

LOT 3 - CONSTRUCTION OF 1NO, I.C.T. IN AVEYIME COMMUNITY

Item	Description	Qty	Unit	Rate	Total GHc
	BILL NO. 1				
	(The Contractor is free to price for additional items under Preliminaries not included in the List below)				
	A: GENERAL CONDITIONS				
	EMPLOYER'S REQUIREMENTS				
A	On-site Administration	1	Item		-
B	Site Meeting and Monitoring of the works	1	Item		-
C	Progress Photographs	1	Item		-
D	Provide adequate security at site	1	Item		-
E	Project Drawing	1	Item		-
F	Insurances of works	1	Item		-
G	Performance Security	1	Item		-
H	Testing of materials	1	Item		-
J	ACCURACY/SETTING OUT GENERALLY Setting out of the works	1	Item		-
	Facility/Temporary work/Services				
K	Name or sign board	1	Item		-
L	Telephone/Facsimile facilities	1	Item		-
M	A40 Contractor's General Cost Items: Management and Staff Provide for general and trade supervision	1	Item		-
N	A41 Contractor's General Cost Items: Site Accommodation Site accommodation for workers	1	Item		-
	PRELIMINARIES/GENERAL CONDITIONS				
	CARRIED FORWARD				
	BROUGHT FORWARD				
	A42 Contractor's General Cost Items: Services and facilities				
A	Power for works	1	Item		-
B	Lighting	1	Item		-
C	Water for works	1	Item		-
D	Health and safety protectives	1	Item		-
E	Storage of materials	1	Item		-

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F	Clearing and disposal of general waste after construction	1	item	
G	Protection of work in all sections	1	item	
H	EPA	1	item	
J	Fire Permit	1	item	
K	Small plants and tools	1	item	
<u>A43 Contractor's General Cost Items: Mechanical plant</u>				
L	Personnel transport	1	item	
M	Concrete plant	1	item	
<u>A44 Contractor's General Cost Items: Temporary Works</u>				
N	Support scaffolding and propping	1	item	
<u>A53 Work by Statutory Authorities</u>				
P	Work by Statutory Authorities	1	item	
<u>BILL NO. 1</u>				
<u>GENERAL ITEMS (PRELIMINARIES)</u>				
Carried to General Summay				
<u>BILL NO. 2</u>				
<u>SUBSTRUCTURE</u>				
<u>D10 EARTH WORKS</u>				
<u>Site Preparation</u>				
A	Clear Site of all bush and undergrowth and dispose from site	380	m ²	
B	Cut off trees girth 0.60m ≤ 1.50m girth	10	No	
C	Cut off trees girth exceeding 1.50m girth	3	No	
<u>Excavation and Earthworks</u>				
D	Excavate oversite to remove topsoil average 150mm deep	600	m ²	
E	Excavate trench not exceeding 1.50 metres deep commencing 150mm below ground level	251	m ³	
F	Excavate pit not exceeding 1.5 metres deep ditto	120	m ³	
G	Extra over all kinds of excavation for excavating in rock	3	m ³	
H	Return, fill in and well ram selected excavated material around foundation	100	m ³	
J	Remove surplus excavated material from site	30	m ³	
<u>Hardcore as described, spread, levelled and well rammed and consolidated</u>				
K	Filling in layers not exceeding 225mm thick in making up levels under floors	150	m ³	
<u>E10: IN-SITU CONCRETE</u>				
<u>Plain in-situ concrete (1:4:8-20mm aggregate) in:</u>				
L	50mm thick blinding	4	m ³	
<u>Plain in-situ concrete (1:4:8-20mm aggregate) in:</u>				

