| 7.06 | Unskilled labour on site | 53.3 | md |  |  |  |
| **A8** | **Steel working (footing+column+slab )** | **5888.0** | **kg** |  |  |  |
| 8.02 | Steel bar 8 mm Khan Steel | 568.9 | kg |  |  |  |
| 8.03 | Steel bar 10 mm Khan Steel | 355.0 | Kg |  |  |  |
| 8.04 | Steel bar 12 mm Khan Steel | 1410.0 | Kg |  |  |  |
| 8.05 | Steel bar 14 mm Khan Steel | 870.0 | Kg |  |  |  |
| 8.06 | Steel bar 16 mm Khan Steel | 1040.0 | Kg |  |  |  |
| 8.07 | Steel bar 18 mm Khan Steel | 714.0 | Kg |  |  |  |
| 8.08 | Steel bar 20 mm Khan Steel | 930.0 | Kg |  |  |  |
| 8.09 | Wire 1 mm | 28.0 | Kg |  |  |  |
| 8.1 | Skilled labour on site | 58.9 | md |  |  |  |
| 8.11 | Unskilled labour on site | 53.0 | md |  |  |  |
| **A9** | **RCC (footing+column+slab ) of Elevated Water reservoir, Gate valve and Guard room ( M:250,1:1:2)** | **62.0** | **m**3 |  |  |  |
| 9.01 | Sand | 21.0 |  |  |  |  |
| 9.02 | Gravel | 41.9 | m3 |  |  |  |
| 9.03 | Cement | 24800.0 | kg |  |  |  |
| 9.04 | water | 12400.0 | liter |  |  |  |
| 9.05 | Skilled labour on site | 43.4 | md |  |  |  |
| 9.06 | Unskilled labour on site | 124.0 | md |  |  |  |
| 9.07 | water for curing |  |  |  |  |  |
| **A10** | **Door and Windows for Guard room and bathroom( PVC)** | **6.9** | **m**2 |  |  |  |
| 10.01 | I- beam (steel girder) 100mmX100mm, 5mm thick, 280cm long | 2.2 | M |  |  |  |
| 10.02 | T-iron galvanized steel 4mm thick & 370cm long | 18.0 | M |  |  |  |
| 10.01 | Bitumen cover for preventing leakage (ezogam) | 40 | m2 |  |  |  |
| 10.02 | PVC door (1mX2m)(0.8mX1.8m) | 2.0 | pcs |  |  |  |
| 10.03 | PVC window (1.5mX1.5m) (0.4mX0.4m) | 2.0 | pcs |  |  |  |
| 10.04 | First class burnt brick (chowka) | 60.0 | pcs |  |  |  |
| 10.05 | Skilled labour on site | 2.0 | md |  |  |  |
| 10.06 | Unskilled labour on site | 2.0 | md |  |  |  |
| **A11** | **Plastering of reservoir, boundary wall ,stand tap & guard room with cement mortar (M:300,1:4)** | **458.0** | **m**2 |  |  |  |
| 11.01 | Sand | 11.5 | m3 |  |  |  |
| 11.02 | Cement | 2748.0 | kg |  |  |  |
| 11.03 | water | 3664.0 | liter |  |  |  |
| 11.04 | Skilled labour on site | 45.8 | md |  |  |  |
| 11.05 | Unskilled labour on site | 45.8 | md |  |  |  |
| **A12** | **Plastering 1:3 (chips) with padllow powder inside of reservoir** | **12.00** | **m2** |  |  |  |
| 12.01 | Sand | 0.26 | m3 |  |  |  |
| 12.02 | Cement | 105.60 | kg |  |  |  |
| 12.03 | padllow powder | 0.96 | kg |  |  |  |
| 12.04 | Skilled labor on site | 1.20 | md |  |  |  |
| 12.05 | Unskilled labor on site | 2.40 | md |  |  |  |
| **A13** | **Filling with gravel 15 cm of floor and compaction for solar stand and guard room** | **20.0** | **m**3 |  |  |  |
| 13.01 | Local stone | 20.0 | m3 |  |  |  |
| 13.02 | Unskilled labour | 6.0 | md |  |  |  |
| **A14** | **Oil painting for Hand Role,door and Stairs** | **24.0** | **m**2 |  |  |  |
| 14.01 | Plastic Paint 50% inside | 12.0 | kg |  |  |  |
| 14.02 | white glue | 0.7 | kg |  |  |  |
| 14.03 | Marble powder | 12.0 | kg |  |  |  |
| 14.04 | Powder glue | 1.2 | kg |  |  |  |
| 14.05 | Oil paint | 5.3 | kg |  |  |  |
| 14.06 | Skilled labour | 1.3 | md |  |  |  |
| **A15** | **White washing inside with 30% emulsion** | **458.0** | **m**2 |  |  |  |
| 15.01 | Plastic Paint 30% inside | 229.0 | kg |  |  |  |
| 15.02 | Skilled labour | 13.7 | md |  |  |  |
| 15.03 | Unskilled labour on site | 18.3 | md |  |  |  |
| **A16** | **Electrical work** | **25.0** | **m** |  |  |  |
| 16.01 | Main Switch | 1.0 | pcs |  |  |  |
| 16.02 | Switch for Bulb | 2.0 | pcs |  |  |  |
| 16.03 | Storage battery 100 amp made in thailand | 1.0 | pcs |  |  |  |
| 16.04 | Solar panel 250 watt made in china (with stand) | 1.0 | pcs |  |  |  |
| 16.05 | Solar fane | 1.0 | pcs |  |  |  |
| 16.06 | Guard room Carpet | 16.0 | m2 |  |  |  |
| 16.07 | Saket under plaster | 2.0 | pcs |  |  |  |
| 16.08 | Electric cable (4X6) | 15.0 | m |  |  |  |
| 16.09 | Wire (2x2.5) | 10.0 | m |  |  |  |
| 16.1 | Electrician | 3.0 | md |  |  |  |
| **A17** | **Hand Role and Stairs** | **1.0** | **Lum Sum** |  |  |  |
| 17.01 | Supply and installation of 2 inch Iron Ladder for reservoir with all required activites according to drawings. | 12.5 | m |  |  |  |
| 17.02 | Supply and installation of 1.5 inch Galvanised Iron Ladder for inter reservoir with all required activites according to drawings. | 2.5 | m |  |  |  |
| 17.03 | Steel Plate ( 32 x 4 ) mm L= 2.7 No.6 (safety ) | 18.0 | m |  |  |  |
| 17.04 | Steel pipe 1 inch diameter L= 6.5m) No.4 for tank | 25.0 | m |  |  |  |
| 17.05 | Steel pipe 0.5 inch diameter L= 0.5 m) no.8 for tank | 4.0 | m |  |  |  |
| 17.06 | Steel bar 20 mm dia l= 1.5 m no. 4 for tank | 6.0 | m |  |  |  |
| 17.07 | Angle iron ( 50 x 50 x 4 ) mm L= 1 m) No.4 | 4.0 | m |  |  |  |
| 17.08 | GI pipe 1.5 inch diameter ( hand role) L= 6.5 m) No.4 | 26.0 | m |  |  |  |
| 17.09 | Steel pipe 1 inch diameter ( hand role) L= 6.5 m) No.4 | 26.0 | m |  |  |  |
| 17.1 | Steel pipe 1 inch diameter ( hand role)L= 1 m) No.46 | 46.0 | m |  |  |  |
| 17.11 | Skilled labour on site | 3.0 | md |  |  |  |
| 17.12 | Unskilled labour on site | 6.0 | md |  |  |  |
| **A18** | **GI & PE pipe Fittings ( water supply system)** | **2478.0** | **m** |  |  |  |
| 18.01 | GI Pipe 2 1/2 inch( 63mm) ( inflow pipe ), thickness 2 - 3mm ,best quality | 18.0 | m |  |  |  |
| 18.02 | GI Pipe 2 1/2 inch ( 63mm)( outflow pipe ) thickness 2 - 3mm best quality | 6.0 | m |  |  |  |
| 18.03 | GI Pipe 2 1/2inch (63mm)( Supply pipe ) thickness 2 - 3mm with flange, best quality | 18.0 | m |  |  |  |
| 18.04 | GI Pipe 3 inch 75mm)( drainage or cleaning pipe ) thickness 2 - 3mm, best quality | 3.0 | m |  |  |  |
| 18.05 | Air vent pipe 2 inch (50mm)=1m | 1.0 | pcs |  |  |  |
| 18.08 | Coupling 2 inch (50mm) diameter, best quality | 6.0 | pcs |  |  |  |
| 18.09 | Coupling 3 inch (75mm) diameter, best quality | 4.0 | pcs |  |  |  |
| 18.1 | GI Joint 2 (50mm) and 2 1/2 inch ( 63mm) diameter,best quality | 8.0 |  |  |  |  |
| 18.11 | Joint 1,1.5,2.5 (25,40,50,63)mm and 2 inch diameter, best quality | 13.0 | pcs |  |  |  |
| 18.12 | Nipple 2 inch (50mm) diameter, best quality | 4.0 | pcs |  |  |  |
| 18.13 | Nipple 2.5 inch (63mm)diameter, best quality | 4.0 | pcs |  |  |  |
| 18.14 | Elbow 0.5 inch (12.5mm) diameter, best quality | 68.0 | pcs |  |  |  |
| 18.15 | Elbow 2.5 inch (63mm)diameter, quality | 5.0 | pcs |  |  |  |
| 18.16 | Glass wool insulation 2 layers t= 67.5 cm | 30.0 | m2 |  |  |  |
| 18.17 | PE Tee (T) 0.5 inch (12.5mm)diameter, best quality | 30.0 | pcs |  |  |  |
| 18.18 | PE Tee (T)1 1/2inch (40mm)diameter, best quality | 25.0 | pcs |  |  |  |
| 18.19 | PE Tee (T) 2 inch(50mm) diameter, best quality | 20.0 | pcs |  |  |  |
| 18.2 | PE Tee (T) 2 1/2 inch (63mm)diameter, best quality | 15.0 | pcs |  |  |  |
| 18.21 | PE pipe 1.5 inch (40mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0.297 kg/m, best quality | 309.0 | m |  |  |  |
| 18.22 | PE pipe 3 inch (75mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 1.02 kg/m, best quality | 220.0 | m |  |  |  |
| 18.23 | PE pipe 2.5 inch ( 63mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0721 kg/m, best quality | 357.0 | m |  |  |  |
| 18.24 | PE pipe 2 inch (50mm) for water supply (PE 100, PN10, SDR 17) 10 bar weight 0.453 kg/m, best quality | 823.0 | m |  |  |  |
| 18.25 | PE pipe 1 1/4inch (32mm) (PE 100, PN10, SDR 17) 10 bar weight 0.187 kg/m, quality | 248.0 | m |  |  |  |
| 18.26 | PE pipe 1 inch (25mm) (PE 100, PN10, SDR 17) 10 bar weight 0.137 kg/m, quality | 504.0 | m |  |  |  |
| 18.27 | PE pipe 3.5 inch (90mm)for water supply (PE 100, PN10, SDR 17) 10 bar weight 1.46 kg/m, best quality | 17.0 | m |  |  |  |
| 18.28 | Gate valve 1.5" best quality | 6.0 | pcs |  |  |  |
| 18.29 | Gate valve 2.5" best quality | 1.0 | pcs |  |  |  |
| 18.3 | Gate valve 2" best quality | 1.0 | pcs |  |  |  |
| 18.31 | Check valve 2" best quality | 3.0 | pcs |  |  |  |
| 18.32 | Gate valve 2.5" for reservoir best quality | 2.0 | pcs |  |  |  |
| 18.33 | Socket 3 inch(75mm)dia best quality | 3.00 | pcs |  |  |  |
