



ISLAMIC RELIEF

Islamic Relief in Pakistan is registered with the Securities and Exchange Commission of Pakistan (CUIN Registration No. 0033819) under Section 42 of Companies Ordinance 1984

Tender Pack

PROPOSAL FOR: Supply of Material and Rehabilitation of Two (02) Drinking Water Supply Schemes (DWSS) for Project in District South Waziristan, Khyber Pakhtunkhwa.

ADVERTISEMENT DATE: January 12, 2021

TENDER DOCUMENTS ISSUANCE: January 12, 2021 to January 21, 2021 (Before 1400 Hrs)

DOCUMENTS SUBMISSION DATE: January 21, 2021 (Latest by 1500 Hrs)



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1. CONFIDENTIAL QUESTIONNAIRE

Company Information

Question	Response
Full Legal and Trading Name.	
Date of Registration of your company (please attach certificate)	
Full address.	
Registered place of business (if different from street address).	
Name the contact within your organization to whom all correspondence regarding this should be addressed. This include Cell#, Email Address	
Company website address.	
Name and position of person authorized to enter into negotiations and sign any formal agreement.	
Company registration details such as, i. Registration numbers ii. VAT Registration number iii. Trade license number (copy must be attach)	
Name of other key contacts: Director/s. Sales/Orders. Technical Support.	



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Business Information

Question	Response
<p>Provide a brief description of your Company profile and structure, size and location(s) including a brief overview of your marketing and the scope of operations and styles manufactured.</p> <p>Relationships with any parent company (if applicable).</p> <p>Include details of third party contractors where applicable.</p> <p>Details of joint venture arrangements (if applicable).</p>	
List of Products/Services	
List of Major Clients	
<p>Details of your company's experience in the execution of similar contracts, keeping in view the following points:</p> <ul style="list-style-type: none">i. Name of company/INGOsii. Contract Valueiii. References <p>(agreements copy must be attach)</p>	



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Banker's Detail:

Question	Response
Bank Name, Account Title, branch and total turnover in USD of last year (attach the bank statement of last 6 months)	

Trade Reference (only for similar Projects):

	1	2	3	4
Name of Organization				
Contact name and phone number				
Description of items/services delivered				
Quantity				
Date contract awarded				
Date contract Completed				
Value of Contract in PKR				



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2. Pricing (RFQ)

M/s _____

Date: _____

Ref. # _____

Islamic Relief (IR) is an International Non-Governmental Humanitarian Organization (NGO) providing humanitarian aid during emergencies and working for long-term development of the world's poorest people.

Islamic Relief (Pakistan) takes this opportunity to request you to quote the prices for the Supply of Material and Rehabilitation of Two (02) Drinking Water Supply Schemes (DWSS) for Project in District South Waziristan, Khyber Pakhtunkhwa as per following detail:

S#	Scheme Name/Locations	Unit	Qty	Amount
1	Rehabilitation of Drinking Water Supply Scheme (DWSS) Rasool Khan Kaly at Sarwakai in South Waziristan-KPK as per BOQ Annex-1	Scheme	1	
2	Rehabilitation of Drinking Water Supply Scheme (DWSS) Islam.Uddin at Sarwakai in South Waziristan-KPK as per BOQ Annex-2	Scheme	1	
Total Amount (Inclusive of Material Supply, Rehabilitation and Taxes)				

Itemized prices against each BoQ shall be provided by the supplier (attached).

Note: IR will have the right to conduct the lab test for of samples to evaluate the quality and also the consignment if selected.

Delivery Time	
Delivery Location	Sarwakai in District South Waziristan-Khyber Pakhtunkhwa

3. General Terms & Conditions

General

- Supplier will be required to provide CDR/DD amounting 5 % (in the name of "Islamic Relief"). CDR/DD will be returned to unsuccessful bidders after decision of tender. Tender without CDR/DD will not be considered.
- Quoted prices for the above items shall be inclusive of all kind of govt. taxes including GST and duties as per prevailing Tax Laws of Govt. of Pakistan, Transportation, and Custom Clearance and port taxes (if any)
- All prices must be quoted in Pak rupees.
- Prices quoted shall be Delivered Duty Paid (DDP) at the identified locations i.e. District South Waziristan in Khyber Pakhtunkhwa.
- Any damage, loss, theft and demurrages outside the premises of Islamic Relief (Pakistan) shall be the responsibility of supplier / agent.



