

PROPOSED CONSTRUCTION OF AN UPGRADE OF HEALTH POST TO PHC BUILDING

AT

ELEKPON

**COMMUNITY IN EASTERN OBOLO L.G.A
AKWA IBOM STATE**

BILLS OF QUANTITIES



BOPANE H.C.D.T



TotalEnergies

CLIENT:

BOPANE HCDT
45 AHOADA ST.
RUMUIBEKWE HOUSING ESTATE
OFF ABA ROAD, PH
RIVERS STATE



KC: AK 18989

CONSULTANT

MBINTEX KONSULT
5 MBAJA AVE. OKOROMBOKHO
Eastern Obolo, Akwa Ibom state



PREPARED BY:
M.N NTEGWUNG, MNIQS, RQS, JP

NIGERIAN INSTITUTE OF QUANTITY SURVEYORS
The Professional Construction Cost Managers

BILL NO. 1: PRELIMINARIES				
COST CENTRE	COMPONENTS	TIME RELATED CHARGES	FIXED CHARGES	TOTAL CHARGES
	BILL NO.1 PRELIMINARIES Part A: Project Particulars Name of the Project: Construction of an Upgrade of Health Post to PHC Nature of project: The project involves; Reconstruction of an existing health Post to upgrade it to Primary Health Centre Building, Site works/Infrastructures etc, from foundation to finishes and Hand over. Location of project: Elekpon Duration of the Project: 6 months Client: Bopane HCDT Name of Contractor Drawings; Architechural and Mechanical Services Bills of Quantities: In accordance with BESMM4R Form of Contract: The Nigerian Construction Industry			
1.1B	Part B: Pricing Schedule			
1.1.1	EMPLOYER'S REQUIREMENT			
1.1.2.06	Control and Protection Multi-service gang- BOPANE Project Unit-12 Project Monitoring by other approved bodies	Wks		1,100,000.00
1.1.2.07	Design, Approvals and permit 2 Processing Fees: (a) Site Plan and Analysis (SPAR) (b) EIA Report 3 Others: Local Authority Approval/ Logistics Stakeholder engagement Logistics	Wks	Item Item	500,000.00 1,200,000.00
4	Commissioning Logistics			
	EMPLOYER'S REQUIREMENT TO COLLECTION			2,800,000.00

1.1.2	MAIN CONTRACTOR'S COST ITEM			
1.1.2.1	Management and Staff			
1.1.2.1.1	Project Specific Management and Staff		Item	
1.1.2.2	Site Establishment			
1.1.2.2.1	Site accommodation		Item	
1.1.2.2.2	Temporary works in connection with site establishment	2	Nr	
1.1.2.2.3	Furniture and Equipment		Item	
1.1.2.2.5	Consumables and services; Stationaries, Computer ink cartridges, Courier charges, postage, tea, coffee, First aid consumables, stationeries etc.	Wks		
1.1.2.2.6	Bought- in services			
1.1.2.2.7	Sundries; Main contractor's signboards, safety and information notice boards, fire points, Employer's composite signboards.		Item	
1.1.2.03	Temporary Services			
1.1.2.3.1	Temporary Water Supply		Item	
1.1.2.3.2	Temporary gas Supply	Wks		
1.1.2.3.3	Temporary electricity Supply		Item	
1.1.2.04	Security of Site			
1.1.2.4.1	Security Staff; security guards and Watchmen for 6months	2	Nr	
1.1.2.4.3	Hoarding, Fences and Gate		M	
	PAGE 2 MAIN CONTRACTOR COST ITEM TO COLLECTION			