| 18.34 | Socket 2 inch (50mm)dia best quality | 15.00 | pcs |  |  |  |
| 18.35 | Socket 1 inch (25mm) dia best quality | 15.00 | pcs |  |  |  |
| 18.36 | Reducer 0.5 x3/4' (12.5\*19)mm best quality | 1.0 | pcs |  |  |  |
| 18.37 | Niple 0.5" = 12.5mm best quality | 68.0 | pcs |  |  |  |
| 18.38 | PE female adapter 20X0.5" best quality | 45.0 | pcs |  |  |  |
| 18.39 | Glass wool 2cm thick w=10, L=2m | 20.0 | m2 |  |  |  |
| 18.4 | GI pipe 0.5 inch thickness 2 - 3mm, best quality | 68.0 | m |  |  |  |
| 18.41 | Top 0.5 Zahid best quality | 45.0 | pcs |  |  |  |
| 18.42 | End cap, 40mm best quality | 8.0 | pcs |  |  |  |
| 18.43 | End cap, 50mm best quality | 6.0 | pcs |  |  |  |
| 18.44 | End cap, 630mm best quality | 4.0 | pcs |  |  |  |
| 18.45 | End cap,75mm best quality | 2.0 | pcs |  |  |  |
| 18.46 | Measurement meter for water , best quality | 45.0 | pcs |  |  |  |
| 18.47 | Meter box Sedaqat Mohmand 4.2kg best quality | 45.0 | pcs |  |  |  |
| 18.48 | Supply and installation of water stopper for joint between floor slab and walls insulation (225 mm width, 15mm thick) | 13.2 | M |  |  |  |
| 18.49 | Supply and installation of best quality well probe sensor, for protection of submersible water pump with complete set | 1.0 | set |  |  |  |
| 18.5 | Power Cable 2\*1.5mm2 for sensor. (best quality) | 95.0 | M |  |  |  |
| 18.51 | Plumber | 15.0 | md |  |  |  |
| 18.52 | Unskilled labour on site | 15.0 | md |  |  |  |
| **A19** | **Water pump and Solar panels with stand (with guarantee)** | **1.0** | **Lum Sum** |  |  |  |
| 19.01 | "Supply, transportation of Submersible pump with its Compatible inverter, control box and Fuse box in stainless steel. EN 1.4301 (AISI  304).EN 1.4301 (AISI 304). EN 1.4539 (AISI 904L).  Rated power P2 = 3 kW, Rated voltage: 3 x 220-230 V  Compatible inverter: 4 KW, IP65-68, Pure sine wave, VFD and soft starter  Avg. water production per day: (9.43 m³/h) 75 m³/day, Total dynamic head: 50m , Pump Max head:100m Solar pump 3 KW according to the technical specification and requirement,  Contractor must submit manufacturer warranty for solar Pump for a period not less than 2 years. Contractor must submit all the required certificates for solar pump  Serial number of Solar pump should be certified by manufacturing company, Supply and transportation of solar pump set" | 1.0 | No |  |  | ظرفیت آب دهی پمپ = 9.43m3/hour باشد و در صورت پایین آمدن سطح آب پمپ بشکل اتوماتیک خاموش شود |
| 19.02 | Supply and transportation of Solar panels 5000 watt internationaly certified by IEC, ISO, TUV and CE Range of ambient temperature: 233 .. 358 K  Temperature coefficient (Voc): -0.31% /Cº Power tolerance: +3 to 5 %  Maximum power voltage: 32 - 33.2V Open circuit voltage: 38 - 39.5V Max power point current: 8.5 - 9.5A Module shortcut current: 9 - 10 A Minimum power output: 5000 W  Solar module type: POLYCRYSTALLINE  Water proof PV junction boxes IP68 for each array including DC Fuses, DC switch disconnectors, bus bars ,terminals, ducts or trays, supports & labels suitable to the PV arrays loads.  Contractor must submit manufacturer warranty for solar panel for a period not less than 25 years. Contractor must submit all the required certificates for each PV solar panel from  Serial number of PV Panel should be certified by manufacturing company Supply and transportation of solar pump set and solar panels | 5000.0 | Watt |  |  | سولر ساخت کشور جرمنی ویا 11 شرکت ثبت شده در وزارت انکشاف دهات بوده و در هر نوع آب و هوا سازگار بوده و بشترین بازدهی را دارا باشند |
| 19.03 | Fixed steel frame (stand) for Solar panels, with the adjustable tilt angle between 35 to 45 degree, for more details refer to drawing | 1.0 | No |  |  |  |
| 19.04 | Supply and installtion of metal box for Inverter and other Switches (best quality) | 1.0 | set |  |  |  |
| 19.05 | Best quality Submersible Drop Cable (4\*4)mm² from Inverter to Submersible water pump with clips, nails and complete installation | 250.0 | M |  |  |  |
| 19.06 | Submersible Drop Cable 4\*4mm² from Inverter to Submersible water pump | 250.0 | M |  |  |  |
| 19.07 | Best quality Power cable (2\*6)mm2 for solar panels connection and from solar panels to inverter icluding connectors, tape, plastic conduits and complete installation. | 100.0 | M |  |  |  |
| 19.08 | Power Cable 2\*1.5mm² for float switch ( Level switch from inverter to water tank) | 25.0 | M |  |  |  |
| 19.09 | Power Cable 2\*1.5mm2 for float switch (Level switch from inverter to water tank) with installation and clips. (best quality) | 250.0 | M |  |  |  |
| 19.1 | Installation of complete set of electrical system (solar panel, submersible pump, inverter) with complete requierment and system check, with Safty rope, plastic for holding of solar water pump | 1.0 | JOB |  |  |  |
| 19.11 | Supplying, installation, laying and fitting in place of High Density Polyethylene pipe (PE 100 PN 12.5 SDR 13.6), Outside Diameter: 50 mm, wall thickness ( 3.7- 4.2) mm, weight 0.55 kg/m, Conforming To ISO 4427,DIN8074&PrEN12201 Spesifications. | 80.0 | M |  |  |  |
| 19.12 | Grounding Rod with Copper Cable | 1.0 | set |  |  |  |
| **A20** | **Security wires above boundary wall** | **51.0** | **m** |  |  |  |
| 20.01 | Metal tube 50mm dia | 18.0 | m |  |  |  |
| 20.02 | Angle iron (3cmX3cm) 3mm thick | 51.0 | m |  |  |  |
| 20.03 | Concertina string (60cm circle dia) | 180.0 | m |  |  |  |
| 20.04 | Galvanized wire for concertina fixation | 270.0 | m |  |  |  |
| 20.05 | Skilled labour on site | 4.3 | md |  |  |  |
| 20.06 | Unskilled labour on site | 8.8 | md |  |  |  |
| **A21** | **Main Gate for boundary wall** | **1.0** | **pcs** |  |  |  |
| 21.01 | Main gate (Centenary 1.50mX1.40m) | 1.0 | pcs |  |  |  |
| **A22** | **Digging of bore well** | **1.0** | **Lum Sum** |  |  |  |
| 22.01 | Well drilling according to the type of earth layers with (cobai machine, diameter (16") depends on soil texture and taking sample of each Geological formation. | 80.0 | m |  |  |  |
| 22.02 | Supply and Installation of PVC casing pipe class -D, dia.8" Super Royal PVC pipe D Class10.5kg/m | 50 | M |  |  |  |
| 22.03 | Supply and installation of Filter pipe PVC Class-D. 8 inch dia. Total area for filter pipe openings should not be more than 25% of total area. Super Royal PVC pipe D Class10.5kg/m and AND CAP 8" | 30 | M |  |  |  |
| 22.04 | Saftey rope Ø10mm for holding of solar pump | 100.0 | M |  |  |  |
| 22.05 | Gravel Packing from sorted gravel round washed gravel the size of gravel should be determind after well drilling accordding to the sample of starta. | 8.0 | M3 |  |  |  |
| 22.06 | Back filling for casing pipe should be clay soil without gravel stone | 4.0 | m3 |  |  |  |
| 22.07 | Complete Water test( Complete physical, chemical and bacteriological tes) | 1.0 | no |  |  |  |
| 22.08 | Well and Network chlorination before used the drinking Water | 1.0 | no |  |  |  |
| 22.09 | Pump Test for the 8 hours with document . Cleaning and compressor Work | 2.0 | no |  |  |  |
| **A23** | **Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 3-4 land** | **848.0** | **m3** |  |  |  |
| 23.01 | Sand filling under and above water supply pipe | 230.0 | m3 |  |  |  |
| 23.02 | Unskilled labour | 424.0 | md |  |  |  |
| **A24** | **Site tools & Moblization** | **1.0** | **Lum Sum** |  |  |  |
| 24.01 | technical survey by third Parti in the RFQ (20000)AFN | 1.0 | Lum Sum |  |  |  |
| 24.02 | Salary for one foreman for implementation and arrangement of project work introduced by RRAA during implementation process.in the RFQ (60000)AFN | 3.0 | Months |  |  |  |
| 24.03 | Safety kit for labour (the site of pipe Scheme ) | 40.0 | pcs |  |  |  |
| 24.04 | Kit for maintenance specified in the RFQ (20000)AFN | 20.0 | pcs |  |  |  |
| 24.05 | Signboard for pipe scheme (40\*60)cm | 1.0 | pcs |  |  |  |
| 24.06 | Logos and Massages | 1.0 | Lum Sum |  |  |  |
| 24.07 | Vase for the Pipe Scheme site | 40.0 | pcs |  |  |  |
| 24.08 | Mobilization on site Pipe Scheme site | 1.0 | Lum Sum |  |  |  |
| **Total cost of activities (A1+A2+……..+A24** | |  |  |  |  |  |