M	Foundation	20	m ³		
M	Step and Ramp	2	m ³		
P	150mm thick floor bed spread and leveled	55	m ³		
		C/F			
		B/F			
A	Reinforced in-situ vibrated concrete (1:2:4-20mm aggregate) as described filled into formwork and packed around reinforcement (both measured separately) Column base	5	m ³		
B	Column	3	m ³		
C	Ground beam	4	m ³		
E30: REINFORCEMENT FOR IN-SITU CONCRETE Supply and fix as described the following mild steel round bar reinforcement with and including all necessary binding wire. <u>Column Bases</u>					
D	12mm diameter bars in column base	266	Kg		
<u>Column</u>					
E	16mm diameter bars in column	300	Kg		
F	10mm diameter bars as stirrups	70	Kg		
<u>Ground beam</u>					
G	12mm diameter bars in column	420	Kg		
H	10mm diameter bars as links	80	Kg		
BRC Mesh Reinforcement; BS 4483, hard drawn plain round steel, welded					
J	Steel fabric reinforcement Ref. No. A142 and fixing in bed with 200mm minimum side and end laps (measured net - no allowance made for laps)	270	m ²		
E20: FORMWORK FOR IN-SITU CONCRETE Sawn formwork as described to:					
K	Vertical side of column	34	m ²		
L	Sides of horizontal beam	80	m ²		
M	Vertical side of step	1	m ²		
N	Edge of bed 150mm wide	76	m		
P	Edge of riser 150mm wide	24	m		
		C/F			
		B/F			
F10: BRICK/BLOCK WALLING Sandcrete, lightweight aggregate blocks, 450mm x 225mm, solid; compressive strength 2.5N/mm ² in cement mortar (1:4)					
A	150mm thick wall	280	m ²		
M20: PLASTERING/RENDERED/ROUGHCAST COATINGS Mortar, cement and sand (1:4); steel trowelled					
B	12mm Cement and sand render to wall	65	m ²		

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M60:PAINTING/CLEAR FINISHING					
Prepare and apply three coats of Acrylic emulsion paint on:					
C	Prepare and apply three coats of emulsion paint on rendered wall	60	m ²	-	-
Surface Treatment					
D	Treat all surfaces of excavation and filling with anti - termite treatment before laying concrete (Dieldrex anti-termite treatment to foundations)	1	item	-	-
J20: WATER PROOFING					
J31: Transparent polythene sheet					
E	Transparent polythene sheet to soffit of concrete slab	250	m ²	-	0.00
F	Allow a provisional sum of (GHZ 1000.00) for any additional works that may arise from earth works	1	item	-	0.00
SUBSTRUCTURE					
Carried to Summary					
SUPERSTRUCTURE					
IN-SITU CONCRETE/LARGE PRECAST CONCRETE					
Reinforced in-situ vibrated concrete (1:2:4-20mm aggregate) as described filled into formwork and around reinforcement (both measured separately)					
A	Horizontal beam	4	m ³	-	-
B	Column	3	m ³	-	-
E30:REINFORCEMENT FOR IN-SITU CONCRETE					
Mild steel round bar reinforcement to BS4449 in:					
Supply and fix as described the following mild steel round bar reinforcement with and including all necessary binding wire					
Column					
C	Straight or bent, 16mm diameter	707	kg	-	-
D	Links, 10mm diameter	138	kg	-	-
Beam					
E	Straight or bent, 16mm diameter	897	kg	-	-
F	Links, 10mm diameter	287	kg	-	-
E20:FORMWORK FOR IN-SITU CONCRETE					
Sawn Formwork to:					
G	Column	89	m ²	-	-
H	Beam	72	m ²	-	-
CONCRETE WORK					
Carried to Summary					
MASONRY					
Sandcrete lightweight aggregate blocks, 450mm x 125mm solid, compressive strength 2.5N/mm ² in cement mortar (1:4)					
J	125mm Wall	389	m ²	-	-
K	75mm thick honey comb wall	2	m ²	-	-
BLOCKWORK					
Carried to Summary					

