



**BAYERO UNIVERSITY,
KANO**

**CONTRACT DOCUMENT AND BILL OF QUANTITIES FOR
THE CONSTRUCTION OF AFRICA CENTRE OF
EXCELLENCE FOR POPULATION HEALTH AND POLICY
(ACEPHAP) STUDENTS HOSTEL AT AMINU KANO
TEACHING HOSPITAL (AKTH) LOT-P1**

AT

BAYERO UNIVERSITY, KANO

PREPARED BY:
Physical Planning Unit
Bayero University
Kano.

MARCH, 2023

TABLE OF CONTENTS

BILL No. 01

Article of agreement Preliminaries, conditions
of Contract and Trade preambles Prelim /1

BILL No. 02

Construction of Africa Centre of Excellence for DC/1-16
Population Health and Policy (ACEPHAP)
Students Hostel at Aminu Kano Teaching Hospital
(AKTH) Lot-P1

General Summary

GS01

BILL NO. 01

Article of Agreement, preliminaries, Condition of Contract, and Trade preamble

ARTICLES OF AGREEMENT

THIS AGREEMENT made the *March* of *2023* BETWEEN *Bayero University Kano* of (or whose registered office is situated at) *Gwarzo Road, Kano* (Hereinafter called "the Employer") of the one part And of *Messer Seeminai Engineering Limited* (or whose registered office is situated at) *No.32, Lingu Crescent, off Aminu Kano Crescent Wuse II, Abuja* (Hereinafter called "the Contractor" (a) of the other part

WHEREAS The Employer is desirous of (b) Construction of Africa Centre of Excellence for Population Health and Policy (ACEPHAP) Students Hostel at Aminu Kano Teaching Hospital (AKTH) Lot-P1 (Hereinafter called "the Works" at BUK.

And has caused Drawing and Bills of Quantities showing and describing the work to be done prepared by Physical Planning Unit.

The Contractor has supplied the Employer with a fully priced copy of the said Bills of Quantities (which copy is hereinafter referred to as "the Contract Bills").

(Hereinafter referred to as "the Contract Drawings) and the Contract Bills have been signed by or on behalf of the parties hereto.

NOW IT IS HEREBY AGREED AS FOLLOWS:

Article 1

For the considerations hereinafter mentioned the Contractor will upon and subject to the Contract Documents, carry out and complete the Works shown upon, described by or referred to in those Documents in **(16)** Weeks or such other extended period in accordance with the Conditions.

Article 2

The Employer will pay to the Contractor the sum of *Four Hundred and Three Million Five Hundred and Thirty Seven Thousand Five Hundred and Thirteen Naira Eighteen Kobo (₦403,537,513.18) only*. The term "the Architect" in the Articles and Conditions shall mean Principal Architect or, in the event of this death or ceasing to be the Architect for the purpose of this Contract, such other person as the Employer shall nominate within a reasonable time but in any case not later than 21 days after such death or cessation for that purpose, not being a person to whom the Contractor not later than 7 days after such nomination shall object for reasons considered to be sufficient by an Arbitrator appointed in accordance with article 7. Provided always that no person subsequently appointed to be the Architect under this contract shall be entitled to disregard or overrule any certificate or opinion or decision or approval or instruction given or expressed by the Architect for the time being.

Article 4

The term "the Quantity Surveyor" in the Articles and Conditions shall mean Assistant Chief Quantity Surveyor or, in the event of his death or ceasing to be the Quantity Surveyor for the purpose of this Contract Such other person as the Employer shall nominate within a reasonable time but in any case not later than 21 days after such death or cessation for that purpose, not being a person to whom the Contractor not later than 7 days after such nomination shall object for reasons considered to be sufficient by an Arbitrator appointed in accordance with Article 7.

Article 5

The term "the Engineer" in the Articles and Conditions shall mean the said

.....
of.....

or in the event of his death, or ceasing to be the Engineer for the purpose of this Contract Such other person as the Employer shall nominate within a reasonable time but in any case not later than 21 days after such death or cessation for that purpose, not being a person to whom the Contractor not later than 7 days after such nomination shall object for reasons considered to be sufficient by an Arbitrator appointed in accordance with article 7.

Article 6

The term "the Co-ordinator" in the article and conditions shall mean the said
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of.....

or, in the event of his death or ceasing to be the Co-ordinator for the purpose of this Contract such other person as the Employer shall nominate within a reasonable time but in any case not later than 21 days after such death or cessation for that purpose, not being a person to whom the Contractor not later than 7 days after such nomination shall object for reasons considered to be sufficient by an Arbitrator appointed in accordance with Article 7. Provided always that no person subsequently appointed to be the co-ordinator under this contract shall be entitled to disregard or overrule any certificate or opinion or decision or approval or instruction given or expressed by the co-ordinator for the time being.

Article 7

If any dispute or difference as to the construction of this contract or any matter or thing of whatsoever nature arising there under or in connection therewith shall arise between the Employer or the Architect/Co-ordination on his behalf and the Contractor either during the progress or after the completion or abandonment of the Works, it shall be and is hereby referred to arbitration in accordance with clause 35.

DEFINITIONS

In the said Conditions the following words and expressions shall have meanings hereby assigned to them except where the context otherwise requires:-

- a) "Acceptance of tender" means written letter of intent to complete a formal contract on the terms stated in the tender documents.
- b) "Approved" or "Approval" means approved or approval in writing by the Architect/Supervising Officer unless otherwise specified.
- c) "Plant" mean all appliances or things of whatever nature required in or about the execution completion or maintenance of the works or temporary works and includes (without hereby limiting the foregoing definition) all machinery, tool coverings, patterns, templates, profiles, power of every kind, water, light, pumping, workshop, sheds, building, stores, materials, and things fixed or moveable;
- d) "Contract" means the Articles of Agreement and conditions of Contract with Appendices, the Contract Drawings and the contract Bills;
- e) "Contract Sum" means the sum named in the Tender subject to such additions thereto or deductions there from as may be made under the contract.
- f) "General attendance" means assisting and collaborating with any subcontractors and their tradesman including obtaining particulars or requirements concerning work to be executed for them, supplying them with and taking responsibility for accurate dimensions and details to their work, providing full facilities to enable their employees to execute their work including the use, free of charge, or working space, look-up storage, plant and other builder's equipment including approved scaffolding, maintaining, altering and removing same as required, unloading and hoisting their plant and materials or assisting to do so and providing them free of charge with water, watching, artificial lighting and electric power, covering up and protecting their goods and materials and their work and making good any loss or supplying unskilled labour for unloading, storing and the like;
- g) "Month" means calendar month.
- h) "Practical Completion" means substantially completed, for occupation or use.

IN WITNESS: whereof the parties hereto have hereunto set their hands and seals the day and year first above written.

*Signed, sealed and delivered by the Registrar
For and on behalf Bayero University, Kano.*

Sign: *H.A. 21/03/23*

Seal

IN PRESENCE OF:

Name: Engr. Saad O. Gobir
Designation: Director PPU

Address: Bayero University, Kano

Sign and Date: *21/03/23*

*Signed, sealed and delivered for and on
Behalf of the Contractor by*

Sign: *21/03/23*

Seal

IN PRESENCE OF:

Name: *Mohammed Tamil Mohammed*

Designation: *Project Manager*

Address: *KANO*

Sign and Date: *21/03/23*

BILL No. 01
PRELIMINARIES

PRELIMINARIES

Listed hereunder are the relevant sections of the Preliminaries. The Tender is advised to make allowances for complying with the requirements contained therein. No claims for any additional payment shall be entertained for failure to inspect, and study in detail the obligations of the Preliminaries. A complete set (page PR/1 - PR/17) is available in the Director's Office PPU

- A Site and scope of works
- B Bill of quantities and definitions
- C Drawings and tolerances on components
- D Licenses/setting out/covering up works
- E Site accommodation/ welfare facilities/ temporary services
- F Water for the works
- G Site security supervision
- H Programme for the work
- J Materials found on site/article of antiquity opening up for inspection
- K Progress photographs
- L Plant, Tool, scaffolding and vehicles
- M Plant, tool, scaffolding and vehicles
- N Temporary storm water drainage
- P Prime cost and provisional sums
- Q Procreation
- R Advertisement
- S Site notice board
- T Commissioning of services installations
- V Clearing and Clearing on completion
- W Defects after completion
- X Allow a sum of for contract administration expenses