### Annex 2: Tender submission form

**Price schedule of Ragha Abdulkhil village Achin district of Nangarhar (Price and currency to be inserted by tenderer)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Item** | **Description of supplies** | **Unit** | **Qty** | **Currency: [AFN]** | | |
| **Unit Price** | **Total Price** | |
| 1 | Site preparation |  | m2 | 165 |  |  | |
| 2 | Excavation for Elevated RCC Water Tank ,Solar Panel stand &boundary wall (Excavation of foundation in grad 6- 7 land |  | m3 | 52 |  |  | |
| 3 | Shuttering for Elevated RCC Water Tank and boundary wall |  | m2 | 298 |  |  | |
| 4 | PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4 |  | m3 | 53.3 |  |  | |
| 5 | Stone Masonry of boundary wall ,room,Gate valve box & Res with 35% mortar (M300, 1:4) |  | m3 | 55.9 |  |  | |
| 6 | Pointing with mortar (M300, 1:4) |  | m2 | 55.9 |  |  | |
| 7 | Bricks masonry with burned bricks with 25% mortar(M:300, 1:4) |  | m3 | 28.6 |  |  | |
| 8 | Steel working (footing+column+slab ) |  | kg | 4866 |  |  | |
| 9 | RCC (footing+column+slab ) of Elevated Water reservoir and Guard room ( M:250,1:1:2) |  | m3 | 35 |  |  | |
| 10 | Door and Windows for Guard room and bathroom( PVC) |  | m2 | 40 |  |  | |
| 11 | Plastering of reservoir, boundary wall ,stand tap & guard room with cement mortar (M:300,1:4) |  | m2 | 458 |  |  | |
| 12 | Plastering 1:3 (chips) with padllow powder inside of reservoir |  | m2 | 12 |  |  | |
| 13 | Filling with gravel 15 cm of floor and compaction for solar stand and Guardroom |  | m3 | 20 |  |  | |
| 14 | Oil painting |  | m2 | 24 |  |  | |
| 15 | White washing inside with 30% emulsion |  | m2 | 458 |  |  | |
| 16 | Electrical work |  | m | 25 |  |  | |
| 17 | Hand Role and Stairs |  | Lum Sum | 1 |  |  | |
| 18 | GI & PE pipe Fittings ( water supply system) |  | m | 2447 |  |  | |
| 19 | Water pump and Solar panels with stand (with guarantee) |  | Lum Sum | 1 |  |  | |
| 20 | Security wires above boundary wall |  | m | 51 |  |  | |
| 21 | Main Gate for boundary wall |  | PCs | 1 |  |  | |
| 22 | Digging of bore well |  | Lum Sum | 1 |  |  | |
| 23 | Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 6-7 land |  | m3 | 612 |  |  | |
| 24 | Site tools & Moblization |  | Lum Sum | 1 |  |  | |
| **Total price** | | | | | | |  | |

