



BAIF INSTITUTE FOR SUSTAINABLE LIVELIHOODS AND DEVELOPMENT

State Office: Odisha

Plot no.: 1565/2682, At Bhatra, PO. Dhanupali, Sambalpur

Odisha – 768005

Tel.: +91 7894418530

INVITATION FOR QUOTATION

To

Date: 12/08/2024

Dear Sir / Madam,

Sub.: **INVITATION FOR QUOTATION FOR “Solar based drinking water pumping system 1 hp”**

You are invited to submit your most competitive quotation for the following product:

Brief description of the product /work/ service	Specifications	Quantity	Delivery and Installation period	Place of delivery/work/service
Solar based drinking water pumping system 1 hp	As per attached Annexures 1-08	03	Work within 30 days from WO.	Installation sites as given below. 1. Bhagabat Ghara, Sahar sahi, Ghantianali, Gp-Deranga, Kaniha, Angul-Odisha 2. Dwarika Mohanty house, Mohanty sahi, Deranga, Gp-Deranga, Kaniha, Angul-Odisha 3. Patharmunda Sahi, Ghantianali, Gp-Deranga, Kaniha, Angul-Odisha

Detailed Description of the Product: As above

1. Quoted Price:

- The offer shall be for the entire quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and re-writing.
- The party shall quote for goods / services in the attached format of quotation.
- All duties, taxes and other levies payable on the raw materials and components shall be included in the total price.
- The rates quoted by the party shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- Delivery and transportation at the cost of the party.
- The prices shall be quoted in Indian Rupees only.

2. Each party must submit only one **SEALED** quotation. Party shall not contact other parties in matters related to this quotation.

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3. Validity of Quotation

The quotation shall remain valid for a period not less than 30 days after the deadline fixed for submission of quotations.

4. Evaluation of Quotations

- BAIF will evaluate and compare the quotations determined to be substantially responsive i.e. which are properly signed and conform to the terms & conditions and specifications.
- The evaluation would be done for all the goods / services put together or separately as feasible. The items for which no rates have been quoted would be treated as zero and the total amount would be computed accordingly.
- List of similar works undertaken with details of clients etc. if any, should be provided.
- Contract will be awarded to the responsive party/parties based on technical cum commercial grounds.

5. Award of contract

- The contract will be awarded to the party/parties whose quotation has been determined to be substantially responsive and technical specifications and commercial terms best suited to the requirement. BAIF, prior to the expiry of the validity period of the quotation, will notify the party/parties whose quotation has been accepted for the award of contract. The terms of the accepted offer shall be incorporated in the Purchase Order or Work Order. Quotations shall include GST & PAN Numbers.
- Notwithstanding the above, BAIF reserves the right to accept or reject any quotation and to cancel the procurement process and reject all quotations any time prior to the award of the contract.
- Rate contract can be entered into for subsequent procurement. Order may be given partially and in multiple slabs.
- The party/parties are bound to abide by the Organization's Internal Committee guidelines.

6. Normal commercial guarantee / warranty shall be applicable to the supplied goods.

7. Payment terms:

10% advance after receiving of SD amount, 50% payment against supply of mounting structure, water pumps, electrical control panel, ump controller, PV module and water tank along with erection of structure at site with civil foundation, Balance 40% payment against supply of water filter and ACP sheet covering including installation, testing and commissioning of the solar-based drinking water system.

8. Queries pertaining to specifications and scope, if any, may be clarified by contacting the undersigned during office hours.

9. 10 % Security shall deposit in favor of '**BAIF Institute for Sustainable Livelihoods and Development**' and payable at Sambalpur, Odisha within 5 days from the Work order issued and it will be refund after one year from date of work completion.

10. You are requested to provide your offer **on or before 20th May, 2024** in the name of **BAIF Odisha** only at the above address or email on only "**bisld.odisha@baif.org.in**". Please mention the Subject on the envelope.

11. We look forward to receiving your quotations and thank you for your interest in this project.

BAIF Institute for Sustainable Livelihoods and Development

Authorized Signatory

Solar drinking water pumping system 1 hp



Annexure 1

Description of quantities

(1 hp system x 03 No.)