1.1.2.05	Safety and Environmental Protection			
1.1.2.05.1	Community Relation and Engagement		Item	
	Safety Programme; Notices and information to neighbours; Community relations Safety audits, Staff safety training, ,Personal Protective equipment (PPE) for workers and multi-service gang, Fire points, Temporary fire alarms, Fire estinguishers, Nurse, Traffic Marshals, etc.		Item	
1.1.2.5.1			Item	
1.1.2.5.2	Barriers and safety scaffolding; guardrails and edge protection, temporary Staircase balustrades,etc.		Item	
1.1.2.06	Control and Protection			
	1 Survey, Inspections and Monitoring		Item	
	2 Setting Out		Item	
	3 Samples		Item	
1.1.2.08	Temporary Works			
	Access Scaffolding, Type---; Bringing to site, erecting and initial safety checks and including desmantling and removing from site		Nr	
1.1.2.09	Site Records			
	Site Records; photography, Works Records.		Item	
1.1.2.10	Completion and Post- completion Requirements			
	1 Testing and Commissioning plan		Item	
	2 Handover		Item	
	3 Post- completion Services	Wks		
	PAGE 3 TO COLLECTION			

1.1.2.11	Cleaning			
1	Site Tidy		Wks	
1.1.2.13	Sites Services			Item/Nr/M/ M2/M3
1	Temporary Works			
2	Multi-service gang- Administrator	Contract Project Architect Project Quantity Surveyor Project Engineer	Wks	
1.1.2.15	Transportation/Haulage Allow a provisional sum for transortation materials.			Item
	PAGE 4 TO COLLECTION			
	COLLECTION: PAGE 2 PAGE 3 PAGE 4			
	MAIN CONTRACTOR COST ITEM TO COLLECTION EMPLOYERS COST ITEM			
	PRELIMINARIES CARRIED TO MAIN SUMMARY			

BILL NO.2; UPGRADING OF EXISTING HEALTH POST TO PHC @ ELEKPON

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	PART A: EXISTING BUILDING				
1.3	DEMOLITION				
1.3.1.1.2.1	Demolitions,individual structures; Roof and roof covering: Carefully take down existing roof, including structural members and dispose rubbish as directed including making good all works disturbed approximately 352.8m2		Item		
1.3.1.1.3.1	Ditto, part of structures;Doors and Windows Carefully take down all the existing dilapidated doors and windows including frames and ironmongeries and make good all works disturbed, material remaining property of the employer. Doors	7	Nr		
	Ditto; windows	15	Nr		
1.3.1.1.3.1	Ditto, part of structures; Plumbing and Electrical Installations Carefully dismantle all the existing plumbing and electrical installations and make good all works disturbed.		Item		
1.3.1.1.3.1	Floors and Walls Break down all internal partition walls and cart away debris from site. Carefully cut open existing cracks on walls and treat same with appropriate weak concrete, including making good all works disturbed. Hack existing delapidated screeded floor to give way for new work and cartaway debris from site including making good works disturbed by this item approximately 60m2	44	m2		
			Item		
	DEMOLITIONS: CARRIED TO SUMMARY				-

ADDITIONAL WORK ON EXISTING BUILDING				
Creating of Office space: Introduce new wall to existing wall of the Health Post				
Excavation and filling				
1.5.6.2.1	Excavation from strip level, foundation excavation not exceeding 2m deep strip foundation.	10.8	M ³	
1.5.6.2.1	Ditto; pits for column bases, over 1m but not exceeding 2m deep.	6.6	M ³	
1.5.8.1.1.1	Support to faces of excavation, maximum depth 750mm, in trench and rigidly supported by timber props in unstable ground.		M ²	
1.5.8.1.1.1	Ditto; excavated material offsite 50m away	14.22	M ³	
1.5.11.1.1.1	Filling obtained from excavated material; final thickness of filling exceeding 500mm deep, 520mm thick backfill to trench excavation and treated with antitermite.	16.46	M ³	
1.11	INSITU CONCRETE WORK			
1.11.2.1.2.2	Plain insitu concrete grade 40mm(1:4:8) aggregate, horizontal work ≤ 300mm thick, in blinding, poured on or against earth.	0.05	M ³	
1.11.2.1.2.1	Plain Insitu Concrete (1:3:6-20mm aggregate) Plain insitu concrete , grade 20mm aggregate, horizontal work ≤ 300mm thick, in trench, in structures, poured on or against blinding.	1.35	M ³	
1.11.2.1.2.1	Reinforced Insitu Concrete (1:2:4-20mm aggregate) Reinforced insitu concrete , grade 20mm aggregate, horizontal work ≤ 300mm thick, in structures, poured on or against blinding in column bases	1.46	M ³	
1.11.5.1.1.1	Ditto; vertical work ≤ 300mm thick, in structures, reinforced =5%	0.18	M ³	
1.11.21.1.1.1	Formwork to insitu concrete Ditto; Sides of attached columns, regular, rectangular in shape.	28.8	M	
1.11.34.1.1.1	Reinforcement High yield steel bars, 12mm diameter, straight bars 12m long; 125m in Columns	0.04	T	
1.11.33.1.1.1	Mild Steel bars, 10mm diameter links, stirrups in Columns	0.03	T	
1.14	MASONRY			
1.14.1.2.2.1	Brick/Block Walling in foundation Walls, overall thickness 150mm thick battered on both sides in Common /stretcher bond, cement mortar (1:3), internal	22.5	M ²	
1.11.1.1.3	Plain insitu concrete (1:10), mass concrete in filling voids.	0.41	M ³	
SUBSTRUCTURE- NEW WALL OF EXISTING TO COLLECTION				-