Annex 2: Tender submission form

**Price schedule of** Kachkol lmasi village Nazyan district **of Nangarhar Province (Price and currency to be inserted by tenderer)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Item** | **Description of supplies** | **Unit** | **Qty** | **Currency: [AFN]** | | |
| **Unit Price** | **Total Price** | |
| 1 | Site preparation |  | m2 | 186 |  |  | |
| 2 | Excavation for RCC Ground Reservoir,Solar Panel stand &boundary wall(Excavation of foundation in grad 6- 7 land) |  | m3 | 100 |  |  | |
| 3 | Shuttering for RCC Ground Reservoir and boundary wall |  | m2 | 153 |  |  | |
| 4 | PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4 |  | m3 | 52 |  |  | |
| 5 | Stone Masonry of boundary wall ,room,Gate valve box & Res with 35% mortar (M300, 1:4) |  | m3 | 58 |  |  | |
| 6 | Pointing with mortar (M300, 1:4) |  | m2 | 58 |  |  | |
| 7 | Bricks masonry with burned bricks with 25% mortar(M:300, 1:4) |  | m3 | 29.2 |  |  | |
| 8 | Steel working (footing+column+slab ) |  | kg | 2400 |  |  | |
| 9 | RCC (footing+column+slab ) of Elevated Water reservoir and Guard room ( M:250,1:1:2) |  | m3 | 19 |  |  | |
| 10 | Door and Windows for Guard room and bathroom( PVC) |  | m2 | 19 |  |  | |
| 11 | Plastering of reservoir, boundary wall ,stand tap & guard room with cement mortar (M:300,1:4) |  | m2 | 477 |  |  | |
| 12 | Plastering 1:3 (chips) with padllow powder inside of reservoir |  | m2 | 16 |  |  | |
| 13 | Filling with gravel 15 cm of floor and compaction for solar stand and Guardroom |  | m3 | 25 |  |  | |
| 14 | Oil painting |  | m2 | 8 |  |  | |
| 15 | White washing inside with 30% emulsion |  | m2 | 477 |  |  | |
| 16 | Electrical work |  | m | 25 |  |  | |
| 17 | Hand Role and Stairs |  | m | 6 |  |  | |
| 18 | GI & PE pipe Fittings ( water supply system) |  | m | 2117 |  |  | |
| 19 | Water pump and Solar panels with stand (with guarantee) |  | Lum Sum | 1 |  |  | |
| 20 | Security wires above boundary wall |  | m | 51 |  |  | |
| 21 | Main Gate for boundary wall |  | PCs | 1 |  |  | |
| 22 | Digging of bore well |  | Lum Sum | 1 |  |  | |
| 23 | Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 6-7 land |  | m3 | 700 |  |  | |
| 24 | Site tools & Moblization |  | Lum Sum | 1 |  |  | |
| **Total price** | | | | | | |  | |

### Annex 2: Tender submission form

**Price schedule of Said ahmadkhail village kot district of Nangarhar (Price and currency to be inserted by tenderer)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Item** | **Description of supplies** | **Unit** | **Qty** | **Currency: [AFN]** | | |
| **Unit Price** | **Total Price** | |
| 1 | Site preparation |  | m2 | 150 |  |  | |
| 2 | Excavation for Elevated RCC Water Tank ,Solar Panel stand &boundary wall (Excavation of foundation in grad 6- 7 land |  | m3 | 70 |  |  | |
| 3 | Shuttering for Elevated RCC Water Tank and boundary wall |  | m2 | 298 |  |  | |
| 4 | PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4 |  | m3 | 52.2 |  |  | |
| 5 | Stone Masonry of boundary wall ,room,Gate valve box & Res with 35% mortar (M300, 1:4) |  | m3 | 49.4 |  |  | |
| 6 | Pointing with mortar (M300, 1:4) |  | m2 | 49.4 |  |  | |
| 7 | Bricks masonry with burned bricks with 25% mortar(M:300, 1:4) |  | m3 | 29.6 |  |  | |
| 8 | Steel working (footing+column+slab ) |  | kg | 5059 |  |  | |
| 9 | RCC (footing+column+slab ) of Elevated Water reservoir and Guard room ( M:250,1:1:2) |  | m3 | 60 |  |  | |
| 10 | Door and Windows for Guard room and bathroom( PVC) |  | m2 | 6.9 |  |  | |
| 11 | Plastering of reservoir, boundary wall ,stand tap & guard room with cement mortar (M:300,1:4) |  | m2 | 458 |  |  | |
| 12 | Plastering 1:3 (chips) with padllow powder inside of reservoir |  | m2 | 12 |  |  | |
| 13 | Filling with gravel 15 cm of floor and compaction for solar stand and Guardroom |  | m3 | 20 |  |  | |
| 14 | Oil painting |  | m2 | 24 |  |  | |
| 15 | White washing inside with 30% emulsion |  | m2 | 458 |  |  | |
| 16 | Electrical work |  | m | 25 |  |  | |
| 17 | Hand Role and Stairs |  | Lum Sum | 1 |  |  | |
| 18 | GI & PE pipe Fittings ( water supply system) |  | m | 1895 |  |  | |
| 19 | Water pump and Solar panels with stand (with guarantee) |  | Lum Sum | 1 |  |  | |
| 20 | Security wires above boundary wall |  | m | 51 |  |  | |
| 21 | Main Gate for boundary wall |  | PCs | 1 |  |  | |
| 22 | Digging of bore well |  | Lum Sum | 1 |  |  | |
| 23 | Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 6-7 land |  | m3 | 537 |  |  | |
| 24 | Site tools & Moblization |  | Lum Sum | 1 |  |  | |
| **Total price** | | | | | | |  | |