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- 6- Withholding tax & GST as per government prevailing rates shall be deducted at the time of payment.
- 7- Payment shall be made in the form of cross cheque within 21 days after acceptance of delivery and subsequent submission of the invoice to the Islamic Relief (Pakistan).
- 8- Islamic Relief reserves the right to reject any or all bids without assigning any reason thereof.
- 9- Expected delivery time must be mentioned on your quotation.
- 10- Lowest evaluated bidder will be those whose samples has been accepted/approved.
- 11- Incomplete Bids/documents shall not be entertained.

3.1 Bid Submission Requirements

1- The following documents should be accompany the tender:

- Updated Company Profile with all registration certificates
- Updated bank statements of last 6 months and Last year audited financial statements
- Relevant Purchase Orders, Agreements and completion certificates
- CDRs/DDs 5% of the total bid value

2- Sealed Bids addressed to “Procurement Committee” should be drop in quotation box placed at AN Arcade Plot # 10-A, St. # 87, G-13/1, Islamabad on or before January 21, 2021 (latest by 1500 Hrs).

3.2 Validity of Price

Prices shall remain valid for at least 90 days from the date of opening. If the last date falls on a holiday, the validity shall be extended to the next working day of the Company thereafter.

For Islamic Relief _____ Sig & Seal of bidder _____



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4. Supplier Screening Form

Company Information:-

Company Name (as appeared on Registration Document): _____

Company Address: _____

Country: _____ Telephone: _____ Website: _____

Director(s) names (Please ensure you enclose proof of identity of director(s) e.g. passport copy or ID card)

Has the organization been convicted of any criminal offence?

Yes No

Does the organization have any relationship with current IR staff in the following capacity?

Personal/Family Yes No

Business Yes No

If you have answered YES to any of the above then can you please state in detail the relationship you have and with whom

How did you hear about IR's service request? _____

Please note that it is compulsory for the following to be provided to us:

1. Company Registration
2. Photo copy of ID/Passport of Directors

Consent

Our organization is not involved in and does not support any activity which is considered illegal by the Government of _____ (insert Country) or under the International Laws Community or what may be termed a 'terrorist activity'

I confirm that the above information is accurate to the best of my knowledge. I have not withheld information.

Name: _____

Position: _____

Sign & Official stamp: _____

Date: _____

We will treat your personal information as confidential and your details will not be shared with anyone else. The information on this form is required for the purpose of providing security screening.

Internal Use

Received by (local office): Name

Position

Date

Information sent to (HQ): Name

Date



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5. Queries..... please write us

If you have any query on tender document than please write to pcco@irp.org.pk

6. Complaints..... please write us

If you see any violation of rights or any incident of corruption, please contact us at:

complaints@irworldwide.org

Islamic Relief has zero tolerance for corruption & bribery and is committed to listen and Address any violation of rights of aid workers, suppliers, contractors and our beneficiary communities.



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7. Supplier Code of Conduct

1 Islamic Relief Worldwide requires all firm to adhere to:

- 1.1 The Modern Slavery Act 2015
- 1.2 The International Labour Standards as defined by the ILO (International Labor Organization). This Code of Conduct developed by the Inter Agency Procurement Group (IAPG) is inspired by the International Labour Standards.

2 Corporate Social Responsibility (CSR)

This information is to advise you, our service provider of the Corporate Social Responsibility (CSR) element in our supplier relationships:

- 2.1 Goods and services purchased are produced and developed under conditions that do not involve the abuse or exploitation of any persons.
- 2.2 Goods/services produced and delivered by organizations subscribe to no exploitation of children
- 2.3 Goods/services produced and manufactured have the least impact on the environment
- 2.4 Goods and services are produced and delivered under conditions where:
 - 2.4.1 Employment is freely chosen
 - 2.4.2 The rights of staff to freedom of association and collective bargaining are respected.
 - 2.4.3 Living wages are paid
 - 2.4.4 There is no exploitation of children
 - 2.4.5 Working conditions are safe and hygienic
 - 2.4.6 Working hours are not excessive
 - 2.4.7 No discrimination is practiced
 - 2.4.8 Regular employment is provided
 - 2.4.9 No harsh or inhumane treatment of staff is allowed.
- 2.5 Environmental Standards:

Service provider should as a minimum comply with all statutory and other legal requirements relating to environmental impacts of their business. Areas to be considered are:

 - 2.5.1 Waste Management
 - 2.5.2 Packaging and Paper
 - 2.5.3 Conservation
 - 2.5.4 Energy Use
 - 2.5.5 Sustainability

3 Business Behaviour:

Islamic Relief will seek alternative sources where the conduct of service provider demonstrably violates the Modern Slavery Act 2015, and there is no willingness to address the situation within a reasonable time-frame.