SUPERSTRUCTURE- NEW PARTITION WALL OF EXISTING BUILDING					
CONCRETE WORK					
Plain Insitu Concrete (1:2:4-20mm aggregate)					
1.11.5.1.1.1	Plain insitu concrete reinforced, grade 20mm aggregate, Vertical work ≤ 300mm thick,in structures, reinforce=5%	1.86	M ³	-	-
1.11.2.1.2.1	Ditto, horizontal work, in Lintels and beams	0.99	M ³	-	-
Form Work to Insitu Concrete					
1.11.20.1	Plain Form work to sides and soffit of columns and beams, ,regular, rectangular in shape.	16	M ²		
Reinforcement					
High Yield Bars to BS 4449					
1.11.33.1.1.1	High Yield bars, 10mm diameter links, stirrups in Columns, Lintels and beams.	0.15	T		
1.11.34.1.1.1	High yield steel bars,12mm diameter, straight bars 12m long; 579m in Columns,Lintels and beams.	0.34	T		
<u>CONCRETE WORK: CARRIED TO SUMMARY</u>					
1.14	MASONRY				
Brick/Block Walling in Superstructure					
1.14.1.2.2.1	Brick/Block Walling- Internal wall partition; Walls, overall thickness 150mm thick battered on both sides in Common /stretcher bond, cement mortar (1:3)	90	M ²		
1.11.1.1.3	Plain insitu concrete (1:10), mass concrete in filling voids.	1.62	M ³		
Protection					
Protect all works in this section					
MASONRY: CARRIED TO SUMMARY					
COLLECTIONS:					
DEMOLITIONS					
SUBSTRUCTURE					
CONCRETE WORK					
INTERNAL WALL					
NEW WALL OF EXISTING BUILDING TO SUMMARY					