### Annex 2: Tender submission form

**Price schedule of Surobai Ghazi abad village Batikot district of Nangarhar (Price and currency to be inserted by tenderer)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Item** | **Description of supplies** | **Unit** | **Qty** | **Currency: [AFN]** | | |
| **Unit Price** | **Total Price** | |
| 1 | Site preparation |  | m2 | 150 |  |  | |
| 2 | Excavation for Elevated RCC Water Tank ,Solar Panel stand &boundary wall (Excavation of foundation in grad 6- 7 land |  | m3 | 70 |  |  | |
| 3 | Shuttering for Elevated RCC Water Tank and boundary wall |  | m2 | 298 |  |  | |
| 4 | PCC (under stone, floor, valve box,stand tap,room,stand )M:150,1:2:4 |  | m3 | 55.6 |  |  | |
| 5 | Stone Masonry of boundary wall ,room,Gate valve box & Res with 35% mortar (M300, 1:4) |  | m3 | 53.8 |  |  | |
| 6 | Pointing with mortar (M300, 1:4) |  | m2 | 53 |  |  | |
| 7 | Bricks masonry with burned bricks with 25% mortar(M:300, 1:4) |  | m3 | 29.6 |  |  | |
| 8 | Steel working (footing+column+slab ) |  | kg | 5888 |  |  | |
| 9 | RCC (footing+column+slab ) of Elevated Water reservoir and Guard room ( M:250,1:1:2) |  | m3 | 62 |  |  | |
| 10 | Door and Windows for Guard room and bathroom( PVC) |  | m2 | 6.9 |  |  | |
| 11 | Plastering of reservoir, boundary wall ,stand tap & guard room with cement mortar (M:300,1:4) |  | m2 | 458 |  |  | |
| 12 | Plastering 1:3 (chips) with padllow powder inside of reservoir |  | m2 | 12 |  |  | |
| 13 | Filling with gravel 15 cm of floor and compaction for solar stand and Guardroom |  | m3 | 20 |  |  | |
| 14 | Oil painting |  | m2 | 24 |  |  | |
| 15 | White washing inside with 30% emulsion |  | m2 | 458 |  |  | |
| 16 | Electrical work |  | m | 25 |  |  | |
| 17 | Hand Role and Stairs |  | Lum Sum | 1 |  |  | |
| 18 | GI & PE pipe Fittings ( water supply system) |  | m | 2478 |  |  | |
| 19 | Water pump and Solar panels with stand (with guarantee) |  | Lum Sum | 1 |  |  | |
| 20 | Security wires above boundary wall |  | m | 51 |  |  | |
| 21 | Main Gate for boundary wall |  | PCs | 1 |  |  | |
| 22 | Digging of bore well |  | Lum Sum | 1 |  |  | |
| 23 | Excavation & backfilling for Pipe Network(Excavation of pipe Network in grad 6-7 land |  | m3 | 848 |  |  | |
| 24 | Site tools & Moblization |  | Lum Sum | 1 |  |  | |
| **Total price** | | | | | | |  | |

**Summary of prices**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Village** | **District** | **Price** |
| 1 | **sofi abad gharb village** | Injil District |  |
| 2 | **Naw Abad Khogiani Village** | Zinda Jan District |  |
| 3 | **Deh Sorkh Village** | Injil District |  |
| **Total Price** | | |  |

**Summary of prices**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Village** | **District** | **Price** |
| 1 | **Ragha Abdulkhail village, Achin district of Nangarhar Province** | Achin District |  |
| 2 | **Surobai Ghazi Abad village, Batikot district of Nangarhar Province** | Batikot District |  |
| 3 | **Said Ahmadkhail village kot district of Nangarhar Province** | Kot District |  |
| 4 | Kachkol lmasi village Nazyan district **of Nangarhar Province** | Nazian District |  |
| **Total Price** | | |  |

|  |  |
| --- | --- |
| **Information required by the Contracting Authority:** | **Information to be entered by tenderer in the below columns:** |
|  |  |

|  |  |
| --- | --- |
| **Company information** | |
| Parent company (legal name) |  |
| Street name and no. |  |
| City |  |
| Postal code |  |
| Country |  |
|  |  |
| Phone no. |  |
| Email |  |
| Website |  |
|  |  |
| Sales Manager (name) |  |
| Director (Name) |  |
| Other contact (Title and Name) |  |
|  |  |
| Does your company have CSR related policies in place – e.g. health and safety policy, HR policy, staff policy, energy policy, climate policy or is a member of Global Compact. Please state which policies. |  |
| Is your company e.g. ISO 26000/50001/14000 certified or SA8000 certified? Please state which. |  |
| Does your company have a Code of Conduct? |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **References** | | | | |
| **Name and country of customer** | **Type of contract** | **Value** | **Contact name** | **Phone and email** |
|  |  |  |  |  |
|  |  |  |  |  |

After having read your Invitation to Tender no. DRA-AFJR/Cordaid –Pipe Scheme 201330 – Nangarhar Provision and Construction services for Pipe scheme network (Reservoir, bore well, stand tap, solar system and guardroom) in 4 village/districts of Nangarhar province

1. Ragha Abdul khil village Achin district.
2. Surobai Ghazi abad village Batikot district.
3. Said ahmad khil village kot district.
4. Kachkol lmasi village Nazyan district.

and after having examined the Tender Dossier, I/we hereby offer to execute and complete the Contract in conformity with all conditions in the Tender dossier for the sum indicated in our financial proposal. On behalf of the company, we are hereby.

* Accept, without restrictions, all the provisions in the Invitation to Tender including General terms and Conditions for Supply contracts, with annexes.
* Provided that a contract is issued by the Contracting Authority we hereby commit to furnish any or all items at the price offered and deliver same to the designated points within the delivery time stated above.
* Certify and attest that we meet the eligibility criteria of article stated in the Instructions to Tenderers.
* Certify and attest compliance with the Code of Conduct for Contractors in Annex 4.

The above declarations will become an integrated part of the contract and misrepresentation will be regarded as grounds for termination.

* In the event the contract is awarded to us, we request that payments under the contract be made to the following account: [insert all necessary references].
* Our tender is valid for a period of 45 days after the closing date in accordance with instructions to tenders.

Signature and stamp:

Signed by:

|  |  |
| --- | --- |
| **The tenderer** |  |
| Name of the company |  |
| Address |  |
| Telephone no. |  |
| Email |  |
| Name of contact person |  |
|  |  |

**DEFINITIONS**

In these general terms and conditions, the terms:

1. “Purchase Order “and “Contract” are used interchangeably and cover also “purchase contract” and/or “supply contract” or any other contract, whichever its denomination, to which these general terms and conditions are made applicable,
2. “Seller” and “Contractor” are used interchangeably and shall also cover the term “Supplier” used in any contract as defined above.
3. “Buyer” and “Contracting Authority” are used interchangeably.
4. “Goods” and “supplies” are used interchangeably, to designate the supplies object of the Contract as defined above.
5. The Contracting Authority’s “partners” are the organisations to which the Contracting Authority is associated or linked.

**1. Delivery terms**

Notwithstanding any Incoterm 2010 used in a purchase order or similar document, it is the responsibility of the Seller to obtain any export license or other governmental authorisation for export.

**2. PAYMENT**

2.1 Payment will be as indicated in the purchase order. Unless otherwise stated in the purchase order, payment terms will be 30 days from receipt of goods and relevant documentation. Payments will only be made by cheque or bank transfer to the Suppliers company bank account.

2.2 Payment made by the Contracting Authority does not imply any acceptance of Goods or related services. Unless otherwise stated in the purchase order, prices are fixed.

**3. INSPECTION AND ACCEPTANCE OF THE GOODS**

3.1. All Goods shall be subject to inspection and testing by the Contracting Authority or its designated representatives, to the extent practicable, at all times and places, including the period of manufacture and, in any event, prior to formal acceptance by the Contracting Authority.

3.2. Neither the carrying out of any inspections of the Goods nor any failure to undertake any such inspections shall release the Seller of any of its warranties or the performance of any obligations under the Contract.

3.3. The Goods shall be taken over by the Contracting Authority when they have been delivered to final destination in accordance with the Contract, have satisfactorily passed the required tests, or have been successfully installed and commissioned as the case may be, and a certificate of acceptance has been issued.