PRELIMINARIES

Carried to Summary

CONDITIONS OF CONTRACT	
	<p>Listed hereunder are the relevant sections of the conditions of Contract. The Tenderer is advised to make allowances for complying with the requirements contained therein. No claims for any additional payment shall be entertained for failure to inspect and study in detail the obligations of the conditions of contract. A complete set [Pages CC/ 1-CC/39 is available in the Director, PPU office for this purpose.</p> <p><u>Clause</u></p> <ul style="list-style-type: none"> 1 Contractor's Obligations 2 Architect's Instructions 3 Contract documents 4 Statutory obligations, Notices, Fees and charges 5 Leveling and Setting out 6 Materials, Goods and workmanship to confirm to Description, Testing and inspection 7 Royalties and patent Rights 8 Foreman - in charge 9 Access of Architect to the works 10 Clerk of work 11 Variations, provisional and prime cost sums 12 Contract Bills 13 Contract sum 14 Unfixed Goods and materials 15 Practical completion and defect liability 16 Sectional completion 17 Assignment for sub-letting Carried to collection

	<u>CONDITIONS OF CONTRACT (Cont'd)</u>	
	BROUGHT FORWARD	
	<p><u>Clause</u></p> <p>17A fair Wages</p> <p>18 Injury to Persons and Property, and Employer's Indemnity</p> <p>19 Insurance Against Injury to Persons and Property</p> <p>20 Insurance of the works Against Fire, etc</p> <p>21 Possession, completion and Post-noment</p> <p>22 Damages for Non-Completion</p> <p>23 Extension of time</p> <p>24 Lost and Expense Caused by disturbance of Regular progress of work</p> <p>25 Determination by Employer</p> <p>26 Determination by Contractor</p> <p>27 Nominated sub-Contractor</p> <p>28 nominated Suppliers</p> <p>29 Artists and Tradesmen</p> <p>30 certificates and payments</p> <p>31 Fluctuations</p> <p>32 outbreak of Hostilities</p> <p>33 War Damage</p> <p>34 Antiquities</p> <p>35 Arbitration</p>	

CONDITIONS OF CONTRACT

Carried to summary

TRADE PREAMBLES

Listed hereunder are the relevant sections of the Trade preambles. The Tenderer is advised to make allowance, for complying with the requirements of specifications, notes contained therein. No claims for any additional payment shall be entertained for failure to inspect, study in detail and comply with the requirements of the specification, notes/Trade preambles. A complete set (Page TP/1 - TP/83) is available in Director's office PPU for this purpose.

- A General Notes
- B Demolitions and Alterations
- C Excavations and Earthwork
- D Concrete work
- E Block work and stone work
- F Roofing, carpentry and Joinery
- G Structural steelwork & metalwork
- H Services Installations
- J Finishing and painting
- K External works and collections

TRADE PREAMBLES

Carried to summary

**ARTICLES OF AGREEMENT, CONTRACT CONDITIONS,
PRELIMINARIES AND TRADE PREAMBLES**

SUMMARY

		Page
A	Articles of agreement	AG/04
B	Contract conditions	CC/02
C	Preliminaries	PR/01
D	Trade preambles	TRP/01

**ARTICLES OF AGREEMENT, CONTRACT CONDITIONS,
PRELIMINARIES AND TRADE PREAMBLES**

Carried to General summary

PR/GS/01

BILL No. 02

<u>ELEMENT NR. 1 SUBSTRUCTURE</u>					
<u>Site preparation:</u>					
A	Clear site of bushes, weeds, grass and undergrowths; grub up all roots and dispose	3818	m ²	275.00	1,648,750.00
<u>Excavation and Earthwork:</u>					
<u>Excavation; normal soil:</u>					
B	Topsoil for preservation; average depth 150mm	2727	m ²	360.00	981,120.00
C	Pits for column bases; maximum depth not exceeding 2.00m starting from stripped level	403	m ³	1,750.00	705,250.00
D	Foundation trench; width exceeding 0.30m; maximum depth not exceeding 2.00m starting from stripped level	751	m ³	1,110.00	733,610.00
<u>Disposal of excavated material:</u>					
E	Offsite	440	m ³	425.00	197,400.00
<u>Filling:</u>					
F	Backfill around foundations with material arising from excavations; average thickness exceeding 0.25m	714	m ³	425.00	346,390.00
<u>Surface treatment:</u>					
G	Pesticides; "Dieldrex 20" anti-termite solution; apply to excavated surfaces	3527	m ²	1.65.00	440,775.00
<u>Filling:</u>					
H	Hardcore to make up levels; thickness 225mm; stone granite; compacted in layers not exceeding 150mm thick	799	m ²	4,700.00	3,655,700.00
J	Approved laterite filling to make up levels; thickness exceeding 250mm; laterite obtained off site; compacted to 95% B.S. compaction	240	m ³	1,420.00	2,768,280.00
TO COLLECTION					
9,987,675.00					
9,912,675.00					

<u>SUBSTRUCTURE (CONT'D)</u>					
A	<u>Damp proofing:</u> Damp proofing; horizontal; single layer 0.26mm polythene sheet; laid on unblinded hardcore to receive concrete	943	m ²	742.00	690,376.00
B	<u>Concrete Work</u> <u>In situ concrete</u> <u>Plain; grade 10:</u> Beds as blinding; thickness not exceeding	32	m ³	423.50	1,552,000.00
C	<u>Plain; grade 15:</u> Beds; poured against unblinded hardcore; thickness 100- 150mm	141	m ³	53,400.00	753,400.00
D	<u>Reinforced; grade 25:</u> Steps and ramp	4	m ³	53,400.00	213,600.00
E	<u>Foundations; thickness 150-300mm</u>	107	m ³	15,150.00	70,050.00
F	<u>Isolated foundations; thickness 150-300mm</u>	74	m ³	65,250.00	4,765,300.00
G	<u>Isolated columns</u>	12	m ³	65,250.00	780,000.00
H	<u>Ground Beams</u>	33	m ³	65,250.00	2,167,750.00
J	<u>Reinforcement for in situ concrete;</u> <u>Reinforcement to BS 4449 (Provisional)</u> <u>Bars: high yield steel</u> 10mm diameter; in links and stirrups	8,952	kg	650.00	3,717,700.00
K	<u>Bars: high yield steel</u> 12mm diameter; straight and bent	7,718	kg	650.00	5,046,700.00
L	<u>16mm diameter; straight and bent</u>	12,485	kg	650.00	8,115,250.00
M	<u>20mm diameter; straight and bent</u>	5,148	kg	650.00	3,346,200.00
N	<u>Fabric</u> Fabric; reference A142; to BS 4483; weighing 2.22kg/m ² ; with 300mm laps on all sides; in concrete ground slab	943	m ²	1,950.00	1,872,220.00
TO COLLECTION					
42,920,570.00					

SUBSTRUCTURE (CONT'D)					
<i><u>Formwork; Sawn;</u></i>					
<i><u>Foundation and beds</u></i>					
A Edges of bed; not exceeding 250mm high	266	m	720.00	244,720.00	
B Faces of isolated foundation; 250-500mm high	708	m	1,744.00	1,222,702.00	
C Faces of ground beam; 250-500mm high	1,244	m	1,240.00	2,228,480.00	
D Edges of steps; not exceeding 250mm high	45	m	920.00	41,440.00	
E Sides of steps; exceeding 1000mm high	12	m2	3,140.00	37,680.00	
F Sides of column; square and rectangular in shape	225	m2	3,140.00	706,520.00	
<i><u>Blockwork</u></i>					
<i><u>Hollow Sandcrete Blockwork; nominal size 450x225mm high; laid stretcher bond with cement and sand (1:3) mortar; cavities filled solid with plain in situ concrete grade 20;</u></i>					
<i><u>Foundations:</u></i>					
G 225mm thick	933	m2	6,195.00	5,512,005.00	
<i><u>Additional Works</u></i>					
H Allow a Provisional Sum for additional works in substructure to be expanded as directed	Sum			500,000.00	
TO COLLECTION					
<i><u>COLLECTION</u></i>					
Collection from page 2/1				9,987,675.00	
Collection from page 2/2				2,941,675.00	
Collection from page 2/3				43,980,575.00	
TO SUMMARY					
		N		14,632,925.00	
				26,672,930.00	
				70,607,236.	