PART B: PROPOSED NEW/ ATTACHED BUILDING				
	SUBSTRUCTURE (ALL PROVISIONAL)			
1.5	EXCAVATING AND FILLING			
1.5.4.1.1	Site clearance; clearing site vegetation and other growth and dispose offsite 80m away	240	M ²	
	Site Preparation			
1.5.5.2.1	Remove top soil, average 150mm depth, stored on site	240	M ²	
1.5.10.1.2	Retained excavated topsoil on site to temporary spoil heaps 80m distance	36	M ³	
	Excavation and filling			
1.5.6.2.1	Excavation from strip level, foundation excavation not exceeding 2m deep strip foundation.	75.0	M ³	
1.5.6.2.1	Ditto; pits for column bases, over 1m but not exceeding 2m deep.	17.8	M ³	
1.5.8.1.1.1	Disposal, ground water, depth 150mm below strip level		Item	
1.5.8.1.1.1	Ditto; excavated material offsite 50m away	18.4	M ³	
1.5.11.1.1.1	Filling obtained from excavated material; final thickness of filling exceeding 500mm deep, 520mm thick backfill to trench excavaton and treated with antitermite.	74.4	M ³	
1.5.12.1.1.1	Imported filling with Laterite, blinding bed, over 50mm but not exceeding 500mm deep,150mm thick to ground floor, compacted in layers 150mm depth, with antitermite.	136	M ³	
1.5.12.1.1.1	Imported filling with hardcore, blinding bed, over100mm but not exceeding 500mm deep,120mm thick, level to falls, to ground floor.	24	M ³	
1.5.11.1.1.1	Filling obtained from excavated material not exceeding 500mm deep, 150mm thick to external perimeter of trench	3	M ³	
1.5.16.1.1.1	Damp proof mainbrane, not exceeding 500mm wide,500 guage, horizontal, polythene sheeting laying on blinding hardcore filling to receive concrete	227	M ²	
1.11	INSITU CONCRETE WORK			
1.11.2.1.2.2	Plain insitu concrete grade 20mm(1:4:8) /M7.5 aggregate, horizontal work ≤ 300mm thick, in blinding, poured on or against earth; Column base.	0.61	M ³	
	Reinforced Insitu Concrete (1:2:4-20mm aggregate M15)			
1.11.2.1.2.1	Reinforced insitu concrete , grade 20mm aggregate, horizontal work ≤ 300mm thick,in column bases	1.82	M ³	
1.11.5.1.1.1	Ditto; vertical work ≤ 300mm thick,column in structures,reinforced =5%	0.68	M ³	
1.11.5.1.1.1	Ditto; Horizontal work ≤ 300mm thick, in Plinth beam in structures,reinforced =5%	2.16	M ³	
	Page 1 To collection:			

	Plain Insitu Concrete (1:3:6-20mm aggregate)			
1.11.2.1.2.1	Plain insitu concrete, grade 20mm aggregate, horizontal work ≤ 300mm thick, in trench, in structures, poured on or against blinding.	5.05	M ³	
1.11.2.1.2.1	Ditto; Horizontal work poured on or against hardcore.	34	M ³	
	Ditto, Horizontal work, ≤ 300mm thick in Step and ramp.	2	M ³	
	Formwork to insitu concrete			
1.11.14.1.1.1	Plain formwork to Edges of horizontal work ≤ 500mm high, 150mm wide	44	M	
1.11.21.1.1.1	Ditto; Sides of attached columns, regular, rectangular in shape.	12	M2	
	Reinforcement			
1.11.34.1.1.1	High yield steel bars, 12mm diameter, straight bars 12m long; 96m in Columns.	0.11	T	
1.11.34.1.1.1	High yield steel bars, 12mm diameter, straight bars 12m long; 144m in Columns base.	0.27	T	
1.11.33.1.1.1	High yield bars, 8mm diameter links/ stirrups in Columns	0.02	T	
1.11.34.1.1.1	High yield steel bars, 12mm diameter, straight bars 12m long; 288m in Plinth beam.	0.23	T	
1.11.33.1.1.1	High yield bars, 10mm diameter links/ stirrups in Columns and Plinth beam	0.09	T	
1.11.37.2.2	Mesh, Weight, 2.22kg/m ² , fabric reinforcement A142; minimum side and end laps; 150mm	227	M ²	
	1.14 MASONRY			
	Brick/Block Walling in foundation			
1.14.1.2.2.1	Walls, overall thickness 150mm thick battered on both sides in Common /stretcher bond, cement mortar (1:3)	266	M ²	
1.11.1.1.3	Plain insitu concrete (1:10), mass concrete in filling voids.		M ³	
	Allow for a defined Provisional Sum to cover other works not measured in the Substructure.	1	Item	
	FINISHES			
1.28.7.2.1	Finish to Walls, Cement and Sand (1:4) rendering 12mm thick, exceeding 600mm wide Externally	58	M ²	
	Wall Tiles:			
1.28.7.2.1	Finish to Walls; 250mm x 400mm x 8mm Glazed Ceramic tiles laid on Walls, exceeding 600mm wide to approved pattern on cement and sand bed (measured separately); finished with straight butt joints and flush with pointing coloured cement grout .	71	M ²	
	Cement Backing; 5mm Cement Binder paste	71.2	M ²	
	Protection			
	Protect all works in this section		sum	
	Page 2 to collection:			
	Collections:			
	Page 4....			
	Page 5....			
	SUBSTRUCTURE CARRIED TO SUMMARY			