3.4. Under no circumstances shall the Contracting Authority be required, or deemed to, accept any Goods that do not conform to the specifications or requirements of the Contract. The Contracting Authority may condition acceptance of the Goods to the successful completion of acceptance tests. In no case shall the Contracting Authority be obligated to accept any Goods unless and until the Contracting Authority has had a reasonable opportunity to (i) inspect the Goods following their delivery at final destination, (ii) proceed with and complete satisfactory tests, or (iii) be satisfied of installation and commissioning of the equipment, as the case may be, and whichever is the latest. Payment by the Contracting Authority does not imply acceptance of the Goods.

3.5. If the Contracting Authority fails to issue an acceptance certificate within a period of 45 days from actual delivery of the Goods at final destination, successful completion of the tests, successful installation and commissioning, whichever is the latest, the Contracting Authority shall be deemed to have issued the acceptance certificate on the last day of that 45-day period. The issue of the acceptance certificate shall not release the Seller of any of its warranties under the Contract, including those of article 4.

3.6. Notwithstanding any other rights of, or remedies available to, the Contracting Authority under the Contract, in case any of the Goods are defective or otherwise do not conform to the Contract, the Contracting Authority may, at its sole option, reject or refuse to accept the Goods, and the Seller shall promptly proceed in accordance with article 4.3.

**4. WARRANTY OBLIGATIONS**

4.1. Without limitation of any other warranties stated in or arising under the Contract, or resulting from statutory rights under applicable product liability law, the Seller warrants and represents that:

1. the Goods, including all packaging and packing thereof, conform to the specifications of the Contract, are fit for the purposes for which such Goods are ordinarily used and for the purposes expressly made known to the Seller, and shall be of even quality, free from faults and defects in design, material, manufacture and workmanship under normal use in the conditions prevailing in the country of final destination.
2. that the Goods are securely contained, packaged and marked, taking into consideration the mode(s) of shipment in a manner so as to protect the Goods during delivery to their ultimate destination.
3. if the Seller is not the original manufacturer of the Goods, the Seller shall provide the Contracting Authority with the benefit of all manufacturers’ warranties in addition to the present warranties.
4. the Goods are of the quality, quantity and description required by the Contract.
5. the Goods are new and unused; and
6. the Goods are free from any right of claim by any third-party and unencumbered by any title or other rights, including any liens or security interests and claims of infringement of any intellectual property rights, including, but not limited to, patents, trademarks, copyright, and trade secrets.

4.2. Unless provided otherwise in the Contract, all warranties shall remain fully valid for a period of one year after acceptance of the Goods by the Contracting Authority.

4.3. During any period in which the Seller’s warranties are effective, upon notice by the Contracting Authority that the Goods do not conform to the requirements of the Contract, the Seller shall promptly and at its own expense correct such non-conformities or, in case of its inability to do so, replace the defective Goods with goods of the same or better quality or fully reimburse the Contracting Authority for the purchase price paid for the defective goods including freight costs to the final destination. The Seller shall pay all costs relating to the repair or return of the Goods as well as the costs relating to the delivery to final site of any replacement goods to the Contracting Authority. If having been notified by any means, the Seller fails to remedy the defect within 30 days, the Contracting Authority may proceed to take such remedial action as may be necessary, at the seller’s risk and expense and without prejudice to any other rights which the Contracting Authority may have against the Seller under the Contract.

4.4. The Seller shall indemnify and hold harmless the Contracting Authority from and against any and all suits, actions or administrative proceedings, claims and demands from third-parties, losses, damages, costs, and expenses of any nature, including legal fees and expenses, which the Contracting Authority may suffer as a result of any infringement by the Seller of the warranties specified in article 4.1.

**5. AFTER SALES SERVICE**

The Seller shall be able to handle requests from the Contracting Authority for technical assistance, maintenance, service and repairs of the Goods supplied.

**6. Liquidated damages for delay**

Subject to force majeure, if the Seller fails to deliver any of the Goods or to perform any of the services within the time period specified in the Contract, the Contracting Authority may, without prejudice to any other rights and remedies, deduct from the total price stipulated in the Contract an amount of 2.5% of the price of such goods for each commenced week of delay.

However, the ceiling of these penalties is 10% of the total Contract price.

**7. Force Majeure**

Neither Party shall be considered to be in default nor in breach of its obligations under the Contract if the performance of such obligations is prevented by any event of force majeure arising after the date the Contract becomes effective.

For the purposes of this Article, the term "force majeure" means strikes, lock-outs or other industrial disturbances, acts of the public enemy, wars whether declared or not, blockades, insurrection, riots, epidemics, landslides, earthquakes, volcanic activity, storms, lightning, unseasonal floods, washouts, civil disturbances, explosions and any other similar unforeseeable events which are beyond the Parties' control and cannot be overcome by due diligence.

If either Party considers that any circumstances of force majeure have occurred which may affect performance of its obligations, it shall promptly notify the other Party and the Contracting Authority, giving details of the nature, the probable duration and the likely effect of the circumstances. Unless otherwise directed by the Contracting Authority in writing, the Seller shall continue to perform its obligations under the Contract as far as is reasonably practicable and shall employ every reasonable alternative means to perform any obligations that the event of force majeure does not prevent it from performing. The Seller shall not employ such alternative means unless directed to do so by the Contracting Authority.

**8. Termination For Convenience**

The Contracting Authority may, for its own convenience and without charge, cancel all or any part of the Contract. If the Contracting Authority terminate this Contract in whole or in part upon written notice to the Seller, the Contracting Authority shall be responsible for the actual costs incurred by the Seller as a direct result of such termination which are not recoverable by either (i) the sale of the goods affected to other parties within a reasonable time, or (ii) the exercise by the Seller, in a commercially reasonable manner, of other mitigation measures. Any claim by the Seller for such actual costs shall be deemed waived by the Seller unless submitted in writing to the Contracting Authority within thirty (30) calendar days after the Contracting Authority notified the Seller of the termination.

**9. VARIATIONS**

The Contracting Authority may at any time by written instruction vary the quantities of the Goods by 25 percent above or below the original Contract price. The Contracting Authority may also order variations including additions, omissions, substitutions, changes in quality, form, character, and kind of the Goods, related services to be provided by the Seller, as well as method of shipment, packing, place of delivery and sequence and timing of delivery. No order for a variation may result in the invalidation of the Contract, but if any such variation causes an increase or decrease in the price of or the time required for performance under this Contract, and except where a variation is necessitated by a default of the Seller, an equitable adjustment shall be made in the Contract price, or delivery schedule, or both, and the Contract shall be amended by way of an addendum. The unit prices used in the Seller’s tender or quotation shall be applicable to the quantities procured under the variation.

**10. Applicable Law and disputes**

The Contract is governed by, and shall be construed in accordance with the laws of the country of establishment of the Contracting Authority.

Any dispute or breach of contract arising under this Contract shall be solved amicably if at all possible. If not possible and unless provided otherwise in the Contract, it shall be submitted to, and settled by, the competent court in the country of establishment of the Contracting Authority, in accordance with the national law of that country.

**11. REMEDIES FOR DEFAULT**

11.1. The Seller shall be considered in default under the Contract if:

* he fails to deliver any or all of the Goods within the period specified in the Contract;
* he fails to perform any other obligations under the Contract;
* his declarations in respect if  his eligibility (article 15) and/or in respect of article 13 (Child labour and forced labour) and article 14 (Mines), appear to have been untrue, or cease to be true;
* he engages in the practices described in article 16 (corrupt practices).

11.2. Upon occurrence of an event of Seller’s default, and without prejudice to any other rights or remedies of the Contracting Authority under the Contract, the Contracting Authority shall be entitled to one or several of the following remedies:

* liquidated damages for delay under article 7;
* any of the remedies specified in article 4.3;
* refuse to accept all or part of the Goods;
* general damages;
* termination of the Contract.