<u>ELEMENT NR. 2 FRAME</u>					
<u>Concrete Work</u>					
<u>In situ concrete</u>					
<u>Reinforced: grade 25:</u>					
A Isolated columns	57	m3	65,750.00	3,947,750.00	
B Beams	98	m3	65,750.00	6,442,500.00	
<u>Reinforcement for in situ concrete:</u>					
<u>Reinforcement to BS 4449 (Provisional)</u>					
<u>Bars; high yield steel</u>					
C 10mm diameter; in links and stirrups	8600	kg	650.00	5,540,000.00	
D 16mm diameter; straight and bent	15944	kg	650.00	10,367,600.00	
E 20mm diameter; straight and bent	6897	kg	650.00	4,493,050.00	
<u>Isolated features:</u>					
F Sides of column; square in shape	997	m2	3,140.00	3,130,520.00	
G Sides and soffits of beams; rectangular in shape	805	m2	3,140.00	2,527,700.00	
<u>TO SUMMARY</u>					
			N	36,286,170.00	

ELEMENT NR. 3 UPPER FLOOR						
<u>Concrete Work</u>						
<u>In situ concrete</u>						
<u>Reinforced, grade 25;</u>						
A	Slabs; suspended; thickness 150-175mm	103	m ³	65,777.00	6,222,135.4	
<u>Reinforcement for in situ concrete:</u>						
<u>Reinforcement to BS 4449 (Provisional)</u>						
<u>Bars; high yield steel</u>						
B	10-12mm diameter; straight and bent	19846	kg	652.10	12,879,900.0	
<u>Formwork; Sawn;</u>						
<u>Slab and associated features</u>						
C	Edges of suspended slabs; depth not exceeding 250mm	195	m	92.00	129,402.0	
D	Soffit of suspended slab; rectangular; thickness not exceeding 200mm; horizontal	690	m ²	2,141.00	7,166,600.0	
TO SURMARRY						
			N		22,093,150.0	

<u>ELEMENT NR. 4 STAIRCASES</u>					
<u>Concrete Work</u>					
<u>In situ concrete</u>					
<u>Reinforced; grade 25;</u>					
A Staircases	14	m3	65,750.00	160,510.00	
B Staircases beams	1	m3	65,750.00	65,750.00	
<u>Reinforcement for in situ concrete;</u>					
<u>Reinforcement to BS 4449 (Provisional)</u>					
<u>Bar; high yield steel</u>					
C 10mm diameter; in links and stirrups	876	kg	650.00	562,400.00	
D 12mm diameter; straight and bent	1659	kg	650.00	1,078,300.00	
<u>Formwork; Sawn</u>					
<u>Slabs, staircases and associated features</u>					
E Soffit of staircase; sloping not exceeding 15 degrees from the horizontal	42	m2	3,140.00	131,816.00	
F Soffit of landing slabs; thickness not exceeding 200mm; horizontal	13	m2	3,140.00	40,720.00	
G Edges of landing slab; depth not exceeding 250mm	29	m	720.00	20,620.00	20,620.00 = 26,180 =
J Edges of staircase flights; maximum width 300mm	58	m	3,140.00	172,120.00	
K Edges of risers not exceeding 250mm high	127	m	720.00	116,390.00	
L Sides and soffits of beams; rectangular in	12	m2	3,140.00	37,680.00	
<u>Finisher</u>					
<u>Beds and backings</u>					
<u>Floors; screeded bed; 30m thick; level and to falls;</u>					
M Landing	13	m2	2,240.00	26,730.00	
N Treads; 300mm wide	16	m	1,125.00	17,600.00	
P Ditto; risers; 150mm high	127	m	6,105.00	140,325.00	
<u>Polished granite Tiles; 20mm thick; jointing and pointing; as specified; on screeded bed (measured separately);</u>					
Q Landing	13	m2	42,150.00	542,950.00	
R Treads; 300mm wide	16	m	12,645.00	202,320.00	
<u>TO COLLECTION</u>					
				4,102,035.00	

<u>STAIRCASES (CONT'D)</u>					
A	Ditto; risers; 150mm high	127	m	1,122.00	701,522.00
B	Exit over for 50x13mm non-slip rubber insert	43	m	3.00	11,400.00
C	Ditto skirting; 100mm high	78	m	4.80	34,848.00
<u>In situ finishings</u>					
<u>Render: cement and sand (1:6); 15mm thick; as specified; finish fair and smooth:</u>					
D	Walls	458	m ²	1,294.00	582,536.00
E	Sloping soffits of staircase	42	m ²	1,262.00	53,596.00
F	Soffits of landings	13	m ²	1,162.00	15,078.00
G	String; not exceeding 300mm wide	32	m ²	3.40	11,160.00
<u>Metalwork</u>					
<u>Primed with red oxide and finished with two coats of gloss paint</u>					
H	50mm diameter hollow mild steel handrail welded to balusters (measured separately)	36	m	22,120.00	48,312.00
J	Ditto intermediate rails welded to balusters (measured separately)	108	m	22,120.00	2,372,560.00
K	50mm diameter hollow mild steel balusters at 500mm centres; 900mm high; one end embedded in concrete 100mm deep and other end welded to	72	nr	22,120.00	1,592,640.00
<u>TO COLLECTION</u>					6,316,716.00
<u>COLLECTION</u>					47,107.125.00
Collection from page 2/6					6,1205.177.00
Collection from page 2/7					6,375.179.00
<u>TO SUMMARY</u>			N		10,442,242.00

<u>ELEMENT NR. 5 ROOF</u>					
<u>Concrete Work</u>					
<u>Precast concrete; with and including all necessary reinforcement and formwork; bedding and jointing in cement mortar (1:4)</u>					
A	Precast concrete coping size 300x75mm thick (parapet wall)	342	m	6,710.00	2,309,712.00
<u>In situ concrete</u>					
<u>Reinforced; grade 25;</u>					
B	Upstand Beam	2	m3	61,750.00	121,500.00
C	Roof beams	66	m3	63,750.00	4,319,500.00
D	Roof slab and gutter; suspended; thickness 150mm	49	m3	63,750.00	3,221,750.00
<u>Reinforcement for in situ concrete:</u>					
<u>Reinforcement to BS 4449 (Provisional)</u>					
<u>Bars; high yield steel</u>					
E	10mm diameter; in links and stirrups	5015	kg	650.00	3,250,250.00
F	12mm diameter; straight and bent	7175	kg	650.00	4,662,750.00
G	16mm diameter; straight and bent	10189	kg	650.00	6,622,250.00
H	20mm diameter; straight and bent	2258	kg	650.00	1,462,750.00
<u>Formwork; Sawn:</u>					
J	Sides and soffits of roof beams and gutter; rectangular in shape	792	m2	3,140.00	2,496,720.00
K	Ditto upstand beam	12	m2	3,140.00	37,728.00
L	Soffit of suspended slab; rectangular; thickness not exceeding 200mm; horizontal	327	m2	3,140.00	1,026,780.00
M	Edges of suspended slabs; depth not exceeding 250mm	425	m	670.00	287,260.00
<u>(ALL PROVISIONAL)</u>					
<u>Woodwork</u>					
<u>Carcassing items:</u>					
<u>Roof members; pitched; sawn creosoted hardwood (black Afara); with nailed scarf'd joints; members fixed together with galvanized nails of appropriate specifications</u>					
P	150x50mm rafters	784	m	975.00	764,400.00
Q	150x50mm struts and king post	2878	m	975.00	7,806,650.00
R	150x50mm Ceiling ties	721	m	975.00	704,175.00
S	75x50mm purlins	1261	m	770.00	907,920.00
<u>TO COLLECTION</u>					
					35,174,535.00

<u>ROOF (CONT'D)</u>					
<u>Aluminium Roof Covering</u>					
<i>Corrugated longspan aluminium roof sheeting of approved colour; lapped one corrugation at sides and 150mm at ends; fixed in accordance with manufacturer's instructions to steel/timber purlins (measured separately)</i>					
A	0.55 thick roof coverings; pitch not exceeding 50 degrees	872	m ²	5,990.00	5,096,420.00
<u>Corrugated roofing sheet</u>					
<i>Roofing accessories: plain sheet;</i>					
B	0.70 thick aluminium ridge capping; 600mm girth fixed in accordance with the manufacturer's details	122	m	3,570.00	427,439.00
C	Gutter flashing; 300mm girth fixed in accordance with the manufacturer's details	71	m	1,352.00	124,392.00
D	Eave flashing; 300mm girth fixed in accordance with the manufacturer's details	97	m	1,752.00	169,944.00
<u>"Sky Light" Translucent Roof Covering</u>					
<i>10mm thick "skylight" translucent roof sheeting of approved colour; fixed in accordance with manufacturer's instructions complete with steel circular hollow sections purlins as in architectural design.</i>					
E	10mm thick roof coverings; circular in shape	225	m ²	38,670.00	2,695,225.00
<u>Blockwork</u>					
<i>Blockwork: hollow sandcrete 450x225mm high nominal; laid stretcher bond with cement and sand (1:3) mortar.</i>					
F	225mm thick (Parapet wall)	596	m ²	6,100.00	3,635,600.00
<u>Finishes</u>					
<i>Damp proofing;</i>					
<i>Asphalt Felting;</i>					
G	Heavy duty Asphalt saturated organic roofing felt (ASTM D226 type II); laid on slab to receive screeding(measured seperately)	327	m ²	3,500.00	1,144,500.00
TO COLLECTION					
19,290,654.00					