SUPERSTRUCTURE					
CONCRETE WORK; FRAMES AND WALLS					
Ground Floor fo Roof Level.(1:2:4)					
1.11.5.1.1.1	Vibrated reinforced insitu concrete, grade 20mm aggregate, filled into formwork and well packed around reinforcement (developing 21KN/sq.mm working strength at 28 days), Vertical work;columns, ≤ 300mm thick,in structures, reinforce=5%	1.18	M ³		
1.11.2.1.2.1	Ditto; horizontal work in Lintels and roof Beams.	2.8	M ³		
Concrete facia-Parapet wall at roof beam					
1.11.5.1.1.1	Concrete facia-Parapet wall- Architrave made of Cement and Sand mortar 1:4mix, filled hollow with concrete work as required.	120	m		
Form Work to Insitu Concrete:					
1.11.21.1.0.	Plain formwork to sides of columns, 15 in numbers, regular, rectangular in shape.	27	M ²		
1.11.18.1.0.	Ditto; Sides and soffits of lintels, regular, rectangular in shape.	33.3	M ²		
1.11.18.1.0.	Ditto; to sides of roof beams, regular, rectangular in shape.	53.1	M ²		
Reinforcement in Superstructure.					
High Yield Bars to BS 4449					
1.11.34.1.1.	High yield steel bars,10-12mm diameter, straight bars 12m long; 168m in Columns	0.19	T		
1.11.33.1.1.	High yield bars, 8mm diameter links, stirrups in Columns.	0.07	T		
1.11.34.1.1.	High yield steel bars,10-12mm diameter, straight bars 12m long; 151.35m in Lintels	1.11	T		
1.11.34.1.1.	High yield steel bars,12mm diameter, straight bars 12m long; 57.6m in Beams.	0.23	T		
1.11.33.1.1.	High yield bars, 8mm diameter links, stirrups in Lintels and Beams.	0.06	T		
CONCRETE WORK: CARRIED TO SUMMARY					
SUPERSTRUCTURE CONT'D.					
Brick/Block Walling in Superstructure					
EXTERNAL & INTERNAL WALL					
1.14.1.2.2.1	Walls, overall thickness 150mm thick battered on both sides in Common /stretcher bond, cement mortar (1:3) externally	179	M ²		
	Ditto; Internally	354	M ²		
EXTERNAL AND INTERNAL WALLS: CARRIED TO SUMMARY					
					-

ROOF CONSTRUCTION- PART A&B					
1.16	CARPENTARY Sawn hardwood treated timber size: Structural Timbers, 50mm x 100mm Rafters and associated timbers fixed with 150mm size nails at 1200 centres and specially treated with solignum.	550	M		
1.16.1.1.1.1	Ditto; 50mm x 75mm purlins fixed at 800mm centres	1250	M		
1.16.1.3.1.1	Ditto;75mm x 100mm wall plates	150	M		
1.16.1.4.1.1	Ditto; Roof and floor joists 50mm x 100mm Tie beams	500	M		
1.16.1.5.1.1	Ditto; 50mm x 100mm Strutting, fixed at 1200mm centres	540	M		
1.16.1.7.1.1	Ditto;50mm x 50mm Partition and wall members.	1640	M		
1.16.6.1.6.1	Sundries 12mm diameter mild steel holding down bolt 45mm long with hexagonal nuts and washers including forming pockets in blockwork and grouting mortar, and boring 100mm hardwood.	85	Nr		
<u>CARPENTRY WORK CARRIED TO COLLECTION</u>					
1.17	<u>SHEET ROOF COVERING</u> 0.50mm gauge darked-Coloured Corrugated Longspan aluminium roofing sheet of high Quality, fixed with single lap covering 150mm end laps to sawn hardwood purlins (measured separately) at approximately 850mm centres with 80mm long drive screw nails with plastic caps and washers. Covering > 500mm wide,sloping at 30° underlays on purlins.	485	M ²		
1.17.4.1.3.7	Boundary work, at the ridge fixed with nails and special washers 600mm girth, Ridges sloping	134	M		
1.17.4.1.5.7	Ditto; Valleys sloping	46	M		
1.17.5.1.9.1	Flashings,Eaves 150mm girth lining to openings.	150	M		
<u>ROOF COVERING CARRIED TO SUMMARY</u>					
<u>COLLECTIONS:</u>					
CARPENTARY					
SHEET ROOF COVERING					
ROOF CONSTRUCTION TO SUMMARY					