CLADDING/COVERING**H72: ALUMINIUM SHEET COVERING/FLASHINGS**

Raincoat or equally approved Longspan aluminium, corrugated sheets, pre-painted standard profile 0.50mm gauge, two corrugations side laps, 150mm end laps, bedded with mastic sealing strips

A	Roofing coverings, fixing to timber purlins at 1050mm general spacing with galvanised drive screws, nuts, washers, caps, drilling holes, pitch 45 degrees	404	m ²	-	-
B	Preformed Ridge Capping, preformed, 600mm girth, 150mm lapped joints, fixing to timber with galvanised drive screws, nuts, washers and caps	32	m	-	-
C	Preformed hip-cap, preformed, 600mm girth, 150mm lapped joints, fixing to timber with galvanised drive screws, nuts, washers and caps	30	m	-	-
D	150mm side trim fixed to fascia boards	79	m	-	-
E	150mm preformed Gutter, 600mm girth with drop outs	79	m	-	-
COVERING					
Carried to Summary					
STRUCTURAL/CARCASSING METAL/TIMBER					
G20: CARPENTRY/TIMBER FRAMING/FIRST FIXING					
Hardwood; treated with preservative; sawn					
F	50 x 150mm Ridge Board	30	m	-	-
G	50 x 150mm Hip and Jack Rafters	66	m	-	-
H	50 x 100mm Rafters	493	m	-	-
J	50 x 75mm Purlins	535	m	-	-
K	50 x 50mm Noggings	618	m	-	-
L	50 x 50mm Hangers	98	m	-	-
The following in 7 No. Hardwood Trusses, with span over 9.0m but not exceeding 12.0m, overall height 4.0m above ground level including hoisting into position					
M	50x150mm Top chord	66	m	-	-
N	50x150mm Bottom chord	50	m	-	-
P	50x100mm Struts and ties	88	m	-	-
		C/F			
		B/F			
A	Carpenter's Metalwork 16mm Diameter mild steel rag bolt, 250mm long cast in concrete	24	No	-	-
B	100x100mm Equal angle plate, bolted	6	No	-	-
CARPENTRY					
Carried to Summary					
JOINNERY/ METAL WORKS					
WINDOWS/DOORS/STAIRS					
Eaves and verge boarding Wrought hardwood as described					
C	25x275mm fascia board	79	m	-	-

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<u>L20: TIMBER DOORS/SHUTTERS/HATCHES</u>			
<u>Doors in hardwood: treated with preservative; wrought</u>			
D	44mm thick (finished) hardwood panel. Size 1500 x 2050mm	4	No
E	Ditto size 900 x 2050mm	2	No
<u>Door and window frames in hardwood, treated with preservative, wrought</u>			
F	50 x 150mm hardwood frame plugged to wall	168	m
	6mm plywood ceiling nailed to noggings	365	m ²
<u>Fillet, etc</u>			
G	12mm x 50mm Planted door stops	34	m
H	12 x 50mm Window stoper	125	m
J	25mm x 14mm thick Cover Battern	92	m
K	Ceiling Battern	280	m
<u>Ironmongery</u>			
<u>Supply and fix the following ironmongery to hardwood with matching screws</u>			
L	100mm Mortice lock set	12	No
P	Pair 100mm Brass butt hinges	12	No
Q	Pair 75mm Brass butt hinges	12	No
R	100mm Brass barrel bolt	12	No
<u>JOINERY</u>			
Carried to Summary			
<u>METALWORK</u>			
<u>Nasco' anodised aluminium louvre carriers and fittings as produced and marketed by Messers PASICO Gh. Limited, or equal approved in approved mastic sealers and screwed to hardwood:</u>			
A	Pair Ditto 1143mm long with clip for 8No. 150mm blades	24	No
B	16mm diameter mild steel burglar proof bar	399	Kg
<u>Mild steel</u>			
C	2.5mm x 5mm x 50mm mild steel square welded mesh	38	m ²
<u>Sundries</u>			
D	Nylon mosquito proof woven plastic gauze cut to size and fixed to hardwood frame with battens (measured separately)	38	m ²
<u>METALWORK</u>			
Carried to Summary			
<u>ELECTRICAL INSTALLATIONS</u>			
<u>ELECTRICAL</u>			
E	Include a provisional sum of GH¢50,000.00 for work in connection power from the National Grid to the facility and its associated works	1	Sum
<u>The rates inserted in the section of the bill of Quantities are to include all cost associated with the material, handling, fixing and contractor's mark-up.</u>			
F	To supply and install electrogalvanised metal clad Distribution board with 12-Way 1 incoming 100A TPN Adjustable MCCB, CT's Indicating light, metering panel, cable termination, with outgoing as per specification and Drawings. Include surge arrestor.	1	No
G	Supply and install 100A RCD Circuit Breaker	1	No

