

Tender Document for Complete Installation of 5 HP Solar Pump in Narsan Block, District Haridwar, Uttarakhand

BAIF Institute for Sustainable Livelihoods and Development Nathanpur, Ring Road, Mussoorie Bypass, Jogiwala, Dehradun, Uttarakhand 248014 Phone: 0135-2662908



NOTICE INVITING TENDER

Sealed tenders are invited in prescribed form by BAIF Institute for Sustainable Livelihoods and Development, Nathanpur, Ring Road, Mussoorie Bypass, Jogiwala, Dehradun, Uttarakhand from reputed, experienced, technically and financially sound agencies/contractors for the following work:

Tender Details

Date of issue of tender	01/Feb/2024
Last date and time for submission of Tender Documents	08/Feb/2024 till 5 PM.
Mode of Submission	Password-protected pdf file on procurement.uttarakhand@baif.org.in or
	Sealed envelope at BAIF Dehradun office

Note: Tender form is given at the end of this document. Please use it for quoting your rate & cost, along with DD of Earnest money.

- 1. The tender document can be downloaded from the official website: https://baif.org.in/tenders/
- 2. The filled-up sealed tender document with the name of the work and the name of the tenderer written on the envelope should be submitted at BAIF Institute for Sustainable Livelihoods and Development, Dehradun, India till 8th February 2024 (5:00 PM) by hand / Registered Post / Courier / Password-protected pdf file on procurement.uttarakhand@baif.org.in

Name of work: Supply and complete installation of 5 HP Solar Pump (2 units)

Brief Description of Product	Quantity	Place of Delivery	Completion date of project (Delivery and Installation)
Solar Lift Irrigation Scheme As per Details (Annexure 1-4)	2	Villages - Harchandpur and Kagwali, Narsan, Haridwar, Uttarakhand	Till 25 th February 2024 (within 15 days from date of Work Order.)

The technical specifications are as follows:

Annexure 1. Construction of Borewell

SN	Particulars		Quantity
1	Construction of Borewell: Diameter: 6 inch /154 MM Depth of borewell: 50 to 55 m or depending upon water level at the site including cavity formation, gap filling by using gravel etc. Casing pipe, etc. as per requirement.	No.	02

Annexure 2. Solar Pump

SN	Solar DC Submersible Pumping system Capacity: Minimum -5000 Wp : 5 HP, 3 Ph 720 V, 20 A Current, 85% Efficiency	Unit	Qty (Set)
1	Solar PV Modules- 325 Wp, 16 No., Total- 5200 Wp. Type- HIT Tech, Make - Panasonic with 25 Year Warranty.		
2	Solar Sub. DC Pump & Motor- 5 HP, 9.00 LPS for 60 M Head, With 5 Year Warranty.		
3	Solar Pump Controller- 5 HP, With 5 Year Warranty.		
4	Module Mounting Structure - Hot Dip Galvanized		
5	Inner Connecting Cable- DC, 6 Sq. m, Copper		
6	GI Perforated Cable Tray- 50 x 25 mm		
7	DCDB- Enclosure - Transparent, 28 x 190 x 130, IP 65, SPD- Type 2, 1000V, Citel. DC MCB- 16A, 2P, 1000V, Fuse Holder and Fuse-16A, Qty		
8	Lighting Arrestor Set- LA Type -Spyse Type, Earthing Type- Copper Plate, Thickness-3mm, Size 2' x 2', HDG Pole Mounted 5m eight.	No.	2
9	Earthing For Controller & DCDB – Type - Copper Plate, Thickness - 3mm, Size 2' x 2'		
10	Sub. Cable- Copper, 4sq.m, 3core,200m, polycab		
11	High Density Pipe- GI, 25mm, 70mm, ISI mark		
12	Electrical Fitting material and accessories	7	
13	System Testing, Transportation, Installation, Integration, Commissioning of system, 5 Year Servicing		
14	AMC- 5 Year (every 6 months or whenever Problematic)		