1.23	WINDOWS, SCREENS AND LIGHTS				
	The following aluminium window tower or approved equivalent; complete all necessary iron mongery, assembled and fixed to;including cutting and pinning lugs to concrete or block work opening; surrounding and bedding frame in cement mortar(1:4). Supply and fix in place Aluminium framed glass projected window fully glazed with 5mm thick sheet glass size: 750mm x 900mm high.	8	Nr		
1.23.1.1.1					
1.23.1.1.1	Ditto; Projected Window size: 1000mm x 1200mm high.	5	Nr		
1.23.1.1.1	Ditto; Projected Window size: 1200mm x 1200mm high.	54	Nr		
1.24	DOORS, SHUTTERS AND HATCHES Supply and fix the following door of approved quality and design to suit size Virony doors or equivalent; size:750mm x 2100mm high.				
1.24.2.1.1.1	Ditto; 900mm x 2100mm high.	7	Nr		
1.24.2.1.1.1	Ditto;1000mm x 2100mm high.	13	Nr		
1.24.2.1.1.1	Ditto;1000mm x 2100mm high. Steel Doors	6	Nr		
1.24.2.1.1.1	Approved Security door size:1200mm x 2100mm high.	6	Nr		
1.26	METAL WORK;BURGLARY PROOF Supply and fix the following mild steel burglary proof panels made of Wrought iron Sq pipe for window Protector design, fixed to concrete work/block work with lugs, including making good surfaces disturbed and painting with 2 gloss paint to suit window openings.				
1.26.2.1.1.1		67	Nr		
	WINDOWS, DOORS AND METAL WORK TO SUMMARY				
	<u>SUPERSTRUCTURE TO COLLECTIONS:</u> Concrete work Block work Roof Construction and covering Windows, door and metal work				
	SUPERSTRUCTURE CARRIED TO SUMMARY				
1.32	FURNITURE , FITTINGS AND EQUIPMENT				
	<u>HANDRAILS</u> Fabricate and fix approved iron handrails at the entrance door/ verander.		M		
	FURNITURE , FITTINGS AND EQUIPMENT TO SUMMARY				

1.38	MECHANICAL SERVICES			
	<u>Sanitary Appliance and Fittings</u>			
1.32.2.1.4	Hand wash basin, 450mm x 350mm c/w bottle trap tap and accessories, 'Twyford' or approved equivalent.	5	Nr	
1.32.2.1.4	Vitreous China or Tyford Water Closet complete with accessories, 'Twyford' or approved equivalent.	5	Nr	
1.32.2.1.4	Vitreous China urinal flush cistern with flush pipe C/w accessories, 'Twyford' or approved equivalent.	2	Nr	
1.32.2.1.4	Vitreous China toilet roll holder, 'Twyford' or approved equivalent.	5	Nr	
	<u>Fixtures</u>			
	9kg multi- purpose dry powder fire extinguisher; waterloo or equivalent.		Nr	
1.38.2	<u>Terminal Equipment and Fittings: Fresh water distribution</u>			
1.38.3.1.1	Pipe Work; Allow a provisional sum for all pipe work (PRP Pipes as specified in the Mechanical Engineering drawings) in connection with Plumbing work		Item	
	<u>Builders Work</u>			
	Allow a provisional sum for builder works in connection with Mechanical Services.		Item	
	MECHANICAL SERVICES TO SUMMARY			