11.3. Upon termination of the Contract by the Contracting Authority under this article, the Seller shall follow the Contracting Authority’s instructions for immediate steps to bring to a close in a prompt and orderly manner the performance of any obligations under the Contract, in such a way as to reduce expenses to a minimum. The Contracting Authority shall have no other liability than paying the Seller the goods which have already been accepted in accordance with article 3, and shall be entitled to deduct from any such sums:

- any liquidated or general damages due by the Seller;

- and/or any sums due by the Seller under article 4.3;

- and/or any excess cost occasioned by a replacement procurement

from other sources.

The Contracting Authority shall also be entitled to call any pre-financing or performance guarantee provided by the Seller under the Contract.

**12. Officials**

The Seller warrants that no official of the Contracting Authority and/or its partner has received or will be offered by the Seller any direct or indirect benefit arising from this Contract.

**13. Child labour and forced labour**

The Seller warrants that it and its affiliates comply with the UN *Convention on the Rights of the Child* - UNGA Doc A/RES/44/25 (12 December 1989) with Annex – and that it or its affiliates has not made or will not make use of forced or compulsory labour as described in the *Forced labour Convention* and in *the Abolition of Forced Labour Convention 105* of the International Labour Organization. Furthermore, the Seller warrants that it, and its affiliates, respect and uphold basic social rights and working conditions for their employees.

**14. Mines**

The Seller warrants that it and its affiliates are NOT engaged in any development, sale or manufacture of anti-personnel mines and/or cluster bombs or components utilized in the manufacture of anti-personnel mines and/or cluster bombs.

**15. Ineligibility**

By signing the purchase order, the Seller certifies that he is NOT in one of the situations listed below:

1. He is bankrupt or being wound up, is having his affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, is the subject of proceedings concerning those matters, or is in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
2. He has been convicted of an offence concerning his professional conduct by a judgement that has the force of res judicata;
3. He has been guilty of grave professional misconduct proven by any means that the Contracting Authority can justify;
4. He has not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which he is established or with those of the country of the Contracting Authority or those of the country where the Contract is to be performed;
5. He has been the subject of a judgement that has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity;
6. Following another procurement procedure carried out by the Contracting Authority or one of their partners, he has been declared to be in serious breach of contract for failure to comply with his contractual obligations.

**16. Corrupt practices**

The Seller and his personnel shall refrain from performing, condoning or tolerating any corrupt, fraudulent, collusive or coercive practices, whether such practices are in relation with the performance of the Contract or not. “Corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value as an inducement or reward for doing or forbearing to do any act in relation to the Contract or any other contract with the Contracting Authority, or for showing favour or disfavour to any person in relation to the Contract or any other contract with the Contracting Authority.

The payments to the Contractor under the Contract shall constitute the only income or benefit the Seller may derive in connection with the Contract and neither he nor his personnel shall accept any commission, discount, allowance, indirect payment or other consideration in connection with, or in relation to, or in discharge of, his obligations under the Contract.

Transactions are undertaken with due consideration to the arm's length principle (ALP) in that the parties to transactions are independent and on an equal footing.

The execution of the Contract shall not give rise to unusual commercial expenses. Unusual commercial expenses are commissions not mentioned in the Contract or not stemming from a properly concluded contract referring to the Contract, commissions not paid in return for any actual and legitimate service, commissions remitted to a tax haven, commissions paid to a recipient who is not clearly identified or commission paid to a company which has the appearance of being a front company.

**17. Discretion and confidentiality**

The Seller shall treat all documents and information received in connection with the contract as private and confidential, and shall not, save in so far as may be necessary for the purposes of the performance thereof, publish or disclose any particulars of the contract or the project without the prior consent in writing of the Contracting Authority. It shall, in particular, refrain from making any public statements concerning the project or the delivery without the prior approval of the Contracting Authority.

**18. CHECKS AND AUDITS**

The Seller shall permit the Contracting Authority or its representative to inspect, at any time, records including financial and accounting documents and to make copies thereof and shall permit the Contracting Authority or any person authorized by it, including its Back Donors, at any time, to have access to its financial accounting documents and to audit such records and accounts both during and after the implementation of the Contract. In particular, the Contracting Authority may carry out whatever documentary or on-the-spot checks it deems necessary to find evidence in case of suspected unusual commercial expenses.

**19. LIABILITY**

Under no circumstances or for no reason whatsoever will the Back Donor entertain any request for indemnity or payment directly submitted by the Contracting Authorities Contractors.

**20. ELECTRONIC SCREENING**

RRAA may be required to verify the identity of its suppliers/contractors and to check that its suppliers/contractors have not been involved in illegal activities. RRAA reserves the right to use electronic screening tools for this purpose.