ROOF (CONT'D)					
<i><u>Roofs:</u></i>					
<i><u>Roofing:</u></i>					
A	40mm average screeded laid to falls and cross-falls ditto	327	m ²	1,260.00	472,020.00
B	15mm thick screeded decking to receive ceramic tiles (measured separately) for upstand and parapet wall; girth not exceeding 500-1200mm	608	m ²	1,260.00	786,020.00
<i><u>Tiles, slab and block finishings:</u></i>					
<i><u>White glazed ceramic wall tiles: 250x400x6mm thick nominal size; fixing with cement and sand mortar; pointing with cement on screeded backing (measured separately)</u></i>					
C	Tiling; internally; over 300mm wide	327	m ²	3,235.00	1,052,845.00
D	Covering to upstand; girth not exceeding 500-1200mm	304	m ²	3,235.00	983,440.00
<i><u>Roof drains:</u></i>					
ROOF DRAIN PIPEWORK					
<i><u>Supply, deliver and install in trench/call/column the following waste uPVC pipes complete with joining materials and socket to BS4515 (PANAR OR SIMILAR APPROVED).</u></i>					
E	150mm diameter uPVC pipe inserted in concretemwork (measured separately)	121	m	1,350.00	163,750.00
F	Ditto: 100mm diameter	76	m	700.00	52,700.00
G	150mm diameter uPVC bend	34	nr	540.00	18,360.00
H	100mm diameter uPVC vent	16	nr	3,800.00	60,800.00
<i><u>TO COLLECTION</u></i>					
COLLECTION					
Collection from page 2/8					
Collection from page 2/9					
Collection from page 2/10					
<i><u>TO SUMMARY</u></i>					
		N		57,792,804.00	

<u>ELEMENT NR. 6 EXTERNAL AND INTERNAL WALLS</u>					
	<u>Concrete Work</u>				
	<u>In situ concrete</u>				
	<u>Reinforced: grade 25:</u>				
A	Beams; isolated as lintels	22	m ³	65,770.00	1,446,500.00
	<u>Reinforcement for in situ concrete:</u>				
	<u>Reinforcement to BS 4449 (Provisional)</u>				
	<u>Bars: round mild steel</u>				
B	10mm diameter; in links and stirrups	1347	kg	652.00	875,512.00
	<u>Bars: high yield steel</u>				
C	12mm diameter; straight and bent	2742	kg	652.00	1,782,309.00
	<u>Formwork: Sawn:</u>				
D	Sides and soffits of lintels	272	m ²	3,140.00	854,090.00
	<u>Blockwork</u>				
	<u>Blockwork: hollow sandcrete</u>				
	<u>450x225mm high nominal; laid stretcher bond with cement and sand (1:3) mortar:</u>				
E	230mm thick	3571	m ²	6,100.00	21,725,100.00
F	150mm thick	456	m ²	5,250.00	2,374,025.00
<u>TO SUMMARY</u>				N	29,185,530.00

ELEMENT NR. 7 DOORS					
	<u>Metalwork</u>				
	<u>Aluminium doors; "Grey" powder coated anodised finish; complete with ironmongery, corner joints, neoprene gasket system, and all necessary fittings and accessories; factory preglazed with 7mm thick plain glazing; with and including fitting to blockwork and/or concretemark</u>				
	<u>Aluminium Sliding doors</u>				
A	Overall size 2100x1500mm high (D6)	1	nr	192,600.00	192,600.00
B	Overall size 2100x2100mm high (D7)	9	nr	205,620.00	1,850,420.00
C	Overall size 2400x1360mm high (D8) <u>Automatic Aluminium doors; "seamless"; complete with rail, pulley, driving belt, transformer, electro-magnetic lock system, controller and all necessary fittings and accessories; factory preglazed with 6mm thick plain glazing; with and including fitting to blockwork and/or concretemark</u>	2	nr	200,160.00	400,320.00
D	Overall size 3600x2400mm high (D9) <u>Security doors and doorframes units; complete with ironmongery; anti-corrosive finish; fixing in accordance with the manufacturer's instructions</u>	1	nr	360,000.00	360,000.00
	<u>Double swing doors</u>				
E	Size 1575x2100mm high D10 <u>shaft doors</u>	6	nr	192,500.00	1,155,000.00
F	Size 1000x2100mm high D4 <u>Disabled Toilet doors and doorframes units; complete with ironmongery; anti-corrosive finish; fixing in accordance with the manufacturer's instructions</u>	5	nr	175,500.00	875,500.00
G	Size 1000x2100mm high D3 <u>44mm thick; hardwood. Flush door or other approved solid hardwood door, complete with steel doorframes steel units; anti corrosive finish boxing out for ironmongery; spray polished finish</u>	4	nr	249,870.00	999,480.00
H	Size 750x2100mm high (D1)	40	nr	90,100.00	3,604,000.00
J	Size 900x2100mm high (D2) & (D11)	56	nr	90,100.00	5,045,600.00
K	Size 1000x2100mm high (D5)	9	nr	165,400.00	1,489,600.00
TO SUMMARY				N	15,960,470.00

ELEMENT NR. 8 WINDOWS					
<i>Aluminium windows; powder coated finish; comprising extruded aluminium sections incorporating thermal barriers; glazing with fully drained neoprene gasket systems fixing to structure with all necessary brackets and bolts; supplied with ironmongery, and all necessary fittings and accessories; factory pre- glazed with 5mm plain glazing; complete with netting</i>					
<i>Casement windows</i>					
A Overall size 900x600mm (W1)	40	nr	26,120.00	934,300.00	
B Overall side 1200x1500mm high (W3)	65	nr	24,150.00	5,465,250.00	
C Overall size 900x1800mm (W4)	4	nr	29,560.00	312,240.00	
D Overall side 1200x1800mm high (W5)	1	nr	29,370.00	96,270.00	
E Overall side 2100x450mm high (W6)	10	nr	43,260.00	432,100.00	
F Overall size 2100x1800mm (W7)	4	nr	192,940.00	715,760.00	
G Overall side 3300x1200mm high (W8)	6	nr	192,650.00	1,155,900.00	
H Overall side 3900x1200mm high (W9)	1	nr	212,360.00	212,300.00	
<i>Window Burglary Proofing</i>					
<i>Well designed burglar proofing to opening; designed with 6mm thick flat bar in hexagonal shape and framed with 25x3mm thick steel flat bar steel; cast into blockwork; finished with calcium plumbate primer and gloss paint</i>					
J Overall size 900x600mm (W1)	40	nr	6,700.00	288,000.00	
K Overall side 1200x1500mm high (W3)	65	nr	22,120.00	1,452,800.00	
L Overall size 900x1800mm (W4)	4	nr	19,800.00	79,200.00	
M Overall side 1200x1800mm high (W5)	1	nr	29,540.00	29,540.00	
N Overall side 2100x450mm high (W6)	10	nr	10,200.00	102,000.00	
P Overall size 2100x1800mm (W7)	4	nr	49,290.00	197,160.00	
Q Overall side 3300x1200mm high (W8)	6	nr	49,250.00	295,500.00	
R Overall side 3900x1200mm high (W9)	1	nr	60,100.00	60,100.00	
TO SUMMARY					N
					11,765,120.00

<u>ELEMENT NR. 9 WALL FINISHES</u>					
<u>In situ finishings</u>					
<u>Render; cement and sand (1:6); 15mm thick; as specified; finished fair and smooth;</u>					
A	Internally	4522	m2	1,760.00	5,694,720.00 ✓
B	Not exceeding 300mm wide	87	m2	1,310.00	113,970.00 ✓
C	Externally	1609	m2	1,260.00	2,027,340.00 ✓
D	Not exceeding 300mm wide	64	m2	1,311.00	83,344.00 ✓
E	Isolated beam	232	m2	1,260.00	282,320.00 ✓
F	Isolated column	278	m2	1,260.00	350,278.00 ✓
G	Parapet	236	m2	1,310.00	309,168.00 ✓
<u>Walls; screeded backing; 12mm thick; over 300mm wide</u>					
H	To receive ceramic tiles	1030	m2	1,050.00	1,074,540.00 ✓
J	Not exceeding 300mm wide	42	m2	70.00	29,820.00 ✓
<u>Tile, slab and block finishings</u>					
<u>White glazed ceramic wall tiles; 250x400x6mm thick nominal size; fixing with cement and sand mortar; pointing with cement on screeded backing (measured separately)</u>					
K	Wall	1,030	m2	3,225.00	3,332,050.00 ✓
L	Not exceeding 300mm wide	42	m2	1,070.50	44,961.00 ✓
TO SUMMARY				N	13,362,761.00