Islamic Relief will seek alternative sources where companies in the supply chain are involved in the manufacture of arms or the sale of arms to governments which systematically violate the human rights of their citizens.

Qualifications to the statement:

Where speed of deployment is essential in saving lives, IAPG members will purchase necessary goods and services from the most appropriate available source.

Annex-1 (BOQ for Drinking Water Supply Scheme (DWSS) Rasool Khan Kaly at Sarwakai in South Waziristan-KPK)					
S#	Activities	Unit	Quantity	Unit Rate	Amount
				PKR	PKR
A.	Construction of Over Head Water Tank				
1	Excavation in foundation of tank				
	Excavation in foundation of building, septic tank, water tank, drainage line, irrigation channel and water pipe line of different dia in all kind of soil including soft soil, hard rock, shingle/gravel etc. For details see the drawings.	Cft	2,206		
2	P.C.C(1:4:8) as in Foundation				
	Providing and laying Plan cement concrete including shuttering, maxing, placing, compacting, finishing and curing up to two weeks (nominal mix ration 1:4:8) (the crush must be well graded, free from mud and dust and the sand will be fine & clear from mud/dust) as in foundation complete in all respect & as per drawing. Required crushing strength must be not less than 1800 psi.	Cft	100		
3	RCC 1:2:4 as in Foundation				
	Providing and laying/pouring reinforced cement concrete (RCC) 1:2:4 ratio including shuttering, curing up to 28 days, compacting, maxing (maxing must be on a surface which having zero water absorption capacity like concrete floor or thick polythene sheet etc.), finishing (for good finishing polythene sheet must be used on the shuttering surface). as foundation, plinth beam, base slab etc. For details see the drawings. Required crushing strength must be not less than 3000 psi.	Cft	917		
4	RCC 1:2:4 as in Super Structure				
	Providing and laying/pouring reinforced cement concrete (RCC) 1:2:4 ratio including shuttering, curing up to 28 days, compacting, maxing (maxing must be on a surface which having zero water absorption capacity like concrete floor or thick polythene sheet etc.), finishing (for good finishing polythene sheet must be used on the shuttering surface). as columns, slabs, braced beams, stairs etc. For details see the drawings. Required crushing strength must be not less than 3000 psi.	Cft	1,225		
5	Supplying/Fixing Grade-60 Steel				
	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade-60) including cutting, bending, binding, fixing on specified location, transportation form cutting point to fixing location etc	kg	8,224		
6	Mosaic Work Over Plaster surface on Internal surface of Water Tank				
	Mosaic work including rough cement plaster surface as a base in 1:4 CSM 1/2" upto 20' height as in water tank, parapet wall etc complete with good finishing and smooth edges.	Sft	507		
7	F/installation of M.S main hole cover 2'x2' or 0.37sqm(2'x2'x.25" with lock arrangement)				
	Providing and fixing of M.S main hole cover 2'x2' or 0.37sqm(2'x2'x.25" with lock arrangement) complete with all necessary fittings	No	1		
8	F/installation of Wash out, over flow, out let, vent pipe 3" dia with hoisting & foot duck				
	Supplying & installation of Wash out, over flow, out let, vent pipe 3" dia with hoisting & foot duck complete with fixing clamps, cutting, treading etc as per drawing.	Rft	150		