Annexure 3. Estimate for Underground Pipe work and Accessories

Sr. No.	Activity	No.	Unit	Quantity
	Excavation for foundation in earth, soil of all types, sand, gravel, soft and hard murum, including removing the excavated material			
1	up to a distance of 50 m. beyond the building area and stacking			
	and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering			
	including shoring and strutting etc. complete. (Lift upto 1.5 m.)			
	Rising Main line		Cum	405.00
	Distribution Line		Cum	324.00
	Providing and supplying in standard lengths Polyethylene Pipe,			
2	confirming to IS4984/14151/12786/ 13488 with necessary			
	jointing material like mechanical connector i.e. thread / insert			
	joint / quick release coupler joint / compression fitting joint or			
	flanged joint excluding coupler/specials, including			
	transportation from stores to site of work, inspection charges,			
	excluding GST levied by Gl & GOM in all respect. As per IS4984-			

	2016, the pipes upto 110 mm dia. should be supplied in coil form only.			
	Providing H. D. P. E. pipes PE 100			
	IX H. D. P. E. pipes PE 100, 90 mm, 6kg/Sq. cm - Make Jain	1	Rmt	1000.00
	IX H. D. P. E. pipes PE 100, 63 mm, 6kg/Sq. cm - Make Jain	1	Rmt	800.00
	Lowering, Laying and Jointing H.D.P.E./M.D.P.E. pipes in proper			300.00
	position including all specials by compression fitting/electro			
	fusion and butt fusion jointing procedure as per relevant ISI Code			
3	complete with all materials for jointing procedure like			
	Electrofusion machine, Electric heater/butt fusion welding			
	machine with hydraulic jack, top loading clamp etc. and all			
	labours as directed by Engineer-in-charge as per IS-7634 Part II			
	Providing H.D.P.E Pipes PE 100			
	IX H. D. P. E. pipes PE 100, 90 mm, 6 kg/Sq. cm - Make Jain	1	Rmt	1000.00
	IX H. D. P. E. pipes PE 100, 63 mm, 6 kg/Sq. cm - Make Jain	1	Rmt	800.00
	Providing and supplying ISI mark CI D/F reflux valves (non-			
	return valves) of following dia including transportation from			
4	stores to site of work, inspection charges, excluding GST levied by			
	GOI & GOM in all respect etc. complete. Reflex valves as per			
	IS.5312 Part I (1984) a) Without bypass arrangement PN -1			
	50 mm.	1	No.	2.00
	80 mm.	1	No.	2.00
	Providing double flange sluice valve confirming for IS14846			
	including worn gear arrangements as per test pressure, stainless			
5	steel spindle, caps, including inspection charges, transportation			
	from stores to site of work excluding GST levied by GOI & GOM in			
	all respect etc. complete.			2.00
	50mm		No.	2.00
	80mm		No.	2.00
	Lowering, laying and jointing in position following C.I.D/F Reflex			
6	valves, Butterfly valves and Sluice valves including cost of all labour jointing material, including nuts and bolts and giving			
0	satisfactory hydraulic testing etc. complete. (Rate for all class of			
	valves.)			
	50mm		No.	2.00
	80mm		No.	2.00
	Providing and supplying Air Valves as per IS14845-2000 and		110.	2.00
	MJP's standard specifications of approved make and quality of			
7	following diameters including inspection charges, transportation			
	from stores to site of work excluding GST levied by GOI & GOM in			
	all respect etc. complete.			
	25mm.		No.	8.00
	Lowering, laying and fixing in proper alignment and position of			
	all types of C.I. air valves as directed by Engineer-in-charge			
8	including cost of conveyance from stores to site of work, cost of			
	all material and giving satisfactory hydraulic testing etc.			
	complete. (for all class of valves).		1	
	Air Valve Single Ball (PN-l and PN			
	25mm.		No.	-
	Refilling the trenches with available excavated stuff with soft			
9	material first over pipeline and then hard material in 15 cm			
=	layers with all leads and lifts including consolidation, etc. complete.			
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	Rising Main line		Cum	405.00
	Distribution Line		Cum	324.00