No.	Description	Unit	Qty.
1	Supply, installation, commissioning & testing of solar submersible Pump Supply of 3 Phase 1hp bore well solar submersible pump including mounting structure for water pump, Earthing system, lightning protection, protection system, cable (3C x 1.5 sq.mm. flat cable and PVC insulated AC 3Ø as per IS-694:1990 up to 75 m (approx.) length and laying in high density PVC pipe) (including trench excavation) etc. complete in all respect and as per site condition data provided and specifications provided in Annexures 1-8.	No.	1
2	Supply, installation, commissioning and testing of solar electrical power plant Supply of PV module including mounting structure (with civil works), Earthing system, lightning protection, protection system, combiner box, PV cable, SPD, MC4 – connector, MCB, solar fuse etc. complete in all respect and as per instrument specifications provided in Annexure 1-8.	No.	1

Note: The given quantities are for one unit. Requirement is of 3 units.

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Annexure 2

Site condition and input data (1hp system x 3 No.)

Project category	:	Renewable energy, solar
Project summary	:	Solar water pumping system
Type of plant	:	Stand alone
Location	:	1. Bhagabat Ghara, Sahar sahi, Ghantianali, Gp-Deranga, Kaniha, Angul 2. Dwarika Mohanty house, Mohanty sahi, Deranga, Gp-Deranga, Kaniha, Angul 3. Patharmunda Sahi, Ghantianali, Gp-Deranga, Kaniha, Angul
Land	:	Flat
Irradiation details considered	:	Yes
Type of PV module mounting structure	:	Fixed structure (1 sets of 4 modules each)
Type of PV modules considered for the offer	:	Poly-crystalline silicon
System capacity pump / solar system	:	1 hp / 0.75 kW
Inverter capacity	:	Refer technical specification
Water consumption (liters / day)	:	10,000-17,000 (considering 4 hours / day)
Pipe length (m)	:	100
Pipe size (mm)	:	40mm
Total head (m)	:	62-91
Calculated pump capacity (hp)	:	1

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Annexure 3

Bill of quantities with specification (1hp system x 02 No.)

SN	Description	Specifications	Quantity
1	Solar pump controller	1 hp	1 No. x 3 systems
2	Solar PV panel	335 W	4 No. x 3 systems
3	ACDB (with AC SPD & MCB)	1000 V, 20 KA, Type-2 SPD	1 No. x 3 systems
4	MC - 4 connector Pair	4 Sq.mm.	2 No. x 3 systems
5	AC cable	3C x 1.5 sq.mm. Flat Cable & PVC insulated, 3 Phase - As per IS-694:1990	As required site-wise for 3 sites
6	DCDB (with DC SPD & DC fuse)	1000 V, 20 A, 50 KA S/C Rating	1 No. x 3 systems
7	DC cable	4 sq.mm. - PV cable	As required site-wise for 3 sites
8	Solar PV module mounting structure (1 sets of 4 modules each)		As per design for 3 sites
9	Providing of G.I Frame work of angle size (100x100x4mm) of Height 20 ft (4 ft bellow GL and 16 ft above GL) as per given diagram with folding ladder and 5mm thick G.I sheet for base of water tank.	Hot dip galvanized (80 microns), Structure designed IS 875: part-3 (Basic wind speed= 42 meter per sec. 150Km/Hr)	As per design for 3 sites
10	Earthing system with chemical bag 25 kg, along with pit cover	Rod Type- Cu - (1m, 19-25 mm Dia.)	1 No. x 3 systems
11	Lightning arrester system with base	Cu, Length - 1m	1 no. x 3 sites
12	Bore well AC Submersible pump	1hp, 3 phase, 50 Hz, head range 62-91m, LPD- 10000-17000	1 No. x 3 systems
13	Excavation of foundation for overhead tank of size 4x0.45mx0.45mx1.1 m	As per given design	0.891 cum. x 3 sites
14	Providing concrete (1:3:6) in foundation for overhead tank of size 4x0.30mx0.30mx1.4 m, Base PCC 1x3mx3mx0.3m	As per given design	0.504 cum. x 3 systems
15	Water storage Tank white color (ISI)	5000 litre triple layers	1 No. x 3 systems