Annex-1 (BOQ for Drinking Water Supply Scheme (DWSS) Rasool Khan Kaly at Sarwakai in South Waziristan-KPK)					
S#	Activities	Unit	Quantity	Unit Rate	Amount
				PKR	PKR
9	F/installation of M.S Ladder				
	Supplying & fixing of MS angle iron ladder of 1.5"x1.5" x 2/8" main irons bars, 1.5"x1.5" x 2/8" agnle iron as in steps @9" c/c distance and 1.5"x1.5"x1/8", 1'-6" wide and 2'-6" high side rail on both sides complete with weldings, painting and other nessessory fittings, as per drawings and instruction of engineer incharge.	Rft	45		
10	Earth Fill around Water Tank				
	Refilling with excavated/out side earth upto 2km lead in 6" layers including compaction upto 85% FDT with mechanical machineries i.e compactor, mini roller etc	Cft	1,800		
11	Grill at the Bottom and Top slabs of water tank				
	Supplying & fixing of MS angle iron grill of 1"x1"x1/16" square or round iron bars in vertical supports with 2'-6" height and at a distance of 9"c/c, the top rail should be 1.5"x1.5"x1/8" complete with weldings and other nessessory fittings, as per drawings. The bottom of the support pipes should be welded with extended bars of base slab of water tank or with plat of 4"x4"x1/8".	Rft	156		
12	B.B.W in Core Wall of Water Tank				
	First class burnt brick masonry in 1:4 cement sand mortar , comprising 9" or 4.5" including curing upto one week, masonry work must be good finished, bricks must be 4.5" x 9" x 3" complete in all respects as in core wall of water tank including v-type pointing on outer edge. For details see the drawings in Annex. Required crushing strength must be not less than 1800 psi.	CFT	302		
13	Water Stopper (10" Wide)				
	Supplying and fixing of water stopper of 10" wide complete of best quality.	Rft	100		
14	P.C Pointing in (1:3) CSM				
	Point of cement mortar 1:3 over outer surface of water tank of V-type complete in all respect, curig upto 14 days, proper finishing and edges of masonry should be made of plaster in border shape.	SFT	403		
B.	Water Supply Pipes Networking				
1	Excavation				
	Excavation in trench of water pipe line of different dia in all kind of soil including soft soil, hard rock, shingle/gravel etc, as per drawings & BOQ.	Cft	4,992		
2	HDPE Pipes				
	Providing and Laying HDPE pipe PN-12.5 PE-100, Din-8074/Din-8075/ISO-4427 including testing, disinfect, cutting, treading, shifting to spacificed locations complete as per Drawing and BOQ.				
	2" dia	Rft	328		
	1" dia	Rft	2,500		
	1/2" dia	Rft	500		
3	Clamps for Distribution Lines connections				
	providing and fixing of HDPE clamps of best quality for distribution line from main line the sizes of clamp should as per the above mention pipes dia's (including testing ect complete).	No's	70		
4	G.I Ball Valve 3"x2"				
	Suplying and Fixing of G.I valve of best quality and approved brand (including testing ect complete)	No	5		
5	G.I Ball Valve 3"				
	Suplying and Fixing of G.I valve of best quality and approved brand (including testing ect complete)	No	4		
6	HDPE Pipes connectors(Couplers)				

Annex-1 (BOQ for Drinking Water Supply Scheme (DWSS) Rasool Khan Kaly at Sarwakai in South Waziristan-KPK)					
S#	Activities	Unit	Quantity	Unit Rate	Amount
				PKR	PKR
	Supplying and Fixing of HDPE pipes connectors of best quality (including testing ect complete)				
	HDPE pipe 2" i/d main lines	No	1		
	HDPE pipe 1" i/d Main lines	No	5		
	HDPE pipe 1/2" i/d Distribution lines	No	4		
7	Socket/Flang 3" with Rubber washer and nut bolts				
	Supplying and Fixing of 3" socket or flange with rubber washer and nuts of 2"x 1/2" of best quality and approved brand (including testing etc complete)	No	8		
C.	Paintings Works				
1	Three (3) Coats Weather Shield as on External Surface				
	Providing and laying Three (3) coats of weather shield as in external surface of pump house, Boundary wall and Overhead water tank including, preparation of surface and arrangement of shuttering complete.	SFT	13,080		
2	Three (3) Coats of Distempering as on Internal Surface				
	Providing and laying Three (3) coats of good quality distempering as in internal surface of pump house, preparation of surface, arrangement of shuttering and good finishing complete.	SFT	2,655		
3	Internal Electrification of Pump Room				
	Internal electrification complete as specified in p.v.c pipe complete in all respect. Including 3 energy saver (one inside the room and 2 out side of the room , 4"x4" pvc electric box, 3/0.029 wire as per requirments etc	Job	1		
4	S/F of Best Quality Ceiling Fan				
	S/F of best quality Ceiling fan with dimmer,plug and installation complete .	No's	1		
D.	Solar Based Water pumping System				
1	Submersible Pump with Electric Motor @ 10 Hp				
	Supply & Installation, testing and commissioning of Submersible Water Pump (ISO – 9906 Certified) with water discharge of 1400 galons per hour(GPH), Coupled with Submersible rewind-able Electric Motor with AC winding and all accessories like Motor Control Unit (equipped with UV/OV, dry run protection device, surge protection, phase reverse indicator) Complete in all accessories including NRV.	Each	1		