Annexure 4. Estimate for panel fencing

SN	Activity	Unit	Quantity
1	Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 12 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of $1:4:8$ mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 16 mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both sides at every corner or bend embedded in concrete blocks of $1:4:8$ of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete.	Rmt	100.00
2	Providing and fixing mild steel grill gate with angle iron frame 65mm x 65mm x 10mm with iron bars at 150mm C/C and diagonal flats as per the detailed drawing including hinges, pivot block locking arrangement, welding riveting and oil painting of three coats of approved shade Weight of gate 35 Kg/Smt.	sqm	5.00

Terms and Conditions:

- 1. Earnest money (2% of Tender value) shall be submitted along with tender through DD in favour of "BAIF INSTITUTE FOR SUSTAINABLE LIVELIHOODS AND DEVELOPMENT, UTTARAKHAND" payable at Dehradun. Tenders will not be accepted without earnest money. The Earnest Money will be returned to unsuccessful tenderers within a reasonable time. The Earnest Money deposited by successful tenderer(s) will be retained towards the Security Deposit (Retained amount).
- 2. Mention the Warranty and Maintenance period of major items like Solar panel, Pump etc.
- **3.** The 3% of bill amount (including earnest money) shall be retained as a Security money for free maintenance for the maintenance period as mentioned in your tender.
- **4.** The retained amount shall be refunded without any bank interest after free maintenance period.
- **5. Penalty for delay in completion of work:** The organization may impose penalties for delay in completion of work except in case of natural calamities and law and order situation. The penalty amount shall be **Rs. 500 per day.** The tenderer must agree to bear the penalty amount for the delay in the completion of work.
- **6.** The rates offered by the Bidder/Tenderer will be inclusive of all Taxes, License fees, Royalty, Octroi, Labour, Construction Materials, all Tools and Plants, Water, and Power required for satisfactory completion of the work.
- **7.** In case of any mishap, injury or damage occurring at the site, it will be the responsibility of the Contractor.
- **8.** Mention clearly that the rates are inclusive of GST or exclusive of GST and mention the GST rate in %.
- **9. Final Payment:** Final payments will be made only after satisfactory completion of the work. After completion and successful demonstration of irrigation systems and water to be delivered as per design.
- 10. The authority for the acceptance of the tender will rest with the organization. It shall not be obligatory on the said authority to accept the lowest tender or any other tender and no tenderer (s) shall demand any explanation for the cause of rejection of his/their tender nor will the organisation undertake to assign reasons for declining to consider or reject any particular tender or tenders.
- **11.** The competent authority of the organisation for the acceptance of the tender reserves the right to divide the tender amongst more than one tenderer, if deemed necessary.



- **12. Schedule of Payment:** The Schedule of payment shall be decided through negotiation as per condition mentioned by successful tenderer in his tender.
- **13.** The final payment shall be made after satisfactory completion of work on production of tax invoice with warranty card. After completion and successful demonstration of irrigation systems and water to be delivered as per design.

For any clarification, please contact:

1. BAIF Dehradun Office: 7897993041, 0135-3566165

2. Taniya Rawat, Dehradun: +91-7453868478

3. Dharmraj Yadav, Narsan: +91-8707075267

For BAIF Institute for Sustainable Livelihoods and Development

Nathanpur, Ring Road, Mussoorie Bypass, Jogiwala, Dehradun, Uttarakhand.



Tender Form (On Letterhead)

CONTACT PERSON (FOR THE TENDERER)

Name	
Address	
Telephone/Contact No.	
E-mail	

ECONOMIC AND FINANCIAL CAPACITY

Financial Year	2020-21	2021-22	2022-23
Annual turnover (Rs. in Lakhs)			

EXPERIENCE

Complete the table using the format below to summarise the major relevant work carried out in the course of the past 5 years by the legal entity or entities making this tender. The number of references to be provided must not exceed 5 for the entire tender.