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16	Construction of stand post (1.5mx1.5m) of 4 tabs with soak pit (1m dia, 2m depth)	As per given design	3 No. x 3 systems
17	Community drinking water system - filtration technology	Aquaguard Eureka Forbes ASF1500 & ACF1500	1 No. x 3 systems
18	Display & branding with frame-ACP sheet with vinyl printing, size: 4 ft x 3 ft	As per given design	1 No. x 3 systems
19	Auto on off system	While water full in tank it will automatically off and water level low it will automatically on	1 No. x 3 systems
20	Panel cleaning system	Automatic Panel cleaning system	1 No. x 3 systems
21	3.25mm ACP sheet covering for protection to filter units with one side opening door.	192 sqm	1 No. x 3 systems
22	Distribution units 100m pipe including excavation and refilling	100m HDPE, 6 kg/sq.m PE63, ISI mark	1 No. x 3 systems
23	Main pipe line	66m HDPE, 6 kg/sq.m PE63, ISI mark	1 No. x 3 systems
24	Semi integrated solar light	65 w panel, 15 Ah battery and 15w light	1 No. x 3 systems

Note:

1. The edges in the structure should not be sharp.
2. Hot dip galvanizing layer should be uniform.
3. Mounting structure base (PCD) should be mentioned.
4. The given quantities are for single unit. Requirement is for 03 units.

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Annexure 4

List of vendors / make

SN	Description	Make
1	Solar pump controller	Kirloskar, Shakti, Lubi
2	Solar PV panel	Waaree, Vikram, Emmvee, Tata, Anchor-Panasonic, RenewSys, Contendor, Luminous, Lubi.
3	ACDB (with AC SPD & MCB)	L & T, Schneider
4	MC - 4 connector Pair	Elmax
5	AC cable	RR, KEI, Finolex, Havells, Polycab, Lubi, Microtek
6	DCDB (with DC SPD & fuse DC)	Elmax, L & T, Schneider
7	DC cable	RR, KEI, Finolex, Havells, Polycab, Lubi, Microtek
8	Solar PV module mounting structure	As per fabrication drawing
9	Structure hardware system	Local
10	Earthing system	True Power/Protech/equivalent*
11	Lightning arrester system with base	True Power/Protech/equivalent*
12	AC Submersible pump (Bore well)	Kirloskar, Shakti, Lubi
13	Water storage Tank (HDPE tank) (5000 litter triple layers)	Supreme/Plasto/Sintex/Nilkamal/Duraplast
14	Community drinking water system - filtration technology	Aquaguard Eureka Forbes ASF1500 & ACF1500
15	Distribution pipe	HDPE, 6 kg/sq.m PE63 ISI, Supreme
16	Main pipe line	HDPE, 6 kg/sq.m PE63 ISI, Supreme
17	Semi integrated Solar light	Battery: - BIS approved, Panel: - MNRE approved, LED: - Philips/Osram/Eveready/ equivalent*

* Any equivalent make to be first approved in writing from BAIF's thematic expert.

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Annexure 5

Price Offer (To be submitted by party in the format herein)

Supply, installation, commissioning and testing of 03 solar drinking water pumping systems of 1 hp at Dareng villages, Kaniha block, Angul, Odisha

Table 1: Offer summary (Details in Table 2)

Sr.	Description	Price ()	GST (%) (if applicable) ()	Any other ()	Final offered price ()
A	03 Sites at Dareng and Takua villages, Kaniha block, Angul: (1 hp system) (Cost of components as given in Table 2)				
B	Supply, installation, commissioning, testing and on-site training including transportation				
C	Comprehensive maintenance of 2 years				
Note: Total amount to be mentioned for 3 sites.					