Annex-1 (BOQ for Drinking Water Supply Scheme (DWSS) Rasool Khan Kaly at Sarwakai in South Waziristan-KPK)					
S#	Activities	Unit	Quantity	Unit Rate	Amount
				PKR	PKR
2	Solar Pump Inverter @ 7.5-11 KW				
	Supply, install, connect and operate of 3 Phase 220/380V Solar Pump inverter (MPPT), efficiency 98% and suited to any PV module Array configuration, the inverter depending on the system design and installation proposed and for the future extended. The DC max power input rating should be equal 11 kWp of the PV modules capacity at standard test condition (STC). The inverter unit shall be suitable for indoor and outdoor installations with IP65. The rated AC output power should be 11 kW compatible with the AC loads design. The inverter must include the safety concepts such as (triple protection with optiprotect, electronic string fuse, self-learning string failure detection, DC surge arrester) to ensure max availability. The contractor should provide certified characteristics, shop test performance curves, spare parts regular (as recommended by manufacturer), maintenance catalogues and manufacturers warrantee for inverter for a period not less than 10 years. The Manufacture testing certificate should be provided for the inverter and the contractor will provide the necessary arrangements for inspecting of the supervision team of the panels before transporting work site. All works and materials must be according to the specifications and supervisor engineer instruction's and approval..	Each	1		
3	Sign Board				
	Providing and installation of Sign Board size of 4'X3' internal size using 18gauge steel sheet , 16 guage pipe 1.5" dia as in frame of size 4.5' x 3.5' & 4'heigh foots with cross angel iron double strips of 1 feet length, writing of given data double side with IR logo) and minimum 4x numbers of wall chalking of given data with IR logo complete 5' X 8' size on the near by wall or as directed by Engineer.	No's	2		
4	Plantation around the pond				
	Providing and planting of guava, grapes, pomegranate, olive, pine, mulberry or Sheesham plants to reduce evaporation losses.	No's	50		
Total Amount Inclusive of All (Labour+Materials+Tax)					

Annex-2 (BOQ for Drinking Water Supply Scheme (DWSS) Islam.Uddin at Sarwakai in South Waziristan-KPK)					
S#	Activities	Unit	Qty	Unit Rate	Amount
				PKR	PKR
A.	Water Supply Pipes Networking				
1	Excavation				
	Excavation in trench of water pipe line of different dia in all kind of soil including soft soil, hard rock, shingle/gravel etc, as per drawings & BOQ.	Cft	1,992		
2	HDPE Pipes				
	Providing and Laying HDPE pipe PN-12.5 PE-100, Din-8074/Din-8075/ISO-4427 including testing, disinfect, cutting, treading, shifting to spacificed locations complete as per Drawing and BOQ.				
	2" dia	Rft	328		
	1" dia	Rft	500		
	1/2" dia	Rft	1,000		
3	Clamps for Distribution Lines connections				
	providing and fixing of HDPE clamps of best quality for distribution line from main line the sizes of clamp should as per the above mention pipes dia's (including testing ect complete).	No's	20		
4	G.I Ball Valve 3"x2"				
	Suplying and Fixing of G.I valve of best quality and approved brand (including testing ect complete)	No	3		
5	G.I Ball Valve 3"				
	Suplying and Fixing of G.I valve of best quality and approved brand (including testing ect complete)	No	3		
6	HDPE Pipes connectors(Couplers)				
	Suplying and Fixing of HDPE pipes connectors of best quality (including testing ect complete)				
	HDPE pipe 2" i/d main lines	No	1		
	HDPE pipe 1" i/d Main lines	No	1		
	HDPE pipe 1/2" i/d Distribution lines	No	4		
B.	Paintings Works				
1	Three (3) Coats Weather Shield as on External Surface				
	Providing and laying Three (3) coats of weather shield as in external surface of pump house, Boundary wall and Overhead water tank including, preparation of surface and arrangement of shuttering complete.	SFT	12,720		
2	Three (3) Coats of Distempering as on Internal Surface				
	Providing and laying Three (3) coats of good quality distempering as in internal surface of pump house, preparation of surface, arrangement of shuttering and good finishing complete.	SFT	885		
3	Internal Electrification of Pump Room				
	Internal electrification complete as specified in p.v.c pipe complete in all respect. Including 3 energy saver (one inside the room and 2 out side of the room , 4"x4" pvc electric box, 3/0.029 wire as per requirments etc	Job	1		
4	S/F of Best Quality Ceiling Fan				
	S/F of best quality Ceiling fan with dimmer,plug and installation complete .	No's	1		

