

# INVITATION TO TENDER NOTICE PUPLIC TENDER INVITATION

Date:	10/ April /2023
Subject:	Invitation bid for a project funded by USAID&FCDO
Bid no:	AYUUB NGO/SOM/2023/AYIRC/039
Bid Title:	A) Procurement of construction of 60 emergency latrines in IDP sites of Merka and Wanlaweyn districts
e	B) Procurement of 'Construction of new/rehabilitation of exiting water points through PPPs-partnership (2 in Merka and 1 in Wanlaweyn)
Project Title:	HARBS Emergency Response Programme
Project Code:	300978-105, 106 and 1 07
Geographical coverage R	egion/District: Marka and Wanlaweyn districts
Contracting authority:	AYUUB NGO

AYUUB NGO invites interested companies to apply from AYUUB a tender bid titled procurement of Procurement of:

- A) Construction of 60 emergency latrines in IDP sites of Merka and Wanlaweyn districts
- **B)** Procurement of 'Construction of new/rehabilitation of exiting water points through PPPspartnership (2 in Merka and 1 in Wanlaweyn)

Under the project of HARBS Emergency Response Programme in Lower Shabelle, Somalia whose geographical area is Marka and Wanlaweyn districts of Lower Shabelle region, 300978-105, 106 and 1 07. AYUUB invites interested parties to apply the tender advert and it's available in AYUUB NGO office, Ayuub village, Merka and websites.

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1.1. Place of service

The service will be carried out in Marka and Wanlaweyn district, Lower Shabelle Region, Somalia

1.2. Value of service

The value for the supply should be identified as USD per each item



1.3 Conditions for

The final acceptance will be decided by the bid committee, and the bidder have the right to inform the decision.

#### 1. Solicitation Package Documents

The following documents are issued to enable you to bid:

- A Annex A Bid application form signed and stamped
- B AYUUB ethical standards for suppliers signed and stamped
- *C* Technical and Financial Proposal Form-including:
  - Annex B Quotation letter form
- D Companies are required to provide the following documents:
  - 1. Licence certificate
  - 2. Bank Details
  - 3. Company profile
  - 4. Company previous experience (use attached format) Annex D

## COMPLETE THE FINANCIAL PROPOSLA HEREIN BELOW.

A) Procurement of construction of 60 emergency latrines in IDP sites of Merka and Wanlaweyn districts- Use the same format to complete the form.

	The second se	1.1				
		IDPs latrine co	onstructio	on		
NO	Description	Unit quantity	Unit Cost	Duration	<b>Time</b> unit (Months, Days or Lump sum)	Total
1	Excavation of pit hole	10.00	1	1.00	Lump Sum	0.00
2	Portland Cement, 50kg	5.00		1.00	Lump Sum	0.00
3	Sand	0.57		1.00	tonne	0.00
4	Gravel	0.70	2	1.00	tonne	0.00
5	Iron bar, Ø 8mm	0.09	0-6 H	1.00	bar	0.00
6	Heavy wood columns	2.00		1.00	columns	0.00
7	Plywood ( flexible)- (1.2x2.4m)	8.00		1.00	Lump Sum	0.00
8	10 cm/4 inch diameter PVC pipe for ventilations	1.00		1.00	Lump Sum	0.00
9	Water	4.00		1.00	drums	0.00
10	Heavy wood columns (10 cm X 3m Length)	5.00		1.00	Lump Sum	0.00
	Wood timber (2.5cm X 5cm			1.00		0.00
11	X 4m)	10.00			Lump Sum	
12	Corrugated Iron sheets,G34	10.00		1.00	Lump Sum	0.00
13	Waste Pipe 2.0x 6m length	0.50		1.00	Lump Sum	0.00
14	Concrete slab of 1.5m by	1.00		1.00	Lump Sum	0.00



	1.3m	n Central Som	апа			
15	Door hinges	4.00		1.00	Lump Sum	0.00
16	Door locks (Tower bolts)	4.00		1.00	Lump Sum	0.00
	Nails (Roofing and			1.00		0.00
17	Ordinary)	4.00			Lump Sum	
18	Assorted Nails 4",6	1.00		1.00	Lump Sum	0.00
19	Mosquito Wire Gauze	0.20		1.00	Lump Sum	0.00
20	Branding/Labelling/Painting	1.00		1.00	Lump Sum	0.00
21	Hand Washing facilities	1.00		1.00	Lump Sum	0.00
22	Labour cost(man days)	1.00		1.00	Lump Sum	0.00
_	Empty metallic drums with			1.00		0.00
23	weld-handles (half-cut)	1.00			Lump Sum	
		Sub total ( 2-s	tance)			0.000
		Total (60 IDP la	atrines)			0
			1 1 2	19 2011		

B) Procurement of 'Construction of new/rehabilitation of exiting water points through PPPs-partnership (2 in Merka and 1 in Wanlaweyn)- Use the same format.

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or

1.0

Pro	ovison of Access Water through Puplic Private Partnership ( S	olar Ins	talatior	n, Engine a	nd Pump)
	SUMMARY BoQs FOR SOLAR UPGRADI	NG 15	<u>HP</u>		
No	ITEM DESCRIPTIONS	Unit	QTY	Unit Price (USD)	Amount (USD)
1.0	Supply and Install Solar Panels of Mono Crystalline Type No.50PCs which is CERTIFIED M2 SOLAR Producted by International Organization for Standardization(ISO) and the Efficiency between 17 - 24%• Type350 – 72M• Peak Power (Pmax):350 W• Open Circuit Voltage (Voc)47.7V• Short Circuit Current (Isc)9.42 A• Max.Power Voltage (Vmp)38.7 V• Max.Power Current (Imp)9.05 A• Maximum System Voltage1000 V• Power Tolerance:+/- 3%• Dimensions (MM)1960 x990 x 40Note: All Technical Data at a Standard test Condition AM=1.5, E=1000 W/M², TC=25 C <sup>0</sup>	Pcs	36		
2.0	Supply stainless steel Solar Pump Inverter 11KW of (DC/AC Inverters With GPRS Romote Control) Controller/ pump Inverter Input DC & AC Output 380VAC 3Phase 50Hz. • working temperature: -10~+50°C • Well sensor. • Water Tank sensor.				
		pcs	1		



1	South Central Somana	ĺ	Ì	1	I
3.0	Supply and Install DC Wire for Special solar cable - 40 $\sim$ +1250C Max 1000V AC/1800V DC 1x6.0 mm2	М	200		
4.0	Combiner fuse box & small accessory	IVI	200		
	DC Combiner Fuse box				
	DC circuit breaker				
	<ul> <li>Manual transfer switch-generator &amp; PV Array of 100A max</li> </ul>				
		Ls	1		
5.0	Case Water Proof for Solar pump inverter	Pcs	1		
6.0	Cable 16mm x 3 core PVC insulated	Lm	20		
8.0	Installation, internal wiring sundries, sensors.	Ls	1		
7.0	Supply and Install the Solar Ground Mounting of Golvanized				
	Steel Ranking Structure frame with Gentel sloping of 1.6m				
(	Elevation, 1.3m@<15 <sup>0</sup> and Sett off the resistance of the air				
	space of 2mm,Bolding and welding the frame work Fix to the footing reinforced concrete to the ground and Plaster man				
	powering, painting with a setting of Serial and Parelell as you	0			
	see the attached Drawing with a technical guidance of Engineer				
	for 22,500Wp	Pcs	36		
9.0	Supply and Install Earthing and Elecical grounding use metallic				
	rod (diameter = $25$ mm (1inch) and length = $2m$ (6ft) instead of				
	earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the				
	moister condition, put 25mm (1inch) coal and Salt mixture				
	around the earth plate	No	1		
SUP	TOTAL COST IN USD mail: ayuubngo@yahoo.co	m	1	•	•
001		3	UME	\$	-
	ISTRUCTION OF CHAIN LINK FENCE				
Note		L. K			
	 ide materials and construction of <u>chain Link Fence</u> made from GI p	nino 2.5"	dia B.	class and 1	8m cloar
	ht every 2.5 meter length, The chain link is 50mmx50mm opening				<u>.om ciear</u>
			1000	Station Street	
1.0	Supply and Install The chain link is 50mmx50mm opening and			-00	
	2.7mm dim. Which the roll is 30mx2m(LxW) The	1		Sugar and	
	Area of Solar Panels:	8			
	Width: 992x12=11,904mm	100		-1111-1-1	
	Length: 1956x8=15,648mm	Roll	3.8	lio	
	Supply and Fix 5" of Angular for as a Columns Fixing the		5.0	114	
2.0	ground	PCs	25		
3.0	Construction Footing and Blinding to fix G.I Pipe, then to 50cm				
	above the footing, and welden the Security net into G.I And fix				
	Two frame door of 1.5mx2m, and 3mx2m	No	15		
	Supply and install rosen wires Fixing above the chainlink but on				
4.0	the weldening G.I Angular and Fence Net	Roll	6.26		•
	SUB TOTAL COST IN USD				\$ -
Prov	ison of Engine and Pump				
1.0	Supply and installation of 1 submersible pump Lowara 7.5KW				
			l .		
	(11Hp)Type capable of discharging <b>14m3/hr</b> at a total pumping	PCs	1		
	(11Hp)Type capable of discharging <b>14m3/hr</b> at a total pumping <b>head of m</b>	PCs	1		
2.0		PCs No	1		



SUB TOTAL COST IN USD SUB TOTAL COST IN USD GRAND TOTAL COST -

These documents constitute the complete Solicitation package.

### 3. Validity and Conditions of Bids

- 3.1 The Bidder is bound by his offer for a period of up on agreement from the final date for the submission of Bids.
- 3.2 The Contracting party reserves the right to deal with any Bidder of its choice for any or more parts of the Bid and is not bound either to accept the lowest or any offer or to award any contract.
- 3.3 Failure to deliver the Bid on or before the due date, or failure to comply with the terms, conditions of the Solicitation, will result in the bid being rejected.
- 3.4 The Candidate is required to hold all information pertaining to the solicitation as confidential, and to limit the dissemination of information within its organisation on a need-to-know basis.
- 3.5 Bids will be opened and reviewed by AYUUB bid committee.
- 3.6 Orders will be placed by the Form of Contract on the basis of the Bid selected, this RFQ the General Conditions of Contract for Supply Contracts.
- 4 The Quotations shall arrive in ONE ORIGINAL copy to AYUUB Office- Merka or Mogadishu by hand latest on the 2<sup>nd</sup> of January 2023, 4:30 pm local time.
- 5 The bid should written; To: AYUUB NGO Office Mogadishu or Merka

Bid NO: AYUUB NGO/SOM/2023/AYIRC/039

*Bid title:* Construction of 60 emergency latrines in IDP camps (30 in Wenlaweyn and 30 in Merka

Should you have quarries, questions please address to <u>procurement@ayuubngo.org</u> and give copy to <u>ayuubngo@ayuubngo.org</u> or <u>ayuubngo@yahoo.com</u>

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Mohamed Yusuf

Signature

**Title: Executive Director** 

Stamp:



#### Annex A -Bid application form (1)

Date:			
Bid no	):		
Bid Ti	tle:	<b>AYUUB NGO</b>	
Servic	e/Activity:		
Locati	on:	Ayuub Village	
То: А	YUUB NGO	Merka, Somalia	-UI
		e-mail: ayuubngo@yahoo.com	
We, th		he aforementioned services offered by AYUUB NGOdefined	the invitation tender notice date
(a)		and have no reservations to the bid Document, include with Instructions to Applicant.	ding Addendum(s) No(s),
(b)	We meet the eligibility confirm here that we	ity requirements as stated. Instructions to Applicants, of the in shall apply.	vitation bid Document; and we
(c)	bound to accept an	t you may cancel the proposal/quotation process at any ty Application that you may receive nor to invite Applicater process, without incurring any liability to the Applicants.	
(g)		tements and description contained in the Application are i of our knowledge and belief.	n all respect true, correct and
Signe	d		
Name	·		
In the	capacity of		
Duly a	uthorized to sign the	Application for and on behalf of:	
Applic	cant's Name		
Addre			
Auurt			



Date:

# Supplier's ethical standards (Annex B)

Anyone doing business with AYUUB NGO shall as a minimum meet the ethical standards as listed below, or shall positively agree to the standards and be willing to implement changes in their organization.

Name of supplier/company:

# CONDITIONS RELATED TO THE WORKPLACE:

We verify the following: Merka, Somalia

1. That no workers in our company will be forced, bonded or involuntary prison workers.

2. Workers shall not be required to lodge "deposits" or identity papers with their employer and shall be free to leave their employer after reasonable notice.

3. Workers, without distinction, shall have the right to join or form trade unions of their own choosing and to bargain collectively.

4. Children and young persons under the age of 18 shall not be engaged in work which is hazardous to their health or safety, including night work.

6. There shall be no discrimination at the work place based on ethnic background, religion, age, disability, gender, marital status, sexual orientation, union membership or political affiliation.

7. Measures shall be established to protect workers from sexually intrusive, threatening, insulting or exploitative behavior, and from discrimination or termination

Of employment on unjustifiable grounds, e.g. marriage, pregnancy, parenthood or HIV status.

8. Physical abuse or punishment, or threats of physical abuse, sexual or other harassment and verbal abuse, as well as other forms of intimidation, shall be prohibited.



9. Steps shall be

ntral Somalia taken to prevent accidents and injury to health arising out of, associated with, or occurring in, the course of work, by minimizing, so far as is reasonably practicable, the causes of hazards inherent in the working environment.

10. Wages and benefits paid for a standard working week shall meet, at a minimum, national legal standards or industry benchmark standards, whichever is higher. Wages should always be enough to meet basic needs.

11. All workers shall be provided with a written and comprehensible contract outlining their wage conditions and method of payments before entering employment.

12. Working hours shall comply with national laws and benchmark industry standards, whichever affords greater protection. It is recommended that working hours do not exceed 48 hours per week (8 hours per day).

13. Workers shall be provided with at least one day off for every 7 day period.

14. All workers are entitled to a contract of employment that shall be written in a language they understand.

e-mail: ayuubngo@yahoo.com

15. Workers shall receive regular and documented health and safety training, and such training shall be repeated for new workers.

16. Access to clean toilet facilities and to potable water, and, if appropriate, sanitary facilities for food storage shall be provided.

17. Accommodation, where provided, shall be clean, safe and Adequately ventilated, and shall have access to clean toilet facilities and potable water.

18. No Deductions from wages shall be made as a disciplinary measure.

19. Obligations to employees under international conventions and social security laws, and regulations arising from the regular employment relationship, shall not be avoided through the use of short term contracting (such as contract labour, casual labour or day labour), sub-contractors or other labour relationships.

20. All workers shall be provided with a contract of employment that shall be written in a language they understand.

21. Hazardous chemicals and other substances shall be carefully managed in accordance with documented safety procedures.

## CONDITIONS OUTSIDE THE WORKPLACE:

1. Production and extraction of raw materials for production shall not contribute to the destruction of the resources and income base for marginalized populations, such



as in claiming large **South Central Somalia** land areas or other natural resources on which these populations are dependent.

2. Environmental measures shall be taken into consideration throughout the production and distribution chain ranging from the production of raw material to the consumer sale. Local, regional and global environmental aspects shall be considered. The local environment at the production site shall not be exploited or degraded by pollution.

3. National and international environmental legislation and regulations shall be respected.

Relationship with the supplier and AYUUB NGO staff members: 1. Is there any potential conflict of interest between you and your company with any AYUUB NGO staff member? A conflict of interest can be due to a relationship with a staff members such as close family etc.
This Contract is made in two original copies and hereby duly signed by both parties
We, the undersigned verify that we meet the ethical standards as listed above.
On behalf of the supplier
NAME:
SIGNATURE: Stamp:
South Central Somalia



(	INSERT LOGO Technical and Financial Proposal Form (Annex C)
Company Contact details: Email:	AYUUB NGO
Address:	Ayuub Village
Date:	Merka, Somalia 🧠
Bid no:	e-mail:.ayuubngo@yahoo.com
Bid Title:	
Service/Activity:	
With the reference of is pleased to submit it	

A) Procurement of construction of 60 emergency latrines in IDP sites of Merka and Wanlaweyn districts- Use the same format to complete the form.

	South (	Tont	01	So	malia	
		IDPs latrine co	onstruction	on		
NO	Description	Unit quantity	Unit Cost	Duration	<b>Time</b> unit (Months, Days or Lump sum)	Total
1	Excavation of pit hole	10.00		1.00	Lump Sum	0.00
2	Portland Cement, 50kg	5.00		1.00	Lump Sum	0.00
3	Sand	0.57		1.00	tonne	0.00
4	Gravel	0.70		1.00	tonne	0.00
5	Iron bar, Ø 8mm	0.09		1.00	bar	0.00
6	Heavy wood columns	2.00		1.00	columns	0.00
	Plywood ( flexible)-			1.00		0.00
7	(1.2x2.4m)	8.00			Lump Sum	
8	10 cm/4 inch diameter PVC pipe for ventilations	1.00		1.00	Lump Sum	0.00

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Email: ayuublogistics@ayuubngo.org



South Central Somalia							
9	Water	4.00		1.00	drums	0.00	
	Heavy wood columns (10			1.00		0.00	
10	cm X 3m Length)	5.00			Lump Sum		
	Wood timber (2.5cm X 5cm			1.00		0.00	
11	X 4m)	10.00			Lump Sum		
12	Corrugated Iron sheets,G34	10.00		1.00	Lump Sum	0.00	
13	Waste Pipe 2.0x 6m length	0.50		1.00	Lump Sum	0.00	
	Concrete slab of 1.5m by			1.00		0.00	
14	1.3m	1.00			Lump Sum		
15	Door hinges	4.00		1.00	Lump Sum	0.00	
16	Door locks (Tower bolts)	4.00		1.00	Lump Sum	0.00	
	Nails (Roofing and			1.00		0.00	
17	Ordinary)	4.00			Lump Sum		
18	Assorted Nails 4",6	1.00	IN I	1.00	Lump Sum	0.00	
19	Mosquito Wire Gauze	0.20		1.00	Lump Sum	0.00	
20	Branding/Labelling/Painting	1.00	- DESERVED AND	1.00	Lump Sum	0.00	
21	Hand Washing facilities	1.00	illa	1.00	Lump Sum	0.00	
22	Labour cost(man days)	1.00		1.00	Lump Sum	0.00	
	Empty metallic drums with		om	1.00		0.00	
23	weld-handles (half-cut)	1.00			Lump Sum		
		Sub total ( 2-s	stance)			0.000	
		Total (60 IDP la	atrines)			0	

B) Procurement of 'Construction of new/rehabilitation of exiting water points through PPPs-partnership (2 in Merka and 1 in Wanlaweyn)- Use the same format.

Pro	ovison of Access Water through Puplic Private Partnership	( Solar Ins	stalation	n, Engine a	ind Pump)
	SUMMARY BoQs FOR SOLAR UPGR	DING 15	HP		
No	ITEM DESCRIPTIONS	Unit	QTY	Unit Price (USD)	Amount (USD)
1.0	Supply and Install Solar Panels of <u>Mono Crystalline Type</u> No. 50PCs which is CERTIFIED <u>M2 SOLAR</u> Producted by				
	International Organization for Standardization(ISO) and the Efficiency between 17 - 24% • Type				
	Peak Power (Pmax):	Pcs	36		
	Max.Power Current (Imp)	5			
	Dimensions (MM)				

11

Email: ayuublogistics@ayuubngo.org



Inverters With GPRS Romote Control) Controller/ pump Inverter       Inverters With GPRS Romote Control) Controller/ pump Inverter         Inverters With GPRS Romote Control) Controller/ pump Inverter       pcs       1         • Walter Tank sensor.       pcs       1         • Walter Tank sensor.       pcs       1         • Walter Tank sensor.       pcs       1         • O ~+1250C Max 1000V AC/1800V DC 1x6.0 mm2       M       200         • O Combiner Fuse box       • OC circuit breaker       1         • D C combiner Fuse box       • D C circuit breaker       1         • O Cable 16mm x 3 core PVC insulated       Ls       1         8.0       Installative Solar gundries, sensors.       Ls       1         7.0       Supply and Install the Solar Ground Mounting of Golvanized       Ls       1         7.0       Supply and Install Earthing and Elecical grounding use metallic rod (ameter - 25m (1ch) and astor man powering, painting with a setting of Serial and Parelell as you see the attached Drawing with a technical guidance of Engineer for 22.5 GolWp.       36         9.0       Supply and Install Earthing and Elecical grounding use metallic rod (ameter - 25m (1ch) instald of earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture around the earth plate       1         SUB TOTAL COST IN USD       <	2.0	South Central Somalia Supply stainless steel Solar Pump Inverter 11KW of (DC/AC					
• Water Tank sensor.       pcs       1         Supply and Install DC Wire for Special solar cable - 40       200       200         3.0       ~+1250C Max 1000V AC/1800V DC 1x6.0 mm2       M       200         4.0       Combiner fuse box & small accessory       .       .         • DC circuit breaker       .       .       .       .         • Manual transfer switch-generator & PV Array of 100A max       .       .       .         5.0       Case Water Proof for Solar pump inverter       .       .       .       .         6.0       Cable 16mm x 3 core PVC insulated       Lm       20       .       .       .         8.0       Installation, internal wring sundries, sensors.       Ls       1       .		Input DC & AC Output 380VAC 3Phase 50Hz.					
3.0       ~+1250C Max 1000V AC/1800V DC 1x6.0 mm2       M       200         4.0       Combiner fuse box & small accessory       • DC circuit breaker         • DC circuit breaker       • Manual transfer switch-generator & PV Array of 100A max       Ls       1         5.0       Case Water Proof for Solar pump inverter       Pcs       1       6.0         6.0       Cable 16mm x 3 core PVC insulated       Lm       20       8.0         1.0       Installation, internal wiring sundries, sensors.       Ls       1       7.0         7.0       Supply and Install the Solar Ground Mounting of Golvanized       Steel Ranking Structure frame with Gentel sloping of 1.6m       Elevation, 1.3m@<15 <sup>o</sup> and Sett off the resistance of the air         space of 2mm, Bolding and welding the frame work Fix to the footing reinforced concrete to the ground and Parelell as you see the attrached Drawing with a technical guidance of Engineer for 22,500Wp       Pcs       36         9.0       Supply and Install Earthing and Elecical grounding use metallic rod (diameter = 25mm (1inch) and length = 2m (6H) instead of earth plate for earthring system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture around the earth plate       No       1         SUB TOTAL COST IN USD       \$       CONSTRUCTION OF CHAIN LINK FENCE       No       1         Note:       Provide materials and constr			pcs	1			
OC Combiner Fuse box     OC circuit breaker     Manual transfer switch-generator & PV Array of 100A max     Ls     1     Case Water Proof for Solar pump inverter     Cable 16mm x 3 core PVC insulated     Lm     20     Ls     1     Cable 16mm x 3 core PVC insulated     Lm     20     Ls     1     Cable 16mm x 3 core PVC insulated     Lm     20     Ls     1     To     Supply and Install the Solar Ground Mounting of Golvanized     Steel Ranking Structure frame with Gentel sloping of 1.6m     Elevation, 1.3m@<15 <sup>0</sup> and Sett off the resistance of the air     space of 2mm, Bolding and welding the frame work Fix to the     footing reinforced concrete to the ground and Plaster man     powering, painting with a setting of Serial and Parelell as you     see the attached Drawing with a technical guidance of Engineer     for 22,500Wp     Supply and Install Earthing and Elecical grounding use metallic     rod (diameter = 25mm (1inch) and length = 2m (6it) instead of     earth plate for earthing system. The metallic pipe should be 2     meter below from the surface of ground. To maintain the     moister condition, put 25mm (1inch) coal and Salt mixture     around the earth plate     SUB TOTAL COST IN USD     Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.     Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.     Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.     Supply and Fix 5" of Angular for as a Columns Fixing the     ground     Supply and Fix 5" of Angular for as a Columns Fixing the     ground in Sub tofin, and welden the Security net into G.1 And fix     Two frame door of 1.5mx2m, and 3mx2m     Supply and install rose wires Fixing above the chainlink but on	3.0		м	200			
5.0       Case Water Proof for Solar pump inverter       Pcs       1         6.0       Cable 16mm x 3 core PVC insulated       Lm       20         8.0       Installation, internal wining sundries, sensors.       Ls       1         7.0       Supply and Install the Solar Ground Mounting of Golvanized Steel Ranking Structure frame with Gentel sloping of 1.6m Elevation, 1.3m@-15° and Sett off the resistance of the air space of 2mm, Bolding and welding the frame work Fix to the footing reinforced concrete to the ground and Plaster man powering, painting with a setting of Serial and Parelell as you see the attached Drawing with a technical guidance of Engineer for 22,500Wp       Pcs       36         9.0       Supply and Install Earthing and Elecical grounding use metallic rod (diameter = 25mm (1inch) and length = 2m (6ft) instead of earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture around the earth plate       No       1         SUB TOTAL COST IN USD       \$         CONSTRUCTION OF CHAIN LINK FENCE       Note:         Provide materials and construction of chain Link Fence made from GI pipe 2.5" dia. B-class and 1.8m c height every 2.5 meter length. The chain link is 50mmx50mm opening and 2.7mm dim.       3.8         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.       3.8         2.0       Supply and Install for a sa Columns Fixing the ground       PCs       25         3.	4.0	DC Combiner Fuse box     DC circuit breaker					
Outcome       Description       Description         0.0       Cable 16mm x 3 core PVC insulated       Lm       20         8.0       Installation, internal witting sundries, sensors.       Ls       1         7.0       Supply and Install the Solar Ground Mounting of Golvanized Steel Ranking Structure frame with Gentel sloping of 1.6m Elevation, 1.3m @<15° and Sett off the resistance of the air space of 2mm, Bolding and welding the frame work Fix to the footing reinforced concrete to the ground and Plaster man powering, painting with a setting of Serial and Parelella as you see the attached Drawing with a technical guidance of Engineer for 22,500Wp       Pcs       36         9.0       Supply and Install Earthing and Elecical grounding use metallic rod (diameter = 25mm (1inch) and length = 2m (6ft) instead of earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture around the earth plate       No       1         SUB TOTAL COST IN USD       \$         CONSTRUCTION OF CHAIN LINK FENCE       \$         Note:       Provide materials and construction of <u>chain Link Fence</u> made from GI pipe 2.5" dia. B-class and 1.8m c height every 2.5 meter length, The chain link is 50mmx50mm opening and 2.7mm dim. Which the roll is 30mx2m(LxW) The • Area of Solar Panels: Width: 992x12=11,904mm Length: 1956x8=15,648mm       Roll       3.8         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       PCs       25         3.0       Co	- 0		Ls	1			
Could of Unit Active Transmitted       Lis       1         8.0       Installation, internal wing sundries, sensors.       Lis       1         7.0       Supply and Install the Solar Ground Mounting of Golvanized Steel Ranking Structure frame with Gentel sloping of 1.6m Elevation, 1.3m @c.15° and Sett off the resistance of the air space of 2mm, Bolding and welding the frame work Fix to the footing reinforced concrete to the ground and Plaster man powering, painting with a setting of Serial and Parelell as you see the attached Drawing with a technical guidance of Engineer for 22,500Wp       Pcs       36         9.0       Supply and Install Earthing and Elecical grounding use metallic rod (diameter = 25mm (1inch) and length = 2m (6ft) instead of earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture around the earth plate       No       1         SUB TOTAL COST IN USD       \$         CONSTRUCTION OF CHAIN LINK FENCE       S         Note;       Provide materials and construction of <u>chain Link Fence</u> made from GI pipe 2.5" dia. B-class and 1.8m c height every 2.5 meter length, The chain link is 50mmx50mm opening and 2.7mm dim. Which the roll is 30mx2m(LxW) The • Area of Solar Panels: Width: 992x12=11,904mm Length: 1956x8=15,648mm       Roll       3.8         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       PCs       25       3.0         3.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Sec							
7.0       Supply and Install the Solar Ground Mounting of Golvanized Steel Ranking Structure frame with Gentel sloping of 1.6m Elevation, 1.3m@ e15° and Sett off the resistance of the air space of 2mm,Bolding and welding the frame work Fix to the footing reinforced concrete to the ground and Plaster man powering, painting with a setting of Serial and Parelell as you see the attached Drawing with a technical guidance of Engineer for 22,500Wp       Pcs       36         9.0       Supply and Install Earthing and Elecical grounding use metallic rod (diameter = 25mm (1inch) and length = 2m (6t) instead of earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture around the earth plate       No       1         SUB TOTAL COST IN USD       \$         CONSTRUCTION OF CHAIN LINK FENCE       \$         Note:       Provide materials and construction of <u>chain Link Fence</u> made from GI pipe 2.5" dia. B-class and 1.8m c height every 2.5 meter length. The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim. Which the roll is 30mx2m(LxW) The • Area of Solar Panels: Width: 992x12=11,904mm Length: 1956x8=15,648mm       Roll       3.8         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       PCs       25       3.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m       No       15	-						
Steel Ranking Structure frame with Gentel sloping of 1.6m       Elevation, 1.3m@-15° and Sett off the resistance of the air         space of 2mm,Bolding and welding the frame work Fix to the       footing reinforced concrete to the ground and Plaster man         powering, painting with a setting of Serial and Parelell as you       see the attached Drawing with a technical guidance of Engineer         for 22,500Wp       Pcs       36         9.0       Supply and Install Earthing and Elecical grounding use metallic       rod (diameter = 25mm (1inch) and length = 2m (6ft) instead of         earth plate for earthing system. The metallic pipe should be 2       meter below from the surface of ground. To maintain the         moister condition, put 25mm (1inch) coal and Salt mixture       No       1         SUB TOTAL COST IN USD       \$         CONSTRUCTION OF CHAIN LINK FENCE       No       1         Note:       Provide materials and construction of <u>chain Link Fence</u> made from GI pipe 2.5" dia. B-class and 1.8m c         Provide materials and construction of <u>chain Link Fence</u> made from GI pipe 2.5" dia. B-class and 1.8m c         Note:       Provide materials and construction of <u>chain Link Fence</u> made from GI pipe 2.5" dia. B-class and 1.8m c         Provide materials and construction of chain link is 50mmx50mm opening and 2.7mm dim.       1         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.       2         Pres       25 <td></td> <td></td> <td>Ls</td> <td>1</td> <td></td> <td></td> <td></td>			Ls	1			
9.0       Supply and Install Earthing and Elecical grounding use metallic rod (diameter = 25mm (1inch) and length = 2m (6ft) instead of earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture around the earth plate       No       1         SUB TOTAL COST IN USD       \$         CONSTRUCTION OF CHAIN LINK FENCE       \$         Note:       Provide materials and construction of chain Link Fence made from GI pipe 2.5" dia. B-class and 1.8m c height every 2.5 meter length, The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         2.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m         3.0       Supply and install rosen wires Fixing above the chainlink but on		Steel Ranking Structure frame with Gentel sloping of 1.6m Elevation, 1.3m@<15 <sup>o</sup> and Sett off the resistance of the air space of 2mm, Bolding and welding the frame work Fix to the footing reinforced concrete to the ground and Plaster man powering, painting with a setting of Serial and Parelell as you see the attached Drawing with a technical guidance of Engineer	Pcs	36			
SUB TOTAL COST IN USD       \$         CONSTRUCTION OF CHAIN LINK FENCE         Note:       Provide materials and construction of <u>chain Link Fence</u> made from GI pipe 2.5" dia. B-class and 1.8m c         height every 2.5 meter length, The chain link is 50mmx50mm opening and 2.7mm dim.       1.0         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       PCs       25         3.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m       No       15         Supply and install rosen wires Fixing above the chainlink bu	9.0	rod (diameter = 25mm (1inch) and length = 2m (6ft) instead of earth plate for earthing system. The metallic pipe should be 2 meter below from the surface of ground. To maintain the moister condition, put 25mm (1inch) coal and Salt mixture	No	1			
QONSTRUCTION OF CHAIN LINK FENCE         Note:       Provide materials and construction of chain Link Fence made from GI pipe 2.5" dia. B-class and 1.8m c         height every 2.5 meter length, The chain link is 50mmx50mm opening and 2.7mm dim.       2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         • Area of Solar Panels:       Note:         Width: 992x12=11,904mm       Roll         Length: 1956x8=15,648mm       Roll         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       PCs         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       No         3.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m       No       15         Supply and instal	SUB			(Contraction)	¢	1	
Note:       Provide materials and construction of <u>chain Link Fence</u> made from GI pipe <u>2.5" dia. B-class and 1.8m c</u> height every 2.5 meter length, The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         • Area of Solar Panels:       Width: 992x12=11,904mm         Length: 1956x8=15,648mm       Roll         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground         3.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m         No       15         Supply and install rosen wires Fixing above the chainlink but on			~~~		\$		-
Provide materials and construction of <u>chain Link Fence</u> made from GI pipe <u>2.5" dia. B-class and 1.8m cheight every 2.5 meter length</u> , The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         1.0       Supply and Install The chain link is 50mmx50mm opening and 2.7mm dim.         • Area of Solar Panels:       Width: 992x12=11,904mm         Length: 1956x8=15,648mm       Roll 3.8         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       PCs 25         3.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m       No         Supply and install rosen wires Fixing above the chainlink but on       Supply and install rosen wires Fixing above the chainlink but on						_	
2.7mm dim. Which the roll is 30mx2m(LxW) The       Image: Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m       Roll And fix No         2.0       Supply and Fix 5" of Angular for as a Columns Fixing the ground       PCs       25         3.0       Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2m       No       15	Provi	ide materials and construction of <u>chain Link Fence</u> made from GI				.8m clea	<u>ar</u>
Width: 992x12=11,904mm Length: 1956x8=15,648mmRoll3.82.0Supply and Fix 5" of Angular for as a Columns Fixing the groundPCs253.0Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2mNo15Supply and install rosen wires Fixing above the chainlink but onVolVolVol	1.0	2.7mm dim. Which the roll is 30mx2m(LxW) The					
2.0Supply and Fix 5" of Angular for as a Columns Fixing the groundPCs253.0Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2mNo15Supply and install rosen wires Fixing above the chainlink but onVolVolVol		Width: 992x12=11,904mm	Poll	20			
3.0Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix Two frame door of 1.5mx2m, and 3mx2mNo15Supply and install rosen wires Fixing above the chainlink but on15	2.0						
	3.0	Construction Footing and Blinding to fix G.I Pipe, then to 50cm above the footing, and welden the Security net into G.I And fix					
	4.0		Roll	6.26			
SUB TOTAL COST IN USD		SUB TOTAL COST IN USD				\$	



Provison of Engine and Pump					
1.0	Supply and installation of 1 submersible pump Lowara 7.5KW (11Hp)Type capable of discharging <b>14m3/hr</b> at a total pumping <b>head of m</b>	PCs	1		
2.0	supply and install cantrol panel of 11kw	No	1		
SUB TOTAL COST IN USD					\$ -
				\$	
GRAND TOTAL COST				-	