<u>CABLES AND ACCESSORIES</u>					
H	1 5mm tropical cables for lighting systems (Red and Black)	220	m		
J	2 5mm tropical cable for electrical sockets (Red Black and Yellow)	300	m		
<u>Supply, fix and connect the following complete with all accessories</u>					
K	1 4m Sweep ceiling fan complete with multi-speed /regulator as Crompton Greaves or approved equivalent	6	No		
M	Ditto 2.5 HP Air Conditioner	4	No		
T	Ditto 1.5 HP Air Conditioner	2	No		
		C/F			
		B/F			
<u>LUMINAIRES</u>					
<u>Supply, install and connect the following luminaires with all Necessary accessories complete (lamps, attachment etc.)</u>					
A	1200mm long florescent frame with bulb and associated fittings	25	No		
<u>FLUSH PLATE SWITCHES</u>					
B	6 Amp, 1 Gang, 2 way, single pole switch	10	No		
C	6 Amp, 2 Gang, 2 way, single pole switch	4	No		
D	6 Amp, 3 Gang, 2 way, single pole switch	4	No		
<u>SOCKETS</u>					
E	13Amp, 2 Gang socket	10	No		
<u>CONDUIT</u>					
F	PVC pipes in wall	150	m		
G	75mm x 75mm conduit box	15	No		
H	75mm x 150mm conduit box	24	No		
J	4way Circular conduit box	30	No		
K	Supply and install suitable earthing system for the above installation	1	item		
<u>ELECTRICAL INSTALLATIONS</u>					
Carried to Summary					
<u>GLAZING</u>					
L	150mm wide plain/obscure glass louvre blade with slightly round long exposed edges and into metal clip 900mm long clip	180	No		
Glazing Carried to Summary					
ELEMENT NO. 9: PLUMBING AND ENGINEERING INSTALLATIONS					
	W.C Complete (Twyford)	1	Nr		0,00
	Chromium plated towel rail plugged and screwed to wall	1	Nr		0,00
	500 x 400mm Twyford Wash-hand Basin	1	Nr		0,00
	Ditto Mirror	1	Nr		0,00
	Include provisional sum of Twenty Thousand Ghana cedis for plumbing works	1	item		0,00
Carried to Summary					
<u>M20:PLASTERING/RENDERED/ROUGHCAST COATINGS</u>					
<u>PLASTERWORK AND OTHER FLOOR,</u>					
<u>WALL AND CEILING FINISHINGS</u>					
In-situ finishings 12mm Cement and sand render (1:4) on concrete and blockwork					