<u>ELEMENT NR. 10 FLOOR FINISHES</u>						
	<i>Floors; screeded bed; 41mm thick; level and to falls:</i>					
A	To receive ceramic tiles; internally	1576	m2	2,240.00	3,482,960.00	/
B	Ditto skirting ; 150mm high	1235	m	745.00	920,025.00	/
C	Ditto steps treads; 300mm wide	45	m2	2,210.00	99,450.00	/
D	Ditto; risers; 150mm high <i>Vitrified Ceramic floor tiles: colour patterned; unglazed; fixing with approved adhesive; pointing with matching grout; floors 400x400x9mm nominal size;</i>	53	m	367.00	19,907.00	/
E	Tiling; internally; over 300mm wide	1576	m2	3,645.00	5,744,532.00	/
F	Ditto skirting ; 150mm high	1235	m	1,912.50	2,250,772.50	/
G	Ditto steps treads; 300mm wide	45	m2	3,695.00	164,025.00	/
H	Ditto; risers; 150mm high	53	m	1,822.50	96,597.50	/
TO SUMMARY			N		12,774,310.00	



	ELEMENT NR. 11 CEILING				
	FINISHES				
	<i>In situ finishings</i>				
	<i>Render: cement and sand (1:6); 15mm thick; as specified; finish fair and smooth;</i>				
A	Suspended slabs <i>Ceiling:</i>	1017	m ²	1,840.00	1,874,270.00
B	Ceilings <i>Carcassing items:</i> <i>Noggins; sawn creosoted hardwood; with nailed scarf'd joints; members fixed together with galvanized nails of appropriate specifications;</i>	775	m ²	7,200.00	5,580,000.00
C	50x50mm noggins	3241	m	400.00	1,296,400.00
D	50x8mm ceiling strips	3241	m	200.00	620,600.00
TO SUMMARY				N	9,428,270.00



<u>ELEMENT NR. 12 PAINTING AND DECORATING</u>					
<u><i>Painting</i></u>					
<u><i>Painting render; prime and apply two full finishing coats of emulsion paint;</i></u>					
A Walls; internally	4609	m2	740.00	3,430,660.00	
<u><i>Painting render; prime and apply one full finishing coat of textured paint;</i></u>					
<u><i>General surfaces; over 300mm girth;</i></u>					
B Walls; externally	1673	m2	725.00	1,450,625.00	
C Isolated beams	232	m2	875.00	205,320.00	
D Isolated columns	232	m2	875.00	205,320.00	
E Parapet	236	m2	725.00	209,262.00	
<u><i>Painting suspended slab; prime and apply two full finishing coats of emulsion paint;</i></u>					
F Soffit of suspended Slab	1017	m2	740.00	752,570.00	
<u><i>Painting render; prime and apply two full finishing coats of emulsion paint;</i></u>					
<u><i>General surfaces; over 300mm girth;</i></u>					
G Staircase Walls	458	m2	740.00	337,520.00	
H Sloping soffits of staircase	42	m2	740.00	31,080.00	
J String; not exceeding 325mm girth	32	m2	740.00	23,440.00	
TO SUMMARY				N	6,657,025.00

A

<u>ELEMENT NR. 13 PLUMBING AND MECHANICAL INSTALLATIONS</u>					
	<i>Supply, deliver to site and install the followings complete with all required installation and operational accessories.</i>				
	<u>Sanitary Wares and Appliances: Make shall be Golding Diamond or Teryford (England)</u>				
A	Wash-down white glazed Water Closet unit Close couple type. Original Flush Master, 9 Liters Cistern.	42	nr	37,500.00	1,575,000.00
B	Pedestal type white glazed Wash Hand Basin with single tap hole. Basin tap shall be chrome plated original heavy gauge.	42	nr	22,300.00	936,600.00
C	Heavy double drainer, double bowl stainless steel kitchen sink complete with heavy gauge cold water taps, 38mm dia adjustable bottle trap and accessories.	1	nr	32,300.00	32,300.00
D	Anal Spray with flexible connector with accessories.	42	nr	4,500.00	187,500.00
E	Chrome plated Toilet Roll Holder in stainless steel with thief proof holder and accessories.	42	nr	6,900.00	287,900.00
F	Plate plain glass type toilet mirror for placement and fixing on top of the lavatory basins.	42	nr	11,540.00	474,680.00
G	High Quality Soap Dish	46	nr	3,300.00	151,740.00
H	Stainless steel Towel Rail and accessories	46	nr	4,500.00	207,000.00
J	Installation accessories		item		45,000.00
TO COLLECTION					3,917,170.00

PLUMBING INSTALLATIONS (CONT'D)					
The Internal cold water supply pipe and high quality PPR Pipes and Fittings. Sanica, Rifeng or Technogreen (10 BAR)					
<u>Note: Rates shall includes for Chiseling, excavation, backfilling and carting away</u>					
PPR Pressure Pipes					
A 25mm diameter "	"	124	m	600.00	111,600.00
B 20mm diameter "	"	120	m	340.00	100,800.00
C 15mm diameter "	"	147	m	225.00	106,225.00
PPR 90° Elbow					
D 25mm ditto		35	nr	610.00	21,350.00
E 20mm ditto		74	nr	575.00	38,110.00
F 15mm ditto		184	nr	500.00	92,000.00
PPR 45° Elbow					
G 25mm ditto		5	nr	425.00	2,125.00
H 20mm ditto		4	nr	310.00	1,240.00
J 15mm ditto		5	nr	295.00	1,475.00
PPR Equal Tees					
K 25mm ditto		43	nr	325.00	13,975.00
L 20mm ditto		46	nr	300.00	13,800.00
M 15mm ditto		92	nr	250.00	23,000.00
PPR Reducing Tees					
N 25X20X25mm Tees		34	nr	625.00	21,250.00
P 20X15X20mm Tees		95	nr	450.00	42,750.00
PPR Reducers					
Q 25mm x 20mm Reducers		31	nr	370.00	11,760.00
R 20mm x 15mm Reducers		46	nr	230.00	9,660.00
PPR Union Connectors					
S 25mm ditto		42	nr	2,260.00	30,440.00
T 20mm ditto		31	nr	1,300.00	19,900.00
U 15mm ditto		154	nr	515.00	7,865.00
TO COLLECTION					
					21,024,525.37

PLUMBING INSTALLATIONS (CONT'D)					
PPR Nipples					
A 25mm ditto	43	nr	2,200.00	94,600.00	
B 20mm ditto	76	nr	1,900.00	146,400.00	
C 15mm ditto	92	nr	1,725.00	158,700.00	
PPR Sockets					
D 25mm ditto	50	nr	1,450.00	72,500.00	
E 20mm ditto	80	nr	1,260.00	100,800.00	
F 15mm ditto	184	nr	1,150.00	211,600.00	
Brass Gate Valves					
G 25mm ditto	15	nr	2,500.00	127,500.00	
H 20mm ditto	8	nr	2,250.00	57,600.00	
J 15mm dia Angle Valve	154	nr	2,100.00	907,600.00	
Non Return Valves					
K 25mm dia Non Return Valves	11	nr	6,500.00	71,500.00	
Flexible Connectors					
L 15mm Flexible Connectors	154	nr	1,340.00	205,360.00	
M 20mm ppr Stand Tap	9	nr	1,850.00	16,650.00	
N Allow for use of high quality installation accessories such as brackets screws, adhesive, Tangit Gum etc. for PPR pressure pipes and fittings.		item		35,600.00	
P Allow for pressure testing of the entire pipe network		item		75,400.00	
<u>Internal Soil/Waste, Drainage and Rain Water Pipes and Fittings (Niger Pipe 4bar)</u>					
UPVC Drainage Pipes					
Q 200mm dia	131	m	4,918.00	641,900.00	
R 100mm dia	150	m	1,260.00	189,000.00	
TO COLLECTION					
				3,154,625.00	