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Table 2: Offer details

Item wise price details (single unit/site)						
Sr.	Description	Qty.	Price (₹)	GST (%)	Any other (₹)	Final offered price (₹)
1	Bore well submersible pump and delivery pipe up to GL (as given in technical details in Annexure 5) HDPE, 6 kg/sq.m PE63, ISI mark	3				
2	PV module of 335 Wp (as given in technical details in Annexure 1-8)	12				
3	Control, electronics and protection (inverter, SPD, connectors, DC cable, MCBs, fuse, combiner box, earthing, lightning protection) {As given in technical details in Annexure 1-8}	3 sets				
4	Solar PV module mounting structure – Hot dip galvanized iron (80 microns) structure with folding ladder. Fix structure as per drawing, excluding civil work). 1 set of 4 panels (as given in technical details in Annexure 1-8). IS 875: part-3 (Basic wind speed= 42 meter per sec. 150Km/Hr)	3 units				
5	AC cable (3C x 2.5 sq.mm three Phase flat cable & PVC insulated as per IS-694:1990, laying in high density PVC pipe) (excluding trench excavation) (As given in technical details in Annexure 1-8)	225 m				
6	Excavation of foundation for overhead tank of size 4x0.45mx0.45mx1.1 m	3 units				
7	Providing concrete (1:3:6) in foundation for overhead tank of size 4x0.30mx0.30mx1.4 m, Base PCC 1x3mx3mx0.3m	3 units				
8	Water storage Tank 5000L, white color, triple layer.	3 No.				
9	Construction of stand post (1.5mx1.5m) of 4 tabs with soak pit (1m dia, 2m depth)	9 units				
10	Automatics solar panels cleaning system	3 units				
11	Display & branding with frame-ACP sheet with vinyl printing, size: 4 ft x 3 ft	3 units				
12	Auto on off system	3 units				
13	3.25mm ACP sheet covering for protection to filter units	3 units				
14	Distribution units 100m pipe including excavation and refilling	300 m				
15	Community drinking water system -filtration technology	3 units				
16	Semi integrated solar light	3 units				
	Total components' cost for 03 systems at 03 sites.					

Rupees (in words): _____ only

Date: Signature with seal of party:

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Annexure 6

Undertaking

Date:

To

BAIF Institute for Sustainable Livelihoods and Development - Odisha

Ref.: Supply, installation, commissioning & testing of solar photovoltaic drinking water pumping systems at Derang village of Kaniha block, Angul dist.

Dear Sir,

In response to the invited tender from you, I/We have examined the notice, conditions, specifications and terms of the contract and I/We agree to abide by all instructions in these documents attached hereto and hereby bind myself / ourselves to execute the work as per the schedule stipulated in the notice.

I / We further agree to sign and execute all agreements / bonds as may be required by BISLD to abide by all the conditions of the contract and to carry out all work as per specifications, failing which, I / We shall have no objection to forfeit the earnest money / security money deposited with BISLD.

I / We also undertake that I / We have not been blacklisted by any entities any time.

I / We enclose herewith the required documents.

Sincerely yours

Signature of Party with seal

Encl.:

