



KENYA ELECTRICITY GENERATING COMPANY LIMITED

KGN-HYD-041-2022

RFx 5000011393

TENDER FOR CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION

(Exclusive to firms owned by PWD contractors)

Date: 3rd January, 2023

Addendum no. 1

In accordance with the **TENDER FOR CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION. KGN-HYD-041-2022**, KenGen hereby issues **Addendum No. 1: as follows**

1	REVISED BILL OF QUANTITIES	PART II - WORK REQUIREMENTS (SECTION VII- BILLS OF QUANTITIES)	Bidder to fill the revised bill of quantities as detailed below
2	WORKING DRAWINGS	PART II - WORK REQUIREMENTS (SECTION V – DRAWINGS)	Detailed drawing attached

PART II - WORK REQUIREMENTS

SECTION VII- BILLS OF QUANTITIES

1. REVISED BILL OF QUANTITIES

CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION- REVISED BILLS OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>SUBSTRUCTURES</u>				
	Note: - <i>Works in this section are works below the ground inclusive of the ground floor slab but not finishes.</i>				
	<u>Excavations</u>				
1	Excavate to remove vegetable soil not exceeding 150 mm deep commencing from existing ground level, load, and cart away from site.	SM	300		
2	Excavate foundation trenches not exceeding 1500 mm deep commencing from stripped level	M ³	128		
3	Excavate for column bases not exceeding 1.5m	M ³	54		
4	Extra over all kinds of excavations for excavating in hard rock, consolidated murrum or gravel at any depth	M ⁴	72		
5	Return, fill, and ram excavated material around foundations	M ³	60		

CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION- REVISED BILLS OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	<u>Level Surfaces</u>				
7	level and compact bottoms of excavations for strip foundation	Sm	81		
	<u>Reinforcement</u>				
	<u>High tensile square twisted steel bars to B.S.4441</u>				
1	12mm Bars to strip footing	Kg	378		
2	8mm Bars	Kg	180		
3	BRC Mesh reinforcement No. A98 in floor slab: including all necessary concrete spacer blocks	Sm	300		
	<u>Substructure Walling</u>				
4	200mm Thick Quarry dressed natural stone foundation walls: bedded and jointed in cement and Sand (1:4) mortar	SM	212		
	<u>Hardcore Filling</u>				
5	Backfill with hardcore inert material: well watered and compacted in 150mm thick (3 maximum) layers	CM	150		
	<u>Murram works</u>				
6	50mm thick approved quality murram to hardcore surfaces	SM	300		
	<u>Polythene underlay</u>				
7	Gauge 500 polythene underlay laid on hardcore	SM	300		
	<u>Ant termite treatment</u>				
8	Approved anti-termite chemical treatment: applied	Sm	300		
	<u>Concrete Works</u>				
9	50mm thick mass concrete blinding (1:4:8) in strip footings	SM	80		
10	Reinforced concrete (1:2:4) in strip footings	Cm	18		
11	200mm thick floor slab	SM	300		
	<u>Formwork</u>				
12	Edged: slab over 75 but not exceeding 150mm girth	Lm	75		
TOTAL FOR SUBSTRUCTURE WORKS CARRIED TO SUMMARY					
	<u>SUPERSTRUCTURE</u>				
	<u>Machine cut (Juja) natural stone jointed and bedded in cement and sand mortar (1:4) as described in: -</u>				
1	200mm thick walls with and including 25x3mm thick hoop iron strips every alternate course includes gables walls. <u>Damp proof course</u>	SM	730		

CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION- REVISED BILLS OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	200/150mm wide "Pluvex" or other equal and approved dump roof course laid and bedded in and including cement and sand mortar (1:4)	LM	135		
	R.C concrete (1:2:4) in beams and columns				
3	Columns	Cm	32		
4	Beams	Cm	25		
	<u>Form work</u>				
5	Soffits and edge of beams	Sm	100		
6	Sides of columns	Sm	160		
	<u>High tensile Reinforcement ribbed steel bars to B.S 4441</u>				
7	8mm Bars dia in Beams	Kg	400		
8	12mm Bars dia in Beams	Kg	101		
	Column and Bases		0		
9	8mm	Kg	510		
10	16mm	Kg	150		
		Kg	0		
TOTAL FOR SUPERSTRUCTURE CARRIED TO SUMMARY					
	<u>ROOFING</u>				
	<u>Supply and install mild steel trusses as detailed in the structural drawings</u>				
1	mild steel trusses fabricated using 50x50x4mm thick square tube spaced at 1250mm C/C as detailed in the attached design drawing	No	20		
2	200x4mm thick Z purlins spaced at 1000mm C/C	L	450		
3	Supply and install 400mm long M20 galvanises anchor bolts complete with washers and nuts for holding down the trusses	No	80		
	<u>Supply and fix Roofing Sheets with colour and profile to approval of the Client and in accordance with manufacturer's printed instructions</u>				
4	28Gauge IT5 box profile roofing sheets as MRM or equivalent	SM	380		
5	supply and install 2000mm long x1000mm wide IT5 box profile clear polycarbonate roofing sheets	NO	8		
6	Angle ridge overall girth 260 mm tapered length wise for ridges and hips - 28gauge	LM	25		
TOTAL FOR ROOFING CARRIED TO SUMMARY					
	<u>WINDOWS & VENTILATION BLOCKS</u>				

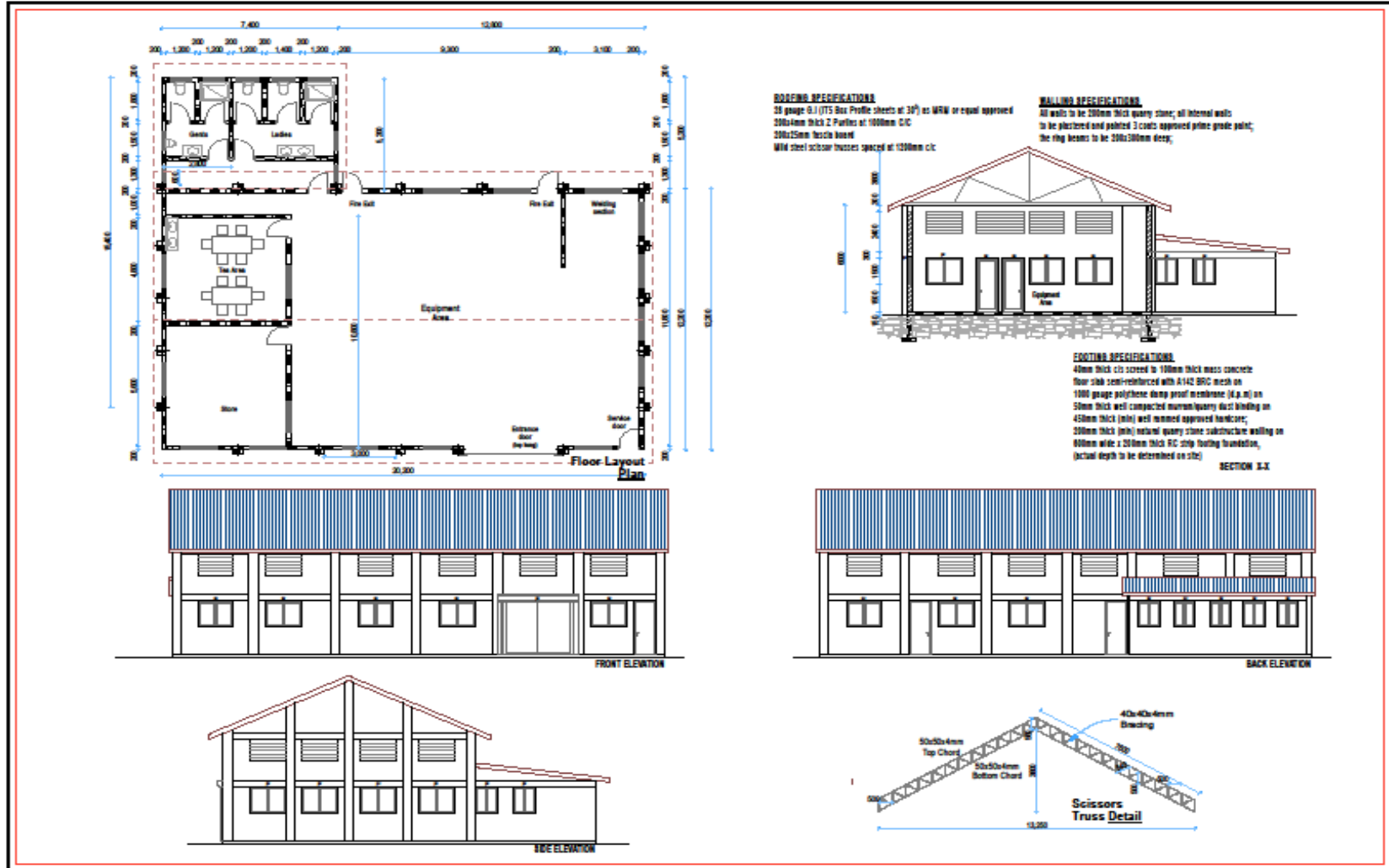
CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION- REVISED BILLS OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Casements</u>				
	<u>Steel casement windows purpose made primed steel complete in opening and fixed lights complete with fasteners and stays; steel lugs built into stonework and complete with burglar proofing in 16mm diamond pattern solid bars to architects' approval.</u>				
1	Window size 2000 x 1000mm high	No.	12		
2	Window size 900 x 1200mm high	No.	4		
3	Window size 1500 x 1200mm high	No.	4		
4	Window size 3000 x 1200mm high	No.	2		
4	200x150mm with cement sand mortar vent block to open windows	SM	96		
	<u>Glazing</u>				
5	4mm thick clear glazing pane to the windows and doors with metallic putty in different panes	SM	40		
	<u>Painting</u>				
6	Prepare and apply three coats of gloss oil paint to metal window surfaces	SM	10		
TOTAL FOR WINDOWS CARRIED TO SUMMARY					
	<u>DOORS</u>				
	<u>Doors in Mild Steel doors to details</u>				
1	1000 x 3000mm high door complete with ironmongery and 50x25x4mm square tube frame	No	4		
2	Vertical opening roller aluminium shutter door complete with all the necessary fittings overall size 4000x6000mm high.	No	1		
3	Supply and install electric mortar for the shutter to electrical engineer's specifications	No	2		
	<u>Doors in Mahogany/hardwood facing to details fitted on 150x50mm mahogany timber frame with 200mm high vent</u>				
4	45mm solid mahogany panel door overall size 900x2400mm	No	10		
5	2500mm high 200mm thick mahogany door frames	No	10		
	<u>Ironmongery</u>				
6	Heavy duty 100mm brass butt hinges	Prs	30		
7	Two lever mortice lock set complete with handle furniture	No.	10		
8	Prepare and apply three coats of gloss varnish paint to doors	SM	30		
9	Prepare and apply three coats of gloss oil paint to metal surfaces	SM	60		

CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION- REVISED BILLS OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL FOR DOORS CARRIED TO SUMMARY					
	<u>FINISHES</u>				
	<i>External Finishes</i>				
1	19mm thick cement and sand 1:4 render to external walls and gable walls	SM	220		
2	Apply one coat undercoat and two finishing coats of exterior quality paint to external walls	SM	220		
	Key pointing on the external walls	SM	415		
	<i>Internal Wall Finishes</i>				
3	Gauged plaster 1:4 as described to: Walls and concrete surfaces internally	SM	530		
4	Prepare and apply three coats Vinyl silk emulsion paints paint to plastered surfaces.	SM	530		
5	300X250X6mm thick Ceramic wall tiles complete with cement grouting to joints to match	SM	98		
-	<i>Floor Finishes</i>	-	-	-	-
6	25 mm beds: finished to receive floor finishes	SM	300		
7	300 X 300 X 10 mm thick ceramic floor tiles laid on screened beds (m.s) Floors in Floors	SM	98		
8	Prepare the floor surface to the required finish and apply 8mm thick self levelling epoxy floor coating as supplied by crown paints or equal approved brand	SM	210		
TOTAL FOR FINISHES CARRIED TO SUMMARY					
	ELEMENT NO.7-SANITARY FITTINGS				
	Supply and install the following sanitary fittings complete with all the necessary fittings				
1	Supply and install countertop ceramic wash hand basin complete pillar taps and connect to water supply and waste disposal	No	4		
2	supply and install P type wc pan with concealed manual flush valve complete with all the necessary fitting as Duravit or equal approved	No	2		
3	stepped Asian with concealed manual flush valve complete with all the necessary fitting as Duravit or equal approved	No	1		
4	Supply and install urinal bowels with concealed manual flush valve complete with all the accessories	No	2		

CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION- REVISED BILLS OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	supply and install concealed shower unit complete with stop cork and chrome shower	NO	2		
6	Allow for connecting the building to water supply from the elevated water with 40mm PPR pipe complete with all the fittings	LM	100		
7	Allow for connecting the above fitting to water supply with 25mm PPR pipe complete with all the fittings	LM	50		
8	Supply, deliver and install 100mm diameter heavy gauge golden brown UPVC pipe waste pipe with fittings fixed to Manufactures instructions and manufactured by reputable manufacturers. Tenderers must allow in their pipework prices for excavation, Installing the pipe and backfilling	LM	50		
9	Construct inspection chamber size 600 x 450mm and averaging 750mm deep constructed in 100mm thick concrete base (1:3:6), approved 150mm block sides rendered all around in cement and sand (1:4). It shall have an approved heavy-duty cast-iron cover and frame	No.	4		
10	Allow for connecting the waste disposal pipe to an existing septic tank testing and commissioning to ensure the system is working as required	Sum	1		
TOTAL FOR SANITARY FINISHES CARRIED TO SUMMARY					
<u>Electrical Works</u>					
Supply, Install, test and commission the following:					
LIGHTING POINTS AND SWITCHES					
Lighting points wired in 3x1.5 mm² PVC/SC CU cables drawn in 20 mm Ø concealed HG PVC conduits complete with all necessary accessories but excluding switches for:					
6A moulded ivory type switch plates as MK range or approved equivalent as follows:					
1	One gang one way	NO.	15		
LIGHTING FITTINGS					
2	T8 LED 5FT Super Bright LED Tube T8 22W complete with its fittings	NO.	15		
3	Security light, LED floodlight 50W	NO.	4		
2.0	POWER OUTLETS & FITTINGS				

CONSTRUCTION OF WORKSHOP AT GITARU POWER STATION- REVISED BILLS OF QUANTITIES					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	13A 2-Gang SP Switched Metal Clad Socket with White Inserts comprising wiring in 3 x 2.5mm ² PVC/SC copper cables drawn in 25mm Ø CONCEALED HG PVC conduits including all conduit accessories but excluding plates	NO.	15		
2	13A twin switched moulded Metal Clad Socket with White Inserts as crabtree or approved equivalent as follows:	NO.	15		
3	Purpose made adaptable boxes	NO.	15		
4	32mmØ PVC HG conduits for the main supply	LM	30		
3.0	SUB-MAINS CABLE & POWER BOARDS				
1	12-way Consumer's Unit as MEM or approved Equivalent complete with 100A SPN integral main switch, 1 No. 10A SP MCB, 1 No. 30A SP MCB & 1 No. 45A SP MCB.	NO.	1		
2	10mm ² 3 Core PVC SWA U/G CU Cable as East Africa Cable drawn in 32mm Ø CONCEALED HG PVC conduits including all conduit accessories from meter board to the Consumer Unit	LM	50		
3	Allow a provisional sum for main power supply and connections from the nearest power point as directed. Approximate 30m	SUM	1		
TOTAL FOR BILL NO. 4					
TOTAL PLUMBING & ELECTRICAL WORKS					
	SUMMARY				
	<u>ELEMENT No. 1-SUBSTRUCTURES</u>				
	<u>ELEMENT No. 2 - SUPERSTRUCTURE</u>				
	<u>ELEMENT No. 3 - ROOFING</u>				
	<u>ELEMENT No. 4 - WINDOWS</u>				
	<u>ELEMENT No. 5- DOORS</u>				
	<u>ELEMENT NO. 6- FINISHES</u>				
	<u>ELEMENT NO.7-SANITARY FITTINGS</u>				
	<u>ELEMENT NO 8- ELECTRICAL & PLUMBING WORKS</u>				
	TOTAL AMOUNT				
	ADD 16% V.A.T				
	GRAND TOTAL CARRIED TO TENDER FORM				

SECTION V – DRAWINGS
2. WORKING DRAWINGS





ACKNOWLEDGEMENT OF ADDENDUM NO.1

We, the undersigned hereby certify that the addendum is an integral part of the document and the alterations set out in the addendum has been incorporated in the tender proposal.

Signed

Tenderer