1.39	ELECTRICAL SERVICES			
1.39.1.1.1.1	Primary Equipment: Supply and install the following High equipment, System, high level in plant room Type: 200A Busbar chamber (Mem) Electrical Control; 100A ELCB 100A 4-way TPN Distribution board 200A TP&N Gear Switch Cut out fuse box Neutral Link/Connector 300mm x 450mm board	1	Nr	
		1	Nr	
1.39.2.1.1.1	Terminal Equipment: Supply and install the following approved rated Lamps and other Fittings complete with accessories: Decorative wall bracket fitting 200W PoP flush Light mounted fittings 100 W Water tight security fittings	12	Nr	
		20	Nr	
		8	Nr	
1.39.3	Cable Contentment: 50mm diameter upvc cable duct-Kano or equal in blockwall chases, including cutting chases in block wall and making good. Ditto; buried in Ceiling	120	M	
		168	M	
1.39.4	Cable Contentment Fittings: Supply and fixed the following: Joint boxes, Connectors, bends,tees,sets,junctions, reducers, Fire barriers and the like. Extra over 50mm pipe ducts for 50mm elbows Ditto; 25mm	95	Nr	
		80	Nr	
		100		
1.39.5	Cables 16mm ² single core pvc insulated copper conductor, drawn in upvc duct (measured). 10mm ² 1c pvc/pvc copper cable 4mm ² 1c pvc/pvc copper cable 2.5mm ² 1c pvc/pvc copper cable 1.5mm ² 1c pvc/pvc copper cable	100	M	
		100	M	
		100	M	
		500	M	
		1000	M	
	Electrical Service to Page collection.			

1.39.7	<u>Final Circuits:</u>				
	Accessories for Electrical Wiring; Lighting switches, power outlet switched sockets MEM or other equal and approved quality including galvanized steel knockout box set in mortices on walls.				
	10A 1 gang, 1 way flush switch socket outlet	8	Nr		
	10A 2 gang, 1 way flush switch socket outlet	8	Nr		
	10A 1 gang, 2 way flush switch socket outlet	12	Nr		
	13A flush switch socket	15	Nr		
	13A Twin flush switch socket	15	Nr		
	15A switched socket outlet	20	Nr		
	1400mm sweep ceiling fan installed with control.	34	Nr		
	Allow for consumables.		Item		
	Earthing and Lighting Protection:				
	Supply and install Earthing system consistent with the drawing to achieve equal or less than 5 ohm resistivity.			Item	
	Low Voltage Installation				
	Supply and install all low voltage installations; Cables and cable containment for CCTV, Television and Telephone/Intercom system etc complete with accessories.			Item	
1.41	<u>Builders Work</u>				
1.41.1.1.1.1	Cut away and make good, builders work disturbed after electrician complete execution of the following:				
	Equipment and Control gear	5	Nr		
	Allow for testing and commissioning.		Item		
	To collection:				
	<u>Collections:</u>				
	Page 7:...				
	Page 8:...				
	ELECTRICAL SERVICES TO SUMMARY				
	<u>SERVICES TO COLLECTION:</u>				
	MECHANICAL SERVICES				
	ELECTRICAL SERVICES				
	SERVICES TO SUMMARY				