1. Technical details
2. Price offer

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Annexure 7

Enclosures Checklist

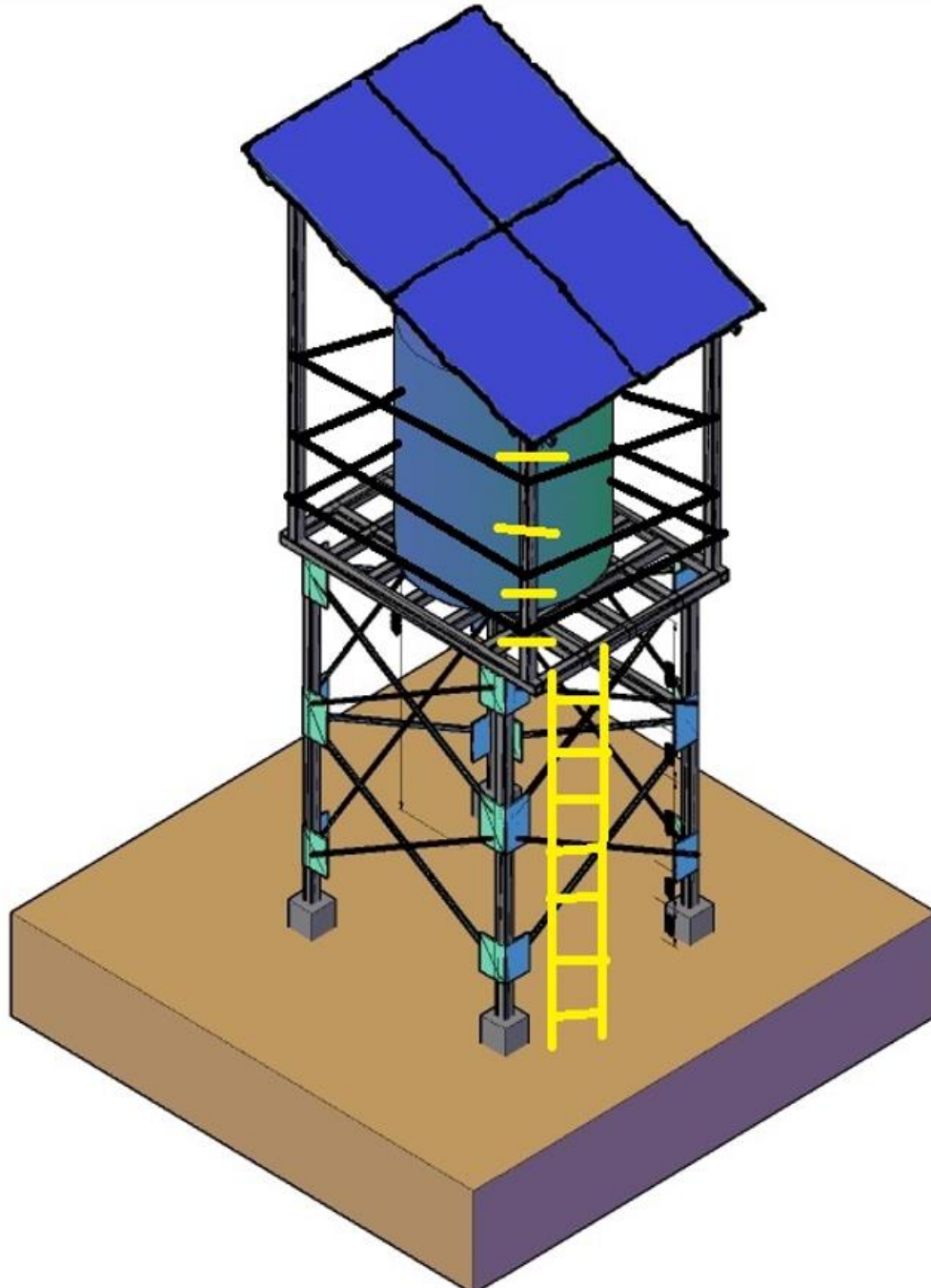
1. Copy of GST registration
2. Copy of PAN card
3. Authorization / dealership certificate from manufacturer
4. Company brochure and product catalogue
5. Self-declaration about not being a blacklisted entity
6. Solar PV module mounting structure drawing
7. List of similar works undertaken in last two years with client contact details
8. Any other supporting documents