PLUMBING INSTALLATIONS (CONT'D)					
A	50mm ditto	250	m	850.00	212,500.00
	UPVC Bend				
B	100mm x 90°	88	nr	762.00	66,000.00
C	50mm ditto	176	nr	525.00	91,400.00
D	100mm x 45°	4	nr	625.00	2,500.00
E	50mm ditto	5	nr	552.00	2,760.00
	UPVC Equal Tees				
F	100mm diameter Tees	68	nr	500.00	34,000.00
G	50mm diameter Tees	94	nr	345.00	32,470.00
H	100mm diameter 'Y' Tees	17	nr	722.00	12,670.00
J	50mm diameter ditto	17	nr	552.00	9,350.00
	UPVC Reducing Tees				
K	100X50X100mm Tees	14	nr	410.00	5,740.00
	Accessories				
L	100mm Vent Cowls	22	nr	160.00	3,520.00
M	110mm diameter Access Plugs	17	nr	210.00	3,570.00
N	50mm ditto	16	nr	126.00	2,016.00
	Sanitary Wares Installation Accessories				
P	100mm diameter Pan Connector	42	nr	1,710.00	71,780.00
Q	32mm diameter bottle traps	44	nr	710.00	31,240.00
R	50mm dia upvc Floor Drains	44	nr	2,102.00	92,488.00
S	200mm dia upvc Floor Drains	5	nr	6,200.00	31,000.00
T	Allow for Pressure Test		item		2,000.00
U	Allow for use of high quality installation accessories		item		35,100.00
	<u>Internal Fire Fighting System: Fire Hose Reels</u>				
	Supply and deliver to site the following items complete with all necessary installation and operational accessories.				
	TO COLLECTION				761,170.00

PLUMBING INSTALLATIONS (CONT'D)					
<i>The Fire Hose Reel and Sprinkler Pipes and Fittings shall be</i>					
<i>Fire Resistance type PPR Pipes & Fittings (10bar)</i>					
<i>External Water Supply Pipes and Fittings and Fittings. Sanica, Rifeng or Technogreen (10 BAR)</i>					
<i>Note: Rates shall includes for excavation, backfilling and carting away</i>					
Supply, deliver to site and install the following items complete with all the necessary operational accessories:					
PPR Pressure Pipes					
A 50mm dia. "	200	m	1,360.00	272,000.00	
B 25mm dia. "	90	m	1,120.00	100,800.00	
PPR 90° Elbow					
C 50mm dia. "	30	nr	1,620.00	48,600.00	
D 25mm dia. "	117	nr	300.00	35,100.00	
PPR 45° Elbow					
E 50mm dia. "	3	nr	1,650.00	49,500.00	
F 25mm dia. "	2	nr	310.00	620.00	
PPR Equal Tees					
G 50mm dia. "	33	nr	2,000.00	66,000.00	
H 25mm dia. "	25	nr	470.00	11,750.00	
PPR Reducing Tees					
J 50X25X50mm "	18	nr	2,050.00	36,900.00	
K 25X20X25mm "	17	nr	660.00	11,050.00	
PPR Union Connectors					
L 50mm dia. "	18	nr	15,400.00	277,200.00	
M 25mm dia. "	26	nr	4,500.00	117,000.00	
TO COLLECTION					
				980,450.00	

PLUMBING INSTALLATIONS (CONT'D)					
<u>PPR Nipples</u>					
A 50mm dia. "	" "	21	nr	2,462.00	17,442.00
B 25mm dia. "	" "	17	nr	1,250.00	3,450.00
<u>PPR Sockets</u>					
C 50mm dia. "	" "	25	nr	1,200.00	30,000.00
D 25mm dia. "	" "	19	nr	1,250.00	24,250.00
<u>Brass Gate Valves</u>					
E 50mm dia. "	" "	7	nr	15,400.00	107,800.00
F 25mm dia. "	" "	5	nr	2,500.00	12,500.00
<u>Non Return Valves</u>					
G 50mm dia Non Return Valves		4	nr	14,200.00	56,800.00
H 450x450mm Isolating Block Wall Chambers		3	nr	12,120.00	36,360.00
J Installation Accessories e.g. nylon made pipe clip-single and double, protective bush etc.			Item:		20,000.00
K Compact recessed cabinet swinging type Fire Hose Reel complete with 30m hose, nozzles all necessary installation and operational accessories (SRI or NAFFCO or equal approved)		4	nr	198,450.00	793,800.00
L Allow for Fire Hose Reels system accessories air relief valves, gate valves, pressure gauge etc and all installation and operational accessories		4	nr.	22,140.00	88,560.00
<u>Air-conditioning and Ventilation</u>					
M Allow for 25mm dia UPVC drain pipes including elbows, sockets and fittings	280 m			1,260.00	352,800.00
N Allow for 75mm dia UPVC pipes for refrigerant pipes including elbows, sockets and fittings	190 m			1000.00	190,000.00
<u>Portable Fire Extinguishers</u>					
P 9kg ABC "Angus" or other equal and approved dry powder portable fire extinguisher complete with fixing brackets.	24	nr.		25,652.00	615,600.00
Q 5kg ABC "Angus" or other equal and approved CO ₂ portable fire extinguisher complete with fixing brackets.	24	nr.		25,650.00	615,600.00
TO COLLECTION					
					3,328,990.00

PLUMBING INSTALLATIONS (CONT'D)					
<u>External Soil/Waste, Drainage and Rain Water Pipes and Fittings (Niger Pipe 4bar)</u>					
UPVC Drainage Pipes					
A 200mm dia	24	m	49,750.00	1,146,000.00	
B 100mm dia UPVC Pipes	60	m	2,230.00	133,800.00	
UPVC Bend					
C 150mm x 90°	2	nr	450.00	900.00	
Accessories					
D 150mm diameter Access Plugs	2	nr	450.00	900.00	
<u>Water Storage Tanks, Pumps & Accessories</u>					
<u>Elevated water Tank</u>					
E Water storage tank "Gee pee" or other equal approved; capacity 5000 litres 2NR; with 75mm ball valve and automatic float switch; complete with all accessories and ancillaries; placed on an elevated steel 6nr I-section 254x254x167mm support of 10,000mm high complete with 60x60x5mm thick angle steel bracings and fittings including base , gusset plates, bolts and all other accessories primed with red oxide and painted with gloss paint on 4nr reinforced concrete pad foundation of size1500x1500x450mm thick, with 9nr Y16 at 200mm centre both ways connected with 4nr reinforced ground beam (size 3000x230x450mm) complete with all excavation, formworks e.t.c	1	nr	2,652,656.36	2,652,656.36	
<u>Ground Water Storage</u>					
F Storage Tank; Geepee Plastic size; capacity 5,000 litres 4nr (20,000 litres); with 75mm ball valve and automatic float switch; complete with all accessories and ancillaries; placed on 4NR reinforced concrete plinth; size: 5000x5000x750mm thick reinforced with Y16 main reinforcement at 200 centre and Y10 diameter stirrup at 150mm centre. complete with all necessary excavations, formworks e.t.c	1	nr	1,250,600.00	1,250,600.00	
TO COLLECTION					4,153,256.36

PLUMBING INSTALLATIONS (CONT'D)					
<u>Water Transfer Pump Set</u>					
A Cold Water Transfer Pump Set. (1 Duty/ 1 Standby) Flow Rate = 2L/s ; Head = 20m Make: LOWARA, Pullen or Approved Equal	2	Nr	130,000.00	260,000.00	
B Conduct Geophysical survey, sink and develop Borehole, complete with Grunfoss submersible pump or other equal approved including testing of water in approved government agency ; drilling would depend on the result of geo-physical investigations.	2	Nr	1,050,000.00	2,100,000.00	
<u>Ventilation</u>					
C GX6 Reversible type Extractor Fans complete with timer and all necessary operational accessories (Xpelair or approved equal)	40	nr	22,340.00	892,000.00	
<u>Builder's work in connection with plumbing and mechanical services</u>					
D Allow a provisional sum for builder's work in connection with plumbing and mechanical engineering installations	item			50,000.00	
E Allow for testing the plumbing installations to the satisfaction of the Services Engineers/ Architect and local authority including all labour and apparatus for same	item			50,000.00	
TO COLLECTION					
COLLECTION				3,252,000.00	
Collection from page 2/18				3,911,180.00	
Collection from page 2/19				2,024,523.33	
Collection from page 2/20				3,154,655.17	
Collection from page 2/21				701,150.00	
Collection from page 2/22				780,450.00	
Collection from page 2/23				3,326,910.00	
Collection from page 2/24				4,150,250.36	
Collection from page 2/25				3,252,000.00	
TO SUMMARY		N		24,664,814.09	