Sr. No.	Name and Address of Client	Capacity of Solar Pump Installed	Date/Year of Construction	Contract value (Rs.)

TENDER DECLARATION

- **1.** I/We have read and examined all the tender documents.
- **2.** We also undertake, if required, to provide evidence of the financial and economic standing and the technical and professional capacity according to the selection criteria for this call for tender. We also understand that if we fail to provide the proof/evidence required, within 7 calendar days after receiving the notification of award, or if the information provided is proved false, the award may be considered null and void.
- **3.** I/We shall be debarred for tendering with BISLD-UP. Also, if such a violation comes to the notice of BISLD-UP before the date of start of work, BISLD-UP shall be free to forfeit the entire amount of earnest money deposit.
- **4.** I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived therefrom to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of BISLD-UP.

Yours faithfully
Name and Signature of Authorized Person
Date & Place
Seal of the firm/company/entity:

Quotation / Tender value

I am ready to supply the following items at the below mentioned rates (Please provide rates for 1 site. Total

	– 2 sites).			D-t-/	
S N	Particulars	Unit	Qty. (Set)	Rate/unit Excluding GST	Amount
	Construction of Borewell:				
4	Diameter: 6inch /154 MM	3.7			
1	Depth of borewell: 50 to 55 m or depending upon water level at the site.	No.			
	Including cavity formation, gap filling by using gravel etc, Casing pipe, etc.as per				
	requirement.				
2	Solar PV Modules- 325 Wp, 16 No. Total - 5200 Wp. Type - HIT Tech, Make - Panasonic with 25 Year Warranty.				
_	Solar Sub. DC Pump & Motor- 5 HP, 9.00 LPS for 60 M Head, with 5 Year				
3	Warranty				
4	Solar Pump Controller- 5 HP, With 5 Year Warranty.				
5	Module Mounting Structure- Hot Dip Galvanized,				
6	Inner Connecting Cable- DC, 6 Sq. m, Copper,				
7	GI Perforated Cable Tray- 50 x 25 mm				
8	DCDB- Enclosure- Transparent, 28 x 190 x 130, IP 65, SPD- Type 2, 1000V, Citel. DC MCB- 16A, 2P, 1000V, Fuse Holder & Fuse-16A, Qty.	No.			
9	Lighting Arrestor Set- LA Type -Spyse Type, Earthing Type-copper Plate, Thickness-3mm, Size 2' x 2', HDG Pole Mounted 5m eight.	1101			
10	Earthing For Controller & DCDB – Type - Copper Plate, Thickness - 3mm, Size 2' x 2'.				
11	Sub. Cable - Copper, 4sq.m, 3core,200m, polycab				
12	High Density Pipe - GI, 25mm, 70mm, ISI mark				
	Electrical Fitting material & accessories System Testing, Transportation, Installation, Integration, Commissioning of				
14	system, 5 Year Servicing				
15	AMC- 5 Years (every 6 months or whenever Problematic)				
	Excavation for foundation in earth, soil of all types, sand, gravel, soft and hard				
	murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering,				
16	preparing the bed for the foundation and necessary back filling, ramming,				
	watering including shoring and strutting etc. complete. (Lift upto 1.5 m.)				
	Rising Main line	Cum	405.00		
	Distribution Line	Cum	324.00		
	Providing and supplying in standard lengths Polyethylene Pipe, confirming to.				
	lS 4984/14151/12786/ 13488 with necessary jointing material like mechanical connector i.e. thread / insert joint / quick release coupler joint /				
	compression fitting joint or flanged joint excluding coupler/specials, including				
	transportation from stores to site of work, inspection charges, excluding GST				
4.5	levied by Gl & GOM in all respect. As per IS:4984-2016, the pipes upto 110mm				
17	dia. should be supplied in coil form only.				
	Providing H. D. P. E. pipes PE 100				
	IX H. D. P. E. pipes PE 100, 110 mm, 8kg./ Sq. cm - Make Jain	Rmt			
	IX H. D. P. E. pipes PE 100, 110 mm, 6kg./ Sq. cm - Make Jain	Rmt	1000.00		
	IX H. D. P. E. pipes PE 100, 63 mm, 6kg./ Sq. cm - Make Jain	Rmt	800.00		
	Lowering, Laying and Jointing H.D.P.E./M.D.P.E. pipes in proper position including all specials by compression fitting/ electrofusion and butt fusion				
	jointing procedure as per relevant IS Code complete with all materials for				
	jointing procedure like Electrofusion machine, Electric heater/butt fusion				
	welding machine with hydraulic jack, top loading clamp etc. and all labours as				
	directed by engineer in charge as per IS-7634 Part II				
18	Providing H.D.P.E Pipes PE 100				
	IX H. D. P. E. pipes PE 100, 110 mm, 8kg./ Sq. cm - Make Jain	Rmt	1000.00		
	IX H. D. P. E. pipes PE 100, 90 mm, 6kg./ Sq. cm - Make Jain	Rmt	1000.00		
	IX H. D. P. E. pipes PE 100, 63 mm, 6kg./ Sq. cm - Make Jain	Rmt	800.00		