A	Wall	2000	m ²		
B	Column	7	m ²		
	<u>25mm Cement and sand render (1:3) on concrete and blockwork</u>				
C	Wall, as writing board	2	m ²		
	<u>Plain sheet finishings</u>				
D	6mm Plywood (Redwood) ceiling lining, fixed to horizontal soffits of hardwood noggings and joists	300	m ²		
	<u>Beds and backings</u>				
	<u>Cement and sand (1:3) as described</u>				
	<u>on blockwork or concrete</u>				
E	50mm Level paving, trowelled smooth	300	m ²		
G	600 x 600 x 6mm thick porcelain floor tiles including extra for round edges bedded and jointed in cement and sand mortar (1:4) and pointed in mixture of white cement on floated backing to washroom	300	m ²		
N	150 x 150 x 6mm thick white ceramic wall tile jointed in cement mortar on wall	50	m ²		
	<u>PLASTERWORK AND OTHER FLOOR</u>				
	<u>WALL AND CEILING FINISHINGS</u>				
	Carried to Summary				
	<u>PAINTING AND DECORATING</u>				
	<u>Prepare and apply one under coat as skimming to wall</u>				
F	Skimming to wall	2 000.00	m ²		
G	Prime back only joinery before fixing	50	m ²		
	<u>Prepare and apply three coats of Acrylic emulsion paint on</u>				
H	Rendered wall	2 000.00	m ²		
J	Soffits of plywood ceiling	365	m ²		
	<u>Knot, prime, stop and paint two undercoats</u>				
	<u>and one finishing coat of Icyland/Icytac oil paint</u>				
	<u>on woodwork</u>				
K	General surfaces	45	m ²		
L	Surfaces not exceeding 300mm girth	16	m ²		
M	Approved writing board paint on rendered walls	18	m ²		
	<u>PAINTING AND DECORATING</u>				
	Carried to Summary				
	<u>SUMMARY</u>				
	<u>BILL NO. 2</u>				
	SUBSTRUCTURE				
	CONCRETEWORK				
	BLOCKWORK				

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	ROOFING				
	CARPENTRY				
	JOINERY				
	METALWORK				
	ELECTRICAL INSTALLTION				
	GLAZING				
	PLASTERWORK AND OTHER FLOOR WALL AND CEILING FINISHINGS				
	PLUMBING AND ENGINEERING INSTALLATIONS				
	PAINTING AND DECORATING				
	CONSTRUCTON OF 1 NO. COMMUNITY CENTER				
	Carried to General Summary				
	BILL NO. 4 EXTERNAL WORKS				
	APRON				
	<u>Excavation and Earthworks</u>				
A	Excavate trench not exceeding 1.50m metres deep commencing 150mm below ground level	328	m ³		
B	Return, fill in and well ram selected excavated material around foundation	100	m ³		
C	Remove surplus excavated material from site	50	m ³		
	<u>Hardcore as described, spread, levelled and well rammed and consolidated</u>				
D	Filling in layers not exceeding 225mm thick in making up levels under floors	50	m ³		
	<u>Concrete Work</u>				
E	Plain in-situ concrete (1:3:6-40mm aggregate) as described foundation in trenches	1	m ³		
F	Concrete Slab	1	m ³		
	<u>Formwork</u>				
	Sawn formwork to				
G	Edge of slab, 100mm wide	30	m		
	<u>Blockwork</u>				
	<u>Sandcrete blockwork in cement and sand (1:4) mortar</u>				
H	125mm thick solid wall	80	m ²		
	Include a sum of Twenty Thousand Ghana cedis for pavement block	1	item		
J	20mm Cement and sand render to wall	40	m ²		
K	Prepare and apply three coats of emulsion paint on rendered wall	15	m ²		
	BILL NO.4: EXTERNAL WORKS (APRON)				
	Carried to General Summary				

GENERAL SUMMARY

BILL NO.1 - GENERAL CONDITIONS OF
CONTRACT AND PRELIMINARIES

BILL NO 2-CONSTRUCTON OF 1 NO I.C.T CENTER

BILL NO.3 - EXTERNAL WORKS (APRON)

SUB-TOTAL

Include Provisonal Sum of Ghs _____ 4 Seater WC

TOTAL

COST CARRIED TO FORM OF TENDER

COST CARRIED TO FORM (EUR)

1

Item

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