

PROPOSED CONSTRUCTION OF 6 CLASSROOM BLOCK BUILDING- PHASE 1

AT

OKOROINYONG

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



RC: AK 18989

CONSULTANT

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



PREPARED BY:

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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 6 Classroom Block Nature of project: The project involves; Construction of 6 Classroom Block, Site works/Infrastructures etc, from foundation to finishes and Hand over. This phase focuses on foundation up to and including roofing. Location of project: Okoroinyong 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		550,000.00
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 4 Commissioning Logistics	Wks	Item Item	250,000.00 750,000.00
	EMPLOYER'S REQUIREMENT TO COLLECTION			1,550,000.00

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				
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	site			
1.1.2.09	Site Records			
	Site Records; photography, Works Records.		Item	
1	Records.			
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			
1	Temporary Works			Item/Nr/M/ M2/M3
2	Multi-service gang- Administrator	Contract	Wks	
		Project Architect Project Quantity Surveyor Project Engineer		
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; 6 CLASSROOM BLOCK -PHASE 1- SUBSTRUCTURE TO ROOF COVERING

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	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	1236	M ²		
	Site Preparation				
1.5.5.2.1	Remove top soil, average 150mm depth, stored on site	1236	M ²		
1.5.10.1.2	Retained excavated topsoil on site to temporary spoil heaps 80m distance	185.4	M ³		
	Excavation and filling				
1.5.6.2.1	Excavation from strip level, foundation excavation not exceeding 2m deep strip foundation.	137	M ³		
1.5.6.2.1	Ditto; pits for column bases, over 1m but not exceeding 2m deep.	47.4	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	85.09	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.	99.31	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.	416	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.	89	M ³		
1.5.11.1.1.1	Filling obtained from excavated material not exceeding 500mm deep, 150mm thick to external perimeter of trench	9	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	969	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.	1.9	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	4.273	M ³		
1.11.5.1.1.1	Ditto; vertical work ≤ 300mm thick,column in structures,reinforced =5%	1.71	M ³		
1.11.5.1.1.1	Ditto; Horizontal work ≤ 300mm thick, in Plinth beam in structures,reinforced =5%	6.813	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.	9	M ³		
1.11.2.1.2.1	Ditto; Horizontal work poured on or against hardcore.	145.3	M ³		
	Ditto, Horizontal work, ≤ 300mm thick in Step and ramp.	2.5	M ³		
	Formwork to insitu concrete				
1.11.14.1.1.1	Plain formwork to Edges of horizontal work ≤ 500mm high, 150mm wide	201.9	M		
1.11.21.1.1.1	Ditto; Sides of attached columns, regular, rectangular in shape.	45.6	M2		
	Reinforcement				
1.11.34.1.1.1	High yield steel bars, 12mm diameter, straight bars 12m long; 406m in Columns.	0.27	T		
1.11.34.1.1.1	High yield steel bars, 12mm diameter, straight bars 12m long; 733m in Columns base.	0.488	T		
1.11.33.1.1.1	High yield bars, 8mm diameter links/ stirrups in Columns	0.06	T		
1.11.34.1.1.1	High yield steel bars, 12mm diameter, straight bars 12m long; 972m in Plinth beam.	0.718	T		
1.11.33.1.1.1	High yield bars, 10mm diameter links/ stirrups in Columns and Plinth beam	0.39	T		
1.11.37.2.2	Mesh, Weight, 2.22kg/m ² , fabric reinforcement A142; minimum side and end laps; 150mm	969	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)	514.7	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.		Item		
	FINISHES				
1.28.7.2.1	Finish to Walls, Cement and Sand (1:4) rendering 12mm thick, exceeding 600mm wide Externally	129	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 .	129	M ²		
	Cement Backing; 5mm Cement Binder paste	128.5	M ²		
	Protection				
	Protect all works in this section Page 2 to collection:		sum		
	Collections:				
	Page 1....				
	Page 2....				
	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%	2.565	M ³		
1.11.2.1.2.1	Ditto; horizontal work in Lintels and roof Beams.	11	M ³		
Concrete facia-Parapet wall at roof beam					
Concrete facia-Parapet wall- Architrave made of Cement and Sand mortar 1:4mix, filled hollow with concrete work as required.					
		201.9	m		
Form Work to Insitu Concrete:					
1.11.21.1.0.0	Plain formwork to sides of columns, 47 in numbers, regular, rectangular in shape.	68.4	M ²		
1.11.18.1.0.0	Ditto; Sides and soffits of lintels, regular, rectangular in shape.	84.3	M ²		
1.11.18.1.0.0	Ditto; to sides of roof beams, regular, rectangular in shape.	96.3	M ²		
Reinforcement in Superstructure.					
High Yield Bars to BS 4449					
1.11.34.1.1.1	High yield steel bars,10-12mm diameter, straight bars 12m long; 169m in Columns	0.41	T		
1.11.33.1.1.1	High yield bars, 8mm diameter links, stirrups in Columns.	0.23	T		
1.11.34.1.1.1	High yield steel bars,10-12mm diameter, straight bars 12m long; 180m in Lintels	0.71	T		
1.11.34.1.1.1	High yield steel bars,12mm diameter, straight bars 12m long; 65m in Beams.	0.864	T		
1.11.33.1.1.1	High yield bars, 8mm diameter links, stirrups in Lintels and Beams.	0.451	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	452.6	M ²		
	Ditto; Internally	849	M ²		
EXTERNAL AND INTERNAL WALLS: CARRIED TO SUMMARY					
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ROOF CONSTRUCTION					
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.	1512	M		
1.16.1.1.1.1	Ditto; 50mm x 75mm purlins fixed at 600mm centres	1886	M		
1.16.1.3.1.1	Ditto;75mm x 100mm wall plates	250	M		
1.16.1.4.1.1	Ditto; Roof and floor joists 50mm x 100mm Tie beams	1320	M		
1.16.1.5.1.1	Ditto; 50mm x 100mm Strutting, fixed at 1200mm centres	1492	M		
1.16.1.7.1.1	Ditto;50mm x 50mm Partition and wall members.	2646	M		
	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		
	CARPENTRY WORK CARRIED TO COLLECTION				
1.17	SHEET ROOF COVERING 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.	1190	M ²		
1.17.4.1.3.7	Boundary work, at the ridge fixed with nails and special washers 600mm girth, Ridges sloping	106	M		
1.17.4.1.5.7	Ditto; Valleys sloping	17	M		
1.17.5.1.9.1	Flashings,Eaves 150mm girth lining to openings.	214	M		
	ROOF COVERING CARRIED TO SUMMARY				
	COLLECTIONS: CARPENTARY SHEET ROOF COVERING				
	ROOF CONSTRUCTION TO 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				-