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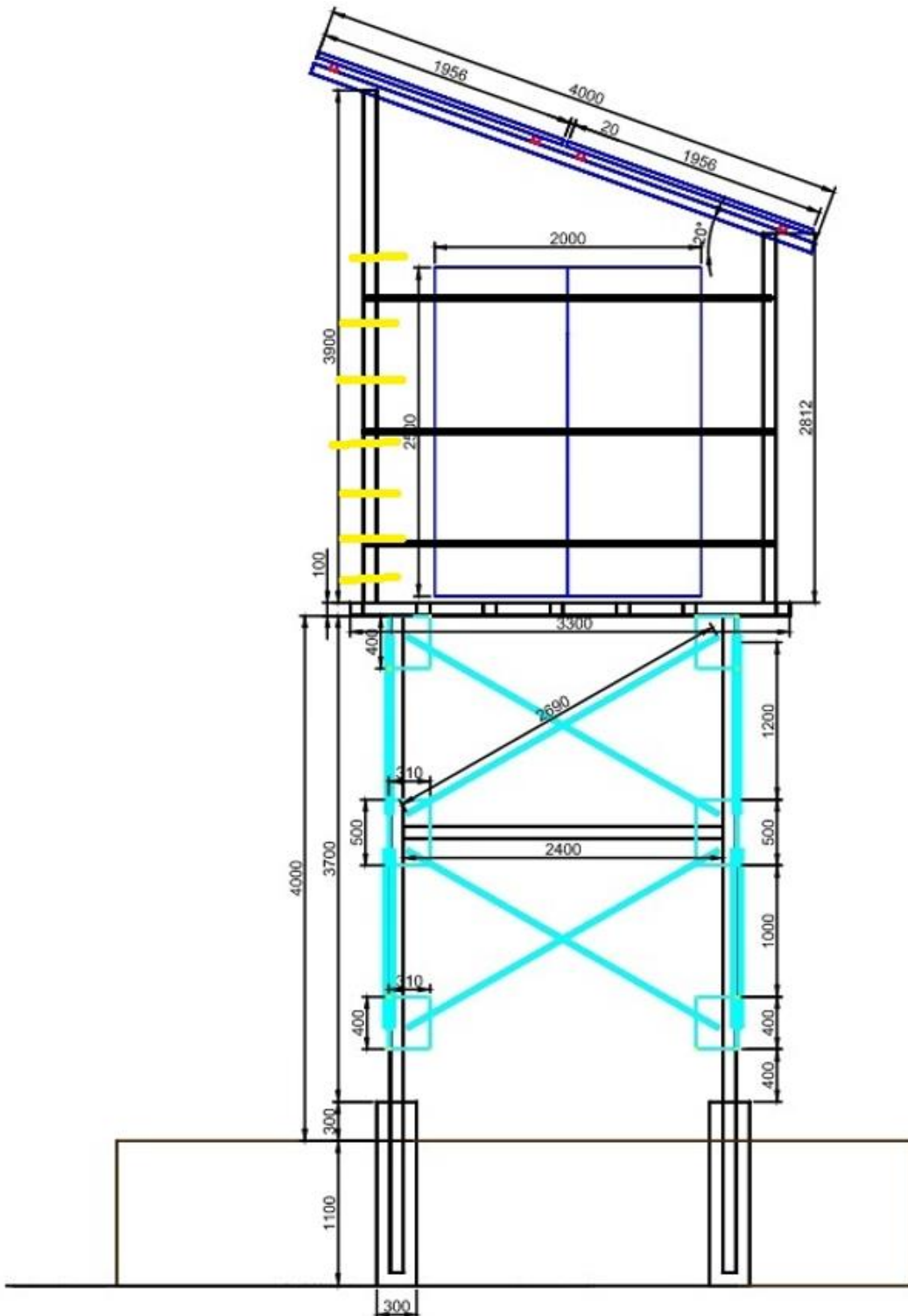
Annexure 8

Indicative details and drawing of mounting structure (This is indicative. Mounting structure to be fixed conforming to specifications).

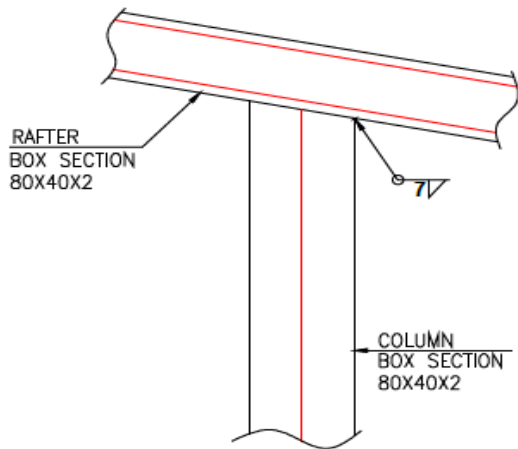


Structure designed: - IS 875: part-3 (Basic wind speed= 42 meter per sec. 150Km/Hr)

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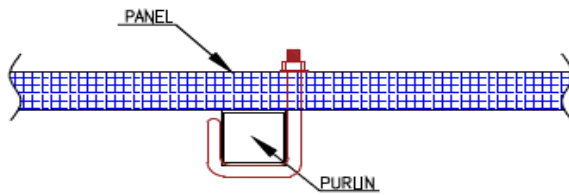
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RAFTER
BOX SECTION
80X40X2

COLUMN
BOX SECTION
80X40X2

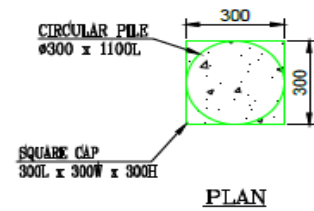
RAFTER TO COLUMN JOINT



PANEL

PURLIN

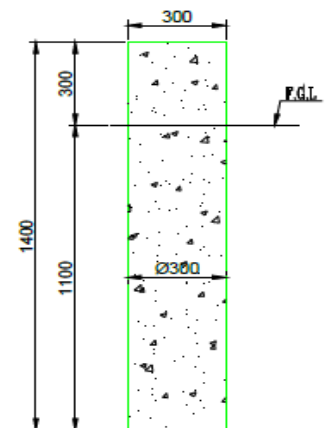
PANEL TO PURLIN JOINT



CIRCULAR PILE
Ø300 x 1100L

SQUARE CAP
300L x 300W x 300H

PLAN



300

300

1400

1100

300

Ø300

F.G.L.