FLOOR, WALL, CEILING AND ROOF FINISHINGS					
	<u>Ground Floor : Floors</u>				
1.28.1.2.1.3	<p>Screeds, beds and toppings 40mm thick, exceeding 600mm wide, level and to falls only =50⁰ from horizontal, backing and beddings 44mm thick in cement and sand mortar (1:5) laid on concrete bed (measured separately) to receive tiles.</p>	326	M ²		
	Cement Backing; 5mm Cement Binder paste	326	M ²		
1.28.2.2.1.7	<p>Floor Tiles: Finish to Floors; 400mm x 400mm x 8mm Vitrified tiles laid on floor, exceeding 600mm wide to approved pattern on cement and sand bed (measured separately); finished with straight butt joints and flush with pointing coloured cement grout .</p>	326	M ²		
	Ditto; Skirting 100mm high.	182	M		
	Cement Backing; 8mm Cement Binder paste	182	M		
1.28.7.2.1	<p>Walls Finish to Walls; Cement and Sand (1:4) rendering 12mm thick, exceeding 600mm wide Externally and internally.</p>	1246	M ²		
	<u>Window and Door Skirting/Design</u>				
	Architrave Balustrade made of Cement and Sand mortar 1:4mix, include concrete work as required.	340	m		
1.28.7.2.1	<p>Wall Tiles: Finish to Walls; 250mm x 400mm x 8mm Glazed Ceramic tiles laid on Walls, exceeding 600mm wide to approved pattern on cement and sand bed (measured separately); finished with straight butt joints and flush with pointing coloured cement grout .</p>	119	M ²		
	Cement Backing; 5mm Cement Binder paste	119	M ²		
1.28.9.2.1	<p>Ceiling Finish to ceilings,Suspended ceiling 600mm thick x 600mm wide as specified.</p>	326	M ²		
	FINISHINGS TO SUMMARY				
	DECORATION; PAINTING				
	Painting to general surfaces, exceeding 300mm girth,internal, patterned, one undercoat and two finishing coats of Peacock or other approved quality emulsion paint on wall Externally and internally.	1246	M ²		
	PAINTING CARRIED TO SUMMARY				
	COLLECTION:				
	FINISHINGS				
	DECORATION; PAINTING				
	INTERNAL FINISHES TO SUMMARY				

1.34	DRAINAGE BELOW GROUND				
1.34.7.1	Foul Drain: Inspection Chamber Construction of inspection chambers, size 450mm x 450mm x 600mm using 150mm thick solid sandcrete block and covered with precast reinforced concrete slab size 450mm x 450mm x 50mm	8	Nr		
1:34.8.2.3	Soak Away Pit (S.A.P) Soak Away Pits; internal size: 2950mm x 2600mm x 3000mm deep using 150 mm thick solid sandcrete block wall built honey comb with reinforced concrete columns and plaster internally with the bottom/base casted with plain concrete grade 30 as well as covered with reinforced concrete slab as per Engineer details.	1	nr		
1:34.10.2.3	Septic Tank (S.T) Septic Tank; internal size: 3000mm x 2600mm x 3200mm deep using 150 mm thick solid sandcrete block wall with reinforced concrete columns/ cross beams and plaster internally with the bottom/base casted with plain concrete grade 30, as well as covered with reinforced concrete slab as per Engineer details.	1	nr		
1.34.16	Allow for all pipe work in connection with drainage		Item		
	DRAINAGE CARRIED TO SUMMARY				

MAIN SUMMARY				
FACILITATING WORKS				
NEW WALL OF EXISTING BUILDING				
SUBSTRUCTURE				
SUPERSTRUCTURE				
INTERNAL FINISHES				
FITTINGS, FURNISHINGS AND EQUIPMENT				
SERVICES				
PREFABRICATED BUILDING AND BUILDING UNITS				
WORK TO EXISTING BUILDING				
DRAINAGE BELOW THE GROUND				
TOTAL				
SUB-TOTAL				
PROVISIONAL SUMS				
DEFINED PROVISIONAL SUM				
WORKS TO BE CARRIED OUT BY STATUTORY UNDERTAKERS				
SUB-TOTAL				
MAIN CONTRACTOR'S FIXED PRICE				
DIRECTOR'S ADJUSTMENT(+/-)				
SUB TOTAL				
DAY WORKS (PROVISIONAL)				
TOTAL TENDER PRICE(EXCLUSIVE OF VAT)				
ADD VAT				
CARRIED TO GENERAL SUMMARY				

GENERAL SUMMARY					
ITEM	DESCRIPTION	QTY	UNIT	AMOUNT	TOTAL
1	BILL NO. 1: PRELIMINARIES	1	Nr	-	-
2	BILL NO.2: MAIN BUILDING	1	Nr	-	-
	TOTAL				-
	ADD PROFIT AND OVERHEAD	20%			-
	TOTAL2				-
	ADD VAT				-
	GRAND TOTAL				-