<u>ELEMENT NR. 14 ELECTRICAL INSTALLATIONS</u>					
<i>Supply, deliver to site and install the followings complete with all required installation and operational accessories</i>					
<i>All Cable Shall be Nigerian Cable; NOCACG, KWALI or Nigerchin</i>					
<u>Electrical Lighting Fittings</u>					
A 1 x 18W, LED Recessed Downlighter Light Fitting Bulkhead Light Fittings. The rates shall include the LED Bulbs	9	Nr	13,200.00	182,200.00	
B 1 X 13W LED Downlighter Light Fitting Wall-mount Vandal Resistant Bulkhead Light Fittings. The rates shall include the LED Bulbs	45	nr.	7,200.00	324,000.00	
C 18W LED Ceiling Surface-mount/Recessed Light Fittings. The rates shall include the LED Bulbs	28	nr.	11,700.00	330,600.00	
D 11W LED Downlighter Light/Recessed With Dust Proof Light Fittings. The rates shall include the LED Bulbs	36	nr.	7,700.00	277,200.00	
E 1X9W LED Downlighter Light Fitting Wall-mount Vandal Resistant Bulkhead Light Fittings. The rates shall include the LED Bulbs	89	nr.	5,200.00	462,800.00	
F 1X12W LED recessed lamp	98	nr.	7,500.00	735,000.00	
G 5 speed ceiling fan with regulator 'Newclime' or other equal approved	45	nr.	30,500.00	1,372,500.00	
H 10A 1 gang 1 way switch (Schneider)	95	nr.	1,200.00	114,000.00	
J 10A 1 gang 2 way switch (Schneider)	24	nr.	1,500.00	37,440.00	
K 10A 2 gang 1 way switch (Schneider)	5	nr.	1,900.00	9,500.00	
L 10A 2 gang 2 way switch (Schneider)	2	nr.	2,500.00	5,000.00	
M Extractor Fan Points	17	nr.	1,650.00	28,050.00	
<u>Conduiting and wiring for Lighting Points</u>					
N Allow for Conduiting and Wiring in Concealed 20mm PVC conduit pipe to all lighting points using 3X1.5mm ² PVC single core copper cable complete with all required installation and operational accessories.	484	nr	5,720.00	27,977,520.00	
<u>TO COLLECTION</u>					
6,594,610.00					

<u>ELECTRICAL INSTALLATION (CONT'D)</u>					
<u>Electrical Power Sockets Outlets</u>					
A 13A Twin Socket outlets (Schneider)	141	nr.	3,200.00	451,200.00	
B 15A 3 pin 1 gang double pole switched above kitchen cooking platform	3	nrs.	3,900.00	11,700.00	
C 20A Air-conditioners Switch (Schneider)	44	nrs.	2,100.00	176,400.00	
D 45A Double pole cooker unit (Schneider)	1	nrs.	4,210.00	4,210.00	
<u>Conduiting & Wiring to all Power Sockets Outlets</u>					
E Allow for Conduiting and Wiring in Concealed 20mm PVC conduit pipe to all 13A Socket outlets and 13A for extractor fans using 3X2.5mm ² PVC single core copper cable wired in ring main circuit. Complete with all required installation and operational accessories	144	nr	6,200.00	892,800.00	
F Allow for Conduiting and Wiring in Concealed 25mm PVC conduit pipe to all 20A Socket outlets and Switches using 3X4.0mm ² PVC single core copper cable wired in radial circuit. Complete with all required installation and operational accessories	45	nr	5,000.00	225,000.00	
<u>Telephone and Communication System</u>					
G RJ 11 Telephone Outlets (Schneider)	42	nrs	1,200.00	50,400.00	
H Data Sockets Outlets (Schneider)	45	nrs	1,200.00	54,000.00	
J Television Outlets (Schneider)	4	nrs	1,200.00	4,800.00	
<u>Conduiting & Wiring to all Data Sockets</u>					
Allow for conduiting and wiring in 20mm concealed conduit using 4 pair Category6 unshielded horizontal cable (ADC Krone) for Data accepted within the local standard; in 20mm diameter pipes, sleeves, trays and trunking, rates to include all fittings, accessories and ancillaries materials deemed necessary for complete installation: Rate to include circular boxes, steel knock-out boxes, screws bushings lock-nuts etc					
K	91	pts	5,900.00	536,900.00	
L Earthing of the Telecommunication System		Item		75,000.00	
<u>TO COLLECTION</u>					
				2,427,410.00	

ELECTRICAL INSTALLATION (CONT'D)				
Fire Detection and Alarm System				
A Smoke Detectors (Zircon or Zeta)	46	nr	2,560.00	345,872.00
B Fire Alarm Electronic Sounder (Zircon or Zeta)	7	nr	12,360.00	86,160.00
C Fire Alarm Siren with Strobe Light (Zircon or	1	nr	12,600.00	12,600.00
D Manual Break Glass (Zircon or Zeta)	6	nr	9,360.00	56,160.00
E Xenon Flasher (Zircon or Zeta)	4	nr	11,100.00	44,400.00
F Fire detection and alarm panel, 2-Zone Conventional type complete with backup batteries, installation and operational accessories (Zircon or Zeta)	1	set	159,500.00	159,500.00
Conduiting & Wiring to all Fire Detection System				
G Allow for Conduiting and Wiring in concealed 20mm PVC conduit pipe to all Fire Detection and Alarm Equipment such as Bells, Break Glass, Detector points, Panels etc. using 0.7 Ohms Fire Resistance Cable complete with all required installation and operational accessories	65	pts	4,500.00	294,500.00
Power Distribution Boards etc.				
H 320A 10ways Main MV panel complete with 1no 125A TP&N MCCB incomer, complete with 1no 250A TP&N MCCB, 3no 32A TP&N MCCB, outgoing and 1nos 63A and 32A TP&N MCCB Spare ways, complete with all necessary installations accessories (ABB)	1	nr.	690,000.00	690,000.00
J 63A, 8-Ways MCCB TP&N Distribution Board Complete with 63A MCCB as integral incoming breaker and MCB outgoings: (ABB)	11	nr.	25,000.00	325,000.00
K 45A TP&N ELCBs complete with metal enclosure (ABB)	6	nr.	42,000.00	252,000.00
L 32A TP&N ELCBs complete with metal enclosure (ABB)	5	nr.	39,000.00	195,000.00
Earthing and Lightning Prevention				
<i>Supply, install, test and commission</i>				
<i>Conventional Lightning Prevention System to BS6651. Earth terminal Networks shall not exceed 10 Ohms</i>				
M Lightning Arrestor Spike complete with test clamp and all required installation and operational accessories.	1	nr	75,000.00	75,000.00
TO COLLECTION				
				3,032,060.00

<u>ELECTRICAL INSTALLATION (CONT'D)</u>						
A Allow for Earthing of Lightening Prevention System complete with 25mmX3mm bare copper tape and all required installation and operational accessories	Item				25,000.00	/
B Allow for complete Earthing of the entire electrical installation complete with all necessary and required installation accessories	Item				65,000.00	/
C Power Distribution Cable (All Cable shall be Kwali, NOCACO or Nigerchin)						
C 3cX70mm ² pvc/swa/pvc Copper Cable	150	m	11,200.00	1,680,500.00	/	
D 4cX150mm ² pvc/swa/pvc Copper Cable	135	m	6,700.00	921,500.00	/	
E 4cX50mm ² pvc/swa/pvc Copper Cable	167	m	5,500.00	918,500.00	/	
F 4cX35mm ² pvc Single Core Copper Cable	55	m	3,800.00	209,000.00	/	
G 3cX10mm ² pvc Single Core Copper Cable	68	m	2,800.00	192,000.00	/	
H 3cX6mm ² pvc Single Core Copper Cable	38	m	1,950.00	74,180.00	/	
J 5cX10mm ² pvc Single Core Copper Cable	100	m	2,000.00	200,000.00	/	
K 5cX6mm ² pvc Single Core Copper Cable	124	m	1,700.00	211,200.00	/	
<u>PUBLIC UTILITY</u>						
L Allow for Connection to public utility facilities including concrete poles, cables insulator, service charges and other necessary accessories	Item				955,000.00	/
M Builder's work in connection with electrical installation	Item				75,000.00	/
<u>TO COLLECTION</u>					5,533,700.00	/
<u>COLLECTION</u>						
Collection from page 2/26					6,544,610.00	/
Collection from page 2/27					2,442,410.00	/
Collection from page 2/28					3,032,060.00	/
Collection from page 2/29					5,533,700.00	/
<u>TO SUMMARY</u>				N	17,607,270.00	