300

300

300

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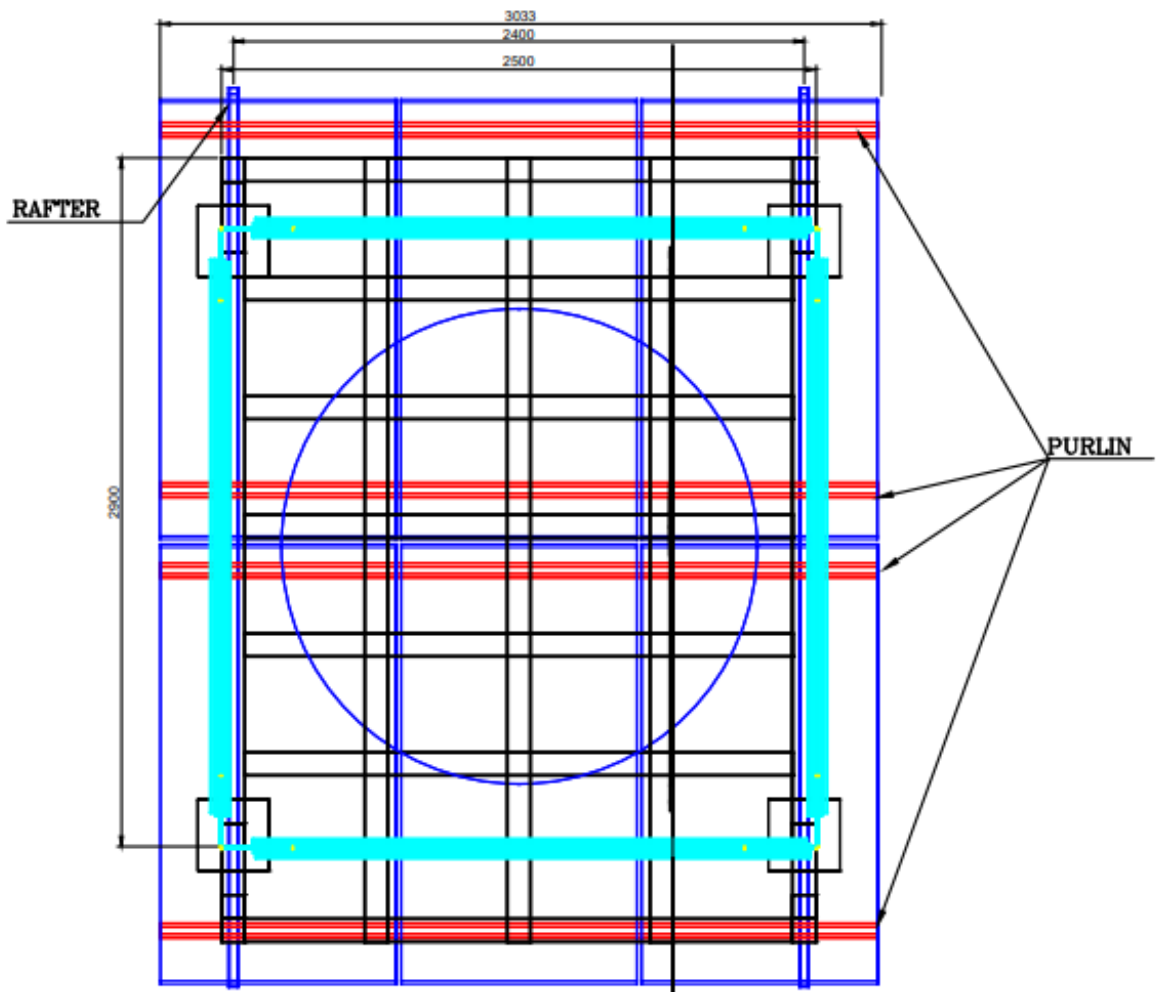
300

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FOUNDATION DETAIL

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