Annex-2 (BOQ for Drinking Water Supply Scheme (DWSS) Islam.Uddin at Sarwakai in South Waziristan-KPK)					
S#	Activities	Unit	Qty	Unit Rate	Amount
				PKR	PKR
C.	Solar Based Water pumping System				
1	Solar PV Modules @ 280 Wp				
	<p>Supply, install, connect and operate -Mono Crystalline Photovoltaic Solar Modules (Grade-A) with all other material needed to have complete job ready for installing high quality PV modules with total array capacity 13 KWp.Solar panels must be with IP68 rating junction box for long-term weather endurance, Outstanding performance at low irradiance, with an average relative efficiency of 96.0 % for irradiances between 200 W/m2 and 1000 W/m2).The Item Includes supply, install &connect the following:</p> <ul style="list-style-type: none"> • Water proof junction boxe IP65(combiner) for each array including DC switch disconnectors(CB), bus bars ,terminals, ducts, supports &labels suitable to the PV arrays loads. • Solar DC cables appropriately sized to connect the PV solar Modules together and to the J.B and from J.B to the inverter to have a complete operational circuit with all conduits, clamps , trays and cable end terminations which shall be DC plug and socket connectors . The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 3%. <p>The contractor should provide certified panel characteristics, shop test performance curves, spare parts regular (as recommended by manufacturer), maintenance catalogues and manufacturers warrantee for each solar panel for a period not less than 20 years. The Manufacture testing certificate should be provided for the PV panels and the contractor will provide the necessary arrangements for inspecting of the supervision team of the panels before transporting to work site.All works and materials must be according to specifications and supervisor engineer instruction's and approval.</p>	No's	54		
2	Submersible Pump with Electric Motor @ 10 Hp				
	<p>Supply & Installation, testing and commissioning of Submersible Water Pump (ISO – 9906 Certified) with water discharge of 1400 galons per hour(GPH), Coupled with Submersible rewind-able Electric Motor with AC winding and all accessories like Motor Control Unit (equipped with UV/OV, dry run protection device, surge protection, phase reverse indicator) Complete in all accessories including NRV, Pressure Gauge, Sluice valve, power cable, except column pipe with appropriate Head and Discharge : 10 HP.</p>	Each	1		

Annex-2 (BOQ for Drinking Water Supply Scheme (DWSS) Islam.Uddin at Sarwakai in South Waziristan-KPK)					
S#	Activities	Unit	Qty	Unit Rate	Amount
				PKR	PKR
3	Solar Pump Inverter @ 7.5-11 KW				
	Supply, install, connect and operate of 3 Phase 220/380V Solar Pump inverter (MPPT), efficiency 98% and suited to any PV module Array configuration, the inverter depending on the system design and installation proposed and for the future extended. The DC max power input rating should be equal 11 kWp of the PV modules capacity at standard test condition (STC). The inverter unit shall be suitable for indoor and outdoor installations with IP65. The rated AC output power should be 11 kW compatible with the AC loads design. The inverter must include the safety concepts such as (triple protection with optiprotect, electronic string fuse, self-learning string failure detection, DC surge arrester) to ensure max availability. The contractor should provide certified characteristics, shop test performance curves, spare parts regular (as recommended by manufacturer), maintenance catalogues and manufacturers warrantee for inverter for a period not less than 10 years. The Manufacture testing certificate should be provided for the inverter and the contractor will provide the necessary arrangements for inspecting of the supervision team of the panels before transporting work site. All works and materials must be according to the specifications and supervisor engineer instruction's and approval.	Each	1		
4	Sign Board				
	Providing and installation of Sign Board size of 4'X3' internal size using 18gauge steel sheet , 16 guage pipe 1.5" dia as in frame of size 4.5' x 3.5' & 4'heigh foots with cross angel iron double strips of 1 feet length, writing of given data double side with IR logo) and minimum 4x numbers of wall chalking of given data with IR logo complete 5' X 8' size on the near by wall or as directed by Engineer.	No's	2		
5	Plantation around the pond				
	Providing and planting of guava, grapes, pomegranate, olive, pine, mulberry or Sheesham plants to reduce evaporation losses.	No's	50		
Grand Total of A+B+C (Labour+Materials+Tax)					