**By this Code of Conduct**, the Contracting Authority applies ethics to  
procurement. We expect our contractors to act socially and  
environmentally responsible and actively work for the implementation of  
the standards and principles in this Code of Conduct. The Code of  
Conduct is applicable for all our contractors who supply goods, services  
and works to our operations and projects.  
This Code of Conduct and its related principles and standards are based  
on UN and ILO conventions.  
**General Conditions**The Code of Conduct defines the ethical requirements and standards for  
our contractors, whom we expect to sign and respect the Code of  
Conduct, and work actively towards the implementation hereof. By  
signing the Code of Conduct contractors agree to place ethics central to  
their business activities.  
The provision of the ethical standards constitutes minimum rather than  
maximum standards. International and national laws shall be complied  
with, and where the provisions of law and the Contracting Authority’s  
standards address the same subject, the highest standard shall apply.  
It is the responsibility of the contractor to assure that their contractors and  
subcontractors comply with the ethical requirements and standards set  
forth in this Code of Conduct.  
The Contracting Authority acknowledges that implementing ethical  
standards and ensuring ethical behavior in our supply chain is a  
continuous process and a long-term commitment for which we also have  
a responsibility. To achieve high ethical standards for procurement we  
are willing to engage in dialogue and collaboration with our contractors.  
In addition, we expect our contractors to be open and willing to engage  
in dialogue with us to implement ethical standards for their businesses.  
At the request of the Contracting Authority the contractor must be able to  
document how they, or any potential subcontractors, work to comply with  
the Code of Conduct. This may be done through follow-up meetings  
and/or monitoring of conditions in the supply chain. Should the  
Contracting Authority request an assessment of subcontractors’  
compliance with the Code of conduct, the contractor is required to provide  
the name and details of subcontractors.  
Unwillingness to co-operate or serious violations of the Code of Conduct  
will lead to termination of contracts.  
**Human Rights and Labor Rights**Contractors must at all times protect and promote human- and labor  
rights and work actively to address issues of concern. As a minimum they  
are obliged to comply with the following ethical standards:  
• *Respect for Human Rights* (UN Universal Declaration of Human  
Rights)  
The basic principles of the Universal Human Rights are that all  
human beings are born free and equal in dignity and in rights, and  
everyone has the right to life, liberty, and security of the person.  
Contractors must not flaunt their responsibility to uphold and  
promote the Human Rights toward employees and the community  
in which they operate.  
• *Non exploitation of Child Labor* (UN Child Convention on the  
Rights of the Child, and ILO Conventions Nos. 138, 182, 79)  
Contractors must not engage in the exploitation of child labor and  
contractors must take the necessary steps to prevent the  
employment of child labor. A child is defined as a person under  
the age of 18 and children shall not be engaged in labor that  
compromise their health, safety, mental and social development,  
and schooling. Children under the age of 15 (in developing  
countries 14) may not be engaged in regular work, but children  
above the age of 13 (in developing countries 12) can be engaged  
in light work if it does not interfere with compulsory schooling and  
is not harmful to their health and development.  
• *Employment is freely chosen* (ILO Convention Nos. 29 & 105)  
Contractors must not make use of forced, bonded or involuntary  
prison labor and must respect workers freedom to leave their  
employer.  
• *Freedom of association and the right to collective bargaining* (ILO  
Convention Nos. 87, 98, 135 & 154)  
Contractors must recognize workers right to join or form trade  
unions and bargain collectively and should adopt an open attitude  
towards the activities of trade unions (even if this is restricted  
under national law).  
• *Living wages are paid* (ILO convention 131)  
As a minimum, national minimum wage standards or ILO wage  
standards must be met by contractors. Additionally, a living wage  
must be provided. A living wage is contextual, but must always  
meet basic needs such as food, shelter, clothing, health care and  
schooling and provide a discretionary income - which is not always  
the case with a formal minimum wage.  
Deductions from wages as a disciplinary measure shall not be  
permitted.  
• *No discrimination in employment* (ILO Convention Nos. 100 & 111  
and the UN Convention on Discrimination against Women)  
Contractors must not practice discrimination in hiring, salaries, job  
termination, retiring, and access to training or promotion - based  
on ethnic background, religion, age, caste, gender, sexual  
orientation, political affiliation, disability, marital status, or  
HIV/AIDS status.  
• *No harsh or inhumane treatment of employees (UN covenant on  
Civil and Political Rights, Art. 7)*The use of physical abuse or punishment, sexual or other  
harassment and verbal abuse, the threat of sexual and physical  
abuse, and other forms of intimidation may never be practiced by  
contractors.  
• *Working conditions are safe and hygienic* (ILO Convention C155)  
Contractors must take adequate steps to provide safe and  
hygienic working environments. Additionally, workers safety must  
be a priority and adequate steps must be taken to prevent  
accidents and injury to health associated with or occurring in the  
course of work.  
Hazardous chemicals and other substances shall be carefully  
managed.  
Workers shall receive regular and documented health and safety  
training, and such training shall be repeated for new or reassigned  
workers.  
Access to clean toilet facilities and to potable water, and, if  
appropriate, sanitary facilities for food storage shall be provided.  
Accommodation, where provided, shall be clean, safe and  
adequately ventilated.  
• *Working hours are not excessive* (ILO Conventions Nos. 1 & 14)  
Contractors must ensure that working hours comply with national  
law and international standards. A working week of 7 days should  
not exceed 48 hours and employees must have one day off per  
week. Overtime shall be compensated, limited and voluntary.  
• *Regular employment is provided* (ILO Conventions Nos. 95, 158,  
175, 177 & 181)  
All Work performed must be based on a recognized employment  
relationship established through international conventions and  
national law. Contractors must protect vulnerable group’s regular  
employment under these laws and conventions and must provide  
workers with a written contract. All workers are entitled to a  
contract of employment in a language they understand.  
• *Condition outside the workplace  
Property rights and traditional use of resources*In case of conflicts with local societies about the use of land or  
other natural resources, the parties, must through negotiations  
secure respect for individual and collective rights to areas and  
resources based on custom/practice. This also applies to cases  
where the rights are not formalized.  
• *Marginalized groups*The production and sourcing of raw materials for production  
must not contribute to harm the livelihood of marginalized  
groups, e.g., by occupying large land areas or other natural  
resources the groups in question are dependent on.  
**International Humanitarian Law**Contractors linked to armed conflicts or operating in armed conflict  
settings shall respect civilian’s rights under International Humanitarian  
Law and not be engaged in activities which directly or indirectly initiate,  
sustain, and/or exacerbate armed conflicts and violations of International  
Humanitarian Law. Contractors are expected to take a ‘do no harm’  
approach to people affected by armed conflict.  
Additionally, Contractors shall not be engaged in any other illegal activity.  
**Involvement in Weapon Activities**The Contracting Authority advocates for the Ottawa Convention against  
landmines and the Convention on Cluster Munitions against cluster  
bombs. Contractors shall not engage in any development, sale, or  
manufacturing of anti-personnel mines, cluster bombs or components, or  
any other weapon which feed into violations of International Humanitarian  
Law or is covered by the Geneva Conventions and Protocols.  
**Protection of the Environment**The Contracting Authority wishes to minimize the environmental  
damages applied to nature via our procurement activities and we expect  
our suppliers and contractors to act in an environmentally responsible  
manner. This involves respecting applicable national and international  
environmental legislation. Measures shall be taken to continuously  
minimize greenhouse gas emissions and local pollution, the use of  
harmful chemicals, pesticides, and to ensure sustainable resource  
extraction and management of water, oceans, forest and land, and the  
conversation of biodiversity.  
**Anti-Corruption**Corruption is by the Contracting Authority defined as the misuse of  
entrusted power for private gain and it includes bribery, fraud,  
embezzlement, and extortion. The Contracting Authority holds a great  
responsibility to avoid corruption and ensure high standards of integrity,  
accountability, fairness, and professional conduct in our business  
relations. Contractors are expected to have the same approach by  
undertaking good and fair business ethics and practices, take action to  
prevent and fight corruption, and abide by international conventions as  
well as international and national laws. To fight corruption and promote  
transparency, contractors who are confronted with corrupt practices are  
advised to file a complaint in the RRAA Complaint Mechanism.  
A contractor’s involvement in any form of corrupt practice during any  
stage of a selection process, in relation to the performance of a contract  
or in any other business context is unacceptable and will lead to the  
rejection of bids or termination of contracts.  
**Sexual Harassment, Exploitation and Abuse**Contractors, their staff, sub-contractors, and any other personnel  
engaged by the contractor, must not:

1. Sexually harass, exploit, or sexually abuse any individual.
2. Engage in any sexual activity with a child or children regardless  
   of the age of majority or age of consent locally. A child is defined  
   as being below 18 years of age. Mistaken belief in the age of a  
   child is not a defense.
3. Act in ways that may place a child at risk of abuse, including not giving due consideration to assessing and reducing potential risks to children as a result of implementing activities. Behaviors and actions that are prohibited include, but are not limited to, using inappropriate language or behavior when dealing with a child or children, bullying, and harassing a child verbally or physically, physical punishment, exposing a child to pornography including on-line grooming and trafficking. Whenever possible avoid being alone with a child.
4. Consume, purchase, sell, possess, and distribute any forms of  
   child pornography.
5. Exchange money, employment, goods, or services for sex,  
   including sexual favors or other forms of humiliating, degrading  
   or exploitative behavior. This includes the buying of or profiting  
   from sexual services as well as exchange of assistance that is  
   due to right holders for sexual favors.
6. Exploit the vulnerability of any target group in the context of  
   development, humanitarian, and advocacy work, especially  
   women and children, or allow any person/s to be put into  
   compromising situations. Never abuse a position to withhold  
   development or humanitarian assistance or give preferential  
   treatment; in order to solicit sexual favors, gifts, payments of  
   any kind, or advantage.
7. Engage in sexual relationships with members of crisis-affected  
   populations given their increased vulnerability and since such relationships are based on inherently unequal power dynamics  
   and undermine the credibility and integrity of aid work.

**Animal Welfare**Animal welfare shall be respected. Measures should be taken to  
minimize any negative impact on the welfare of livestock and working  
animals. National and international animal welfare legislation and  
regulations shall be respected.  
**Photography**To protect the dignity and maintain confidentiality, Contractor’s  
personnel are to refrain from taking photos or videos of beneficiaries or  
members of the host population. If the contractors wish to take images  
of the installations/works they are undertaking, this is permitted, but it is  
the Contractors responsibility to ensure that no beneficiaries or  
members of the host population are visible in the images.  
**Complaints**Contractors, sub-contractors, their staff, and other individuals are  
encouraged to report any breaches or suspected breaches of this Code  
of Conduct to See fazal.rahman@rraa.org.af  
[https://www.rraa.org.af](https://www.rraa.org.af/)