19	Providing and supplying ISI mark CI D/F reflux valves (non-return valves) of following dia including transportation from stores to site of work, inspection charges, excluding GST levied by GOI & GOM in all respect etc. complete. Reflex valves as per IS.5312 Part I (1984) a) Without bypass arrangement PN -1 50 mm.	No.	2.00	
	80 mm.	No.	2.00	
		INO.	2.00	
20	Providing double flange sluice valve confirming for IS-14846 including worn gear arrangements as per test pressure, stainless steel spindle, caps, including inspection charges, transportation from stores to site of work excluding GST levied by GOI & GOM in all respect etc. complete. 50mm	No	3.00	
		No.	2.00	
	80mm	No.	2.00	
21	Lowering, laying and jointing in position following C.I.D/F Reflex valves, Butterfly valves and Sluice valves including cost of all labour jointing material, including nut bolts and giving satisfactory hydraulic testing etc. complete. (Rate for all class of valves.) 50mm	No.	2.00	
	80mm	No.	2.00	
22	Providing and supplying Air Valves as per IS14845-2000 and MJP's standard specifications of approved make and quality of following diameters including inspection charges, transportation from stores to site of work excluding GST levied by GOI & GOM in all respect etc. complete.	NO.	2.00	
	25mm.	No.	8.00	
23	Lowering, laying and fixing in proper alignment and position all types of C.I. air valves as directed by Engineer-in-charge including cost of conveyance from stores to site of work, cost of all material and giving satisfactory hydraulic testing etc. complete. (for all class of valves).			
	Air Valve Single Ball (PN-l and PN			
	25mm.	No.	-	
24	Refilling the trenches with available excavated stuff with soft material first over pipeline and then hard material in 15 cm layers with all leads and lifts including consolidation, etc. complete.			
	Rising Main line	Cum	05.00	
	Distribution Line	Cum	324.00	
25	Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50×50 mm, 12 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of $40 \times 40 \times 6$ mm size, including excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size $450 \times 450 \times 670$ mm. at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of $25 \times 25 \times 5$ mm size and vertical M.S. flat 35×5 mm and 25×5 mm horizontal including cross support of $40 \times 40 \times 6$ mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size $450 \times 450 \times 670$ mm including 3 coats of oil painting etc. complete.	Rmt	100.00	
26	Providing and fixing mild steel grill gate with angle iron frame 65mm x 65mm x 10mm with iron bars at 150mm C/C and diagonal flats as per the detailed drawing including hinges, pivot block locking arrangement, welding riveting and oil painting of three coats of approved shade Weight of gate 35 Kg/Smt. Sub Total	sqm	5.00	
	Add GST		 	
	nuu uo i		+	
	Total cost of 04 ·····!		-	
	Total cost of 01 unit			
	Total cost of 02 units		1	

Any additional information

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Signature with Stamp: