

Guidelines for the Supply, Delivery, Installation, Testing and Commissioning of One (1) Unit 31.5KVA Generator Set with Automatic Transfer Switch (ATS)

A. BACKGROUND

ChildFund International is a non-sectarian and non-profit development organization working in more than 30 countries worldwide to improve the well-being of about 15.2 million children and families, regardless of race, creed, religion and gender. ChildFund Kenya’s core intent is to help deprived, excluded and vulnerable children have the capacity to improve their lives and the opportunity to become young adults, parents and leaders who bring lasting and positive change in their communities; and societies whose individuals and institutions participate in valuing, protecting and promoting the worth and rights of children.

The MFAT funded Agriculture, Dairy and Economic Development Project (ADED) will deliver improved agriculture, diversified livelihoods and reliable and beneficial market pathways for 1,250 farming households, who are included within the 2,875 direct beneficiaries (5,750 indirect). By the end of the project, food security and incomes in Emali farming communities will be improved and Maasai and Kamba households will be more resilient to climatic and economic shocks.

ChildFund Kenya intends to set up 5 milk collection centres within its area of operation to improve milk value chain and marketing of milk under Samuli Dairy cooperative. Due to frequent power outages experienced in the area, a back-up power system was envisaged to minimize losses associated with the milk spoilage. It is due to this that ChildFund Kenya intends to procure and install standby generators in the milk collection centres.

B. OBJECTIVE

To provide, install, commission and operate generator set at Osutwa Dairy cooperative milk collection centre at Sultan Hamud to ensure the continuous or uninterrupted supply of electricity/power in the Milk collection centre.

C. ITEM SPECIFICATIONS

Lot No.	Item	Technical Description	Unit	Qty.
1	One (1) unit of 31.5KVA acoustic canopied generator set with ATS	Number of cylinders: 6 Cylinder arrangement: V-Type turbo charged & intercooled design with high capacity air, fuel and lubricating oil filters Total Power at 1500rpm = 34kVA Prime Power = 25.2kW or 31.5kVA Standby Power = 27.2kW or 34Kva Control Panel: Digital Speed governor: Electrical Cooling system: Water Cooling Cycle Phase : 3 Volts: 230Vac Frequency: 60Hz Power Factor: 0.8 Starter motor: 24V Exciter type: Single bearing, Brushless, Self-excited Silent Type : Imported Sound Proofed and Weather Proofed Canopy	set	1

Lot No.	Item	Technical Description	Unit	Qty.
2	Generator house made of fabricated steel hollow sections	As per the drawing number CFK-GH-001	Nr	1

D. PROJECT SITE

The said goods should be delivered, installed and commissioned at the Osutwa Dairy Milk Collection Centre at Sultan Hamud.



E. SCOPE OF WORK

1. Mobilization of manpower, materials, tools, equipment and technical supervisions.
2. Construction of Generator housing according to the Bill of quantities and attached drawing
3. Supply, Delivery, Installation, Testing, and Commissioning of brand new generator set and all ancillary equipment required for installation and operation.
 - i. Installation fittings/ accessories
 - ii. 1 1/2" Exhaust pipe
 - iii. Copper earth rod c/w clamp
 - iv. 2.5mm 4 core ug cable
 - v. 16mm² single core grounding cable (m)
 - vi. Cable glands
 - vii. Cable lugs
 - viii. Insulation tapes
 - ix. Generator Foundation Bolts
 - x. Control panel bolts
4. Supply and Installation of Cable wires from Generator sets to ATS and Main Distribution Panel.
5. Installation of appropriate safety measures at the project site.
6. Provisions of warranties:

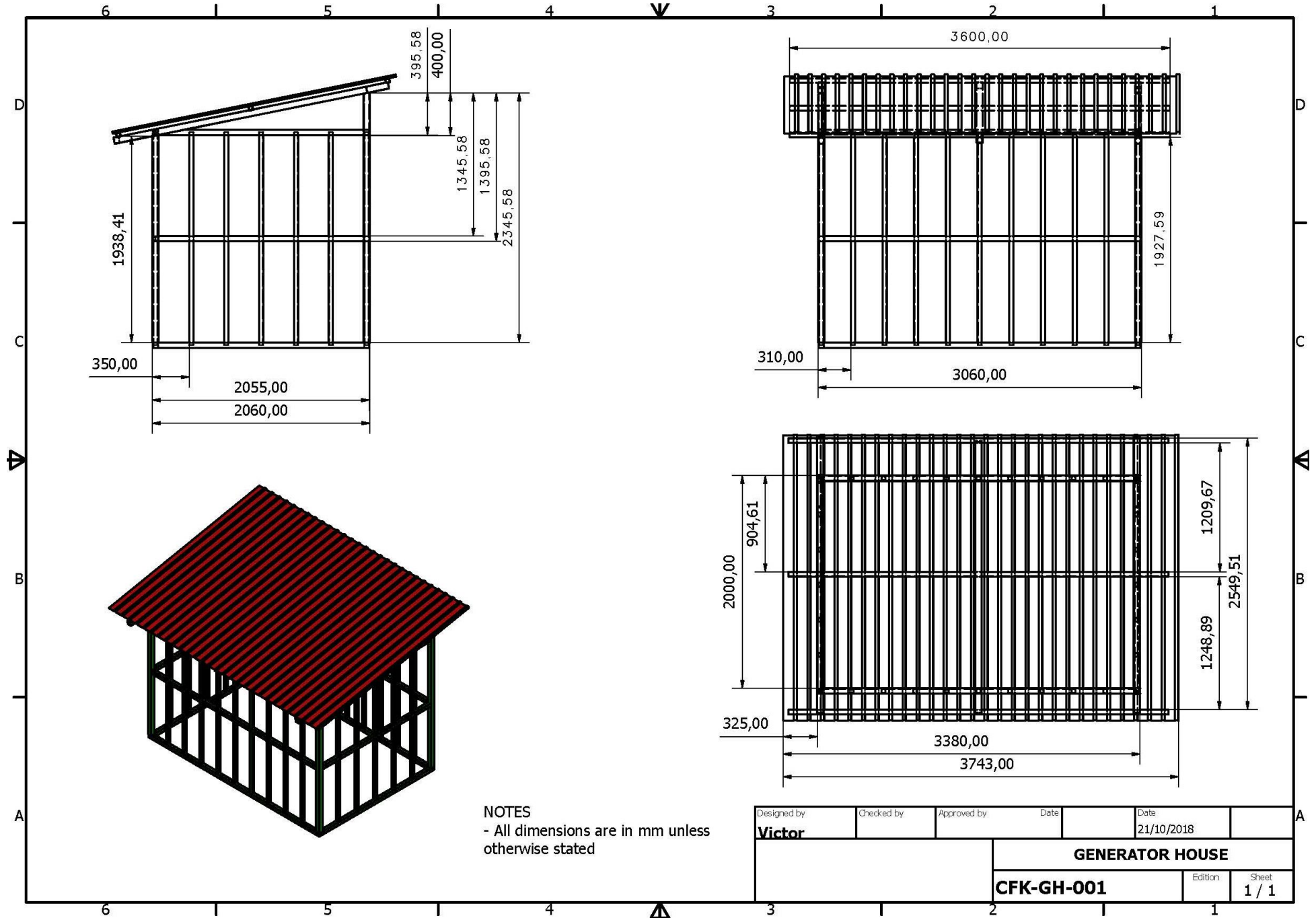
- a. Two (1)-years warranty against manufacturer's defects from receipt of the Certificate of Acceptance.
7. Actual Load testing before final acceptance.
8. Conduct of a one (1) day training for the end-user operator for operating system, commissioning and preventive maintenance procedure.

F. BILL OF QUANTITIES

Item	Description	Qty	Unit	Rate	Amount
	<u>NOTES</u>				
	Rates to include labour, transport to site and installation				
	Unless otherwise stated, rates for Generator shall include all installaton sundries and any necessary equipment, temporary or permanent needed during installation				
	The Genset should be fitted with sound proof canopy to provide weather protection and incorporate an integral residential silencer				
A	GENERATOR				
A.1	Providee for supply and installation of 31.5KVA acoustic canopied generator complete with its Automatic Mains failure and base frame mounting	1	Nr		
B	<u>GENERATOR HOUSING</u>				
B.1	60mmx60mmx3mm	2	pcs		
B.2	50mmx50mmx2mm	7	pcs		
B.3	40mmx40mmx3mm	11	pcs		
B.4	Box Profile precoated roofing sheets 2m long	6	pcs		
B.5	Roofing Nails	0.5	kg		
B.6	Roofing Rubber	1	pkts		
B.7	Re-enforced concrete pad	3	m3		
C	EARTHWORKS				
C.1	Provide for excavation of foundation	3	m3		
	SUBTOTAL				

Item	Description	Qty	Unit	Rate	Amount
	VAT				
	SUB-TOTAL				

F. DRAWINGS



NOTES
- All dimensions are in mm unless otherwise stated

Designed by	Checked by	Approved by	Date	Date
Victor				21/10/2018
GENERATOR HOUSE				
CFK-GH-001			Edition	Sheet
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