<u>ELEMENT NR.15 STORM WATER</u>				
<u>DRAINAGE</u>				
(Provisional)				
<u>Covered Gutter</u>				
A Storm drain size 910x610mm; 150mm plain hollow sandcrete blockwork side filled solid with plain in-situ concrete grade 20; 150mm thick reinforced concrete base; rendering inside in water proof cement mortar (1:3); including all necessary excavations; fillings, compacting and disposal of surplus excavated materials; covered with metal grille; 16mm diameter reinforcement bar at 100mm centres welded on both ends to 70x70x6mm thick angle	134	m	24,500.00	7,015,000.00 ✓
<u>TO SUMMARY</u>		N		7,015,000.00 ✓

<u>ELEMENT NR. 16 DRAINAGE BELOW GROUND</u>					
<u>Manholes</u>					
A	Manhole; size 600x600x600mm deep (average) internally constructed of 150mm plain in-situ concrete grade 15 base, 150mm plain hollow sandcrete blockwork side fitted solid with plain concrete and capped with 75mm thick precast concrete grade 20 cover slab reinforced with single layer B.R.C. Nr. 65 mesh and with 255mm (average) concrete grade 15 benching and forming 150mm diameter half round diameter in and same rendering insides in waterproof cement mortar (1:3) with including all necessary excavations, earthworks and formwork	43	nr	13,500.00	520,500.00
<u>Septic tank</u>					
B	Septic tank; size 3600x2400x2000mm deep internally of 225mm blockwork sides and 150mm concrete (1:3:6) base capped with 150mm concrete (1:2:4) slab reinforced with and including single layer BRC Nr. 65 mesh and fitted with 3Nr coated cast iron manhole cover and frame set in grease and sand. The attached manhole with 225mm (average) concrete (1:3:6) benching with 100mm half round channel and fitted with 50mm deep cover slab reinforced with single layer BRC Nr. 65 mesh and housed to sides of septic tank, including 2Nr 100mm diameter asbestos cement tee piece built into sides all to include all necessary excavations, earthworks and disposal. The septic tank having 75mm (average) screeded (1:4) bed finished to falls and rendered internally all round	3	nr	395,600.00	1,186,800.00
<u>TO COLLECTION</u>					1,767,300.00

<u>DRAINAGE BELOW GROUND (CONT'D)</u>					
	<u>Soakaway pit</u>				
A	Soakaway pit; size 2400x2400x2000mm deep internally of 150mm solid blockwork sides built honey-comb on 450x50mm concrete (1:3:6) foundations and covered slab in four sections each reinforced with and including BRC Nr 65 mesh supported on 225x225mm reinforced concrete (1:2:4) beam reinforced with 4Nr 12mm diameter mild steel bars, and 600mm wide loose rock or rubble (minimum) size 150 gauge and covered with galvanized iron sheets including length of 150mm diameter asbestos cement pipe with saw cuts at 150mm centres, with and including all necessary excavations, earthworks and formwork	2	nr	292,500.00	585,000.00
B	Soakaway pit; size 1800x1800x2000mm deep internally of 150mm solid blockwork sides built honey-comb on 450x50mm concrete (1:3:6) foundations and covered slab in four sections each reinforced with and including BRC Nr 65 mesh supported on 225x225mm reinforced concrete (1:2:4) beam reinforced with 4Nr 12mm diameter mild steel bars, and 600mm wide loose rock or rubble (minimum) size 150 gauge and covered with galvanized iron sheets including length of 150mm diameter asbestos cement pipe with saw cuts at 150mm centres, with and including all necessary excavations, earthworks and formwork	1	nr	28,400.00	273,400.00
	<u>TO COLLECTION</u>				860,400.00
	<u>COLLECTION</u>				
	Collection from page 2/31				1,762,300.00
	Collection from page 2/32				860,400.00
	<u>TO SUMMARY</u>		N	2,622,700.00	

<u>Handrails</u>			
<u><i>Corridor balcony hand railings (courtyards)</i></u>			
A Corridor balustrades; 1100mm high; 50mm diameter; baluster at 150mm centres welded to 50mm diameter steel handrail; one end fixed to metal plate embedded in concrete 100mm deep and other end fixed to 35x3mm thick flat metal rail; primed with red oxide and finished with two coats of gloss paint	53	m	
<u><i>Interlocking paving Stones (Courtyards)</i></u>			
B 45mm thick interlocking paving stones, concrete laid on and including 50mm thick stone dust filling and damp proof membrane.	175	m ²	
<u><i>Covered Gutter (courtyard)</i></u>			
C Courtyard drain/service duct size 600x700mm high; 150mm plain hollow sandcrete blockwork side filled solid with plain in-situ concrete grade 20; 150mm thick reinforced concrete base; rendering inside in water proof cement mortar (1:3); including all necessary excavations, fillings, compacting and disposal of surplus excavated materials; covered with metal grille; 16mm diameter; reinforcement bar at 100mm centres welded on both ends to 70x70x6mm thick angle	23	m	
D Steel louvers; 970mm wide; both end fixed to 75x50x2mm thick angle with braces; in accordance with manufacturer's instruction	90	m	
<u><i>Storm Pipes</i></u>			
<u><i>Supply, deliver and install in trench and floor slabs the following soil and waste uPVC pipes complete with jointing materials and socket to BS4513 (PANAR OR SIMILAR APPROVED).</i></u>			
E 200mm diameter (provisional)	97	m	
<u><i>Grate Inlet</i></u>			
F Construct grate inlets to collect roof drain water to structural engineers instruction and specifications. Size 600x600x450mm deep <i>TO COLLECTION</i>	6	m	

FITTINGS CONT'D					
<u>Blockwork</u>					
A	Dwarf wall washing area (150mm thick)	62	m ²	6,995.00	433,070.00
<u>In situ finishings</u>					
B	To receive ceramic tiles (dwarf wall)	145	m ²	1,050.00	153,250.00
<u>Tile, slab and block finishings</u>					
C	Dwarf wall	145	m ²	3,235.00	469,075.00
<u>Concrete Work</u>					
D	Steps and ramp	8	m ³	52,400.00	419,200.00
E	Edges of steps; not exceeding 250mm high	13	m	920.00	11,960.00
F	Sides of steps; exceeding 1000mm high <i>Reinforced; grade 25;</i>	3	m ²	3,140.00	9,420.00
G	Slabs; suspended; thickness not exceeding 100mm (wardrobe) <i>Reinforcement for in situ concrete; Reinforcement to BS 4449 (Provisional) Bars; high yield steel</i>	11	m ³	65,260.00	723,250.00
H	10-12mm diameter; straight and bent <i>Formwork; Sawn;</i>	1225	kg	650.00	796,250.00
J	Edges of suspended slab; curved to radius 1750m; depth not exceeding 250mm	182	m	920.00	167,440.00
K	Soffit of suspended slabs; thickness not exceeding 200mm; horizontal	142	m ²	2,140.00	445,820.00
L	Edges of steps; not exceeding 250mm high	42	m	920.00	38,640.00
M	Sides of steps; exceeding 1000mm high	6	m ²	3,140.00	18,840.00
TO COLLECTION					
3,652,775.00					

FITTINGS CONT'D					
<i>In situ finishings</i>					
A	Suspended slabs; over 300mm wide; internally	142	m ²	1,240.00	761,280.00
<i>Blockwork</i>					
	<i>Blockwork; hollow sandcrete 450x225mm high nominal; laid stretcher bond with cement and sand (1:3) mortar.</i>				
B	Planter Trough wall (150mm thick)	19	m ²	5,250.00	99,750.00
	<i>Precast concrete; with and including all necessary reinforcement and formwork; bedding and jointing in cement mortar (1:4).</i>				
C	Precast concrete coping size 300x150mm thick (planter trough)	25	m	6,900.00	172,500.00
<i>In situ finishings</i>					
	<i>Render; cement and sand (1:6); 15mm thick; as specified; finished fair and smooth;</i>				
	<i>Walls; over 300mm wide</i>				
D	Planter externally	19	m ²	1,200.00	23,540.00
	<i>Brick facing tiles; size 150x60x15mm thick; jointing and pointing; as specified; on screeded backing (measured separately).</i>				
E	Trough Wall	19	m ²	9,500.00	85,500.00
	<i>Soiling and Cultivating;</i>				
F	Filling; oversite thickness not exceeding 0.25m; manured soil obtained off site; spread and level to 75mm thick; and prepare for planting (measured separately)	19	m ²	430.00	8,170.00
	<i>Planting of flowers</i>				
G	Approved flower; well watered and maintained until properly established and evenly covered with health growth and leave in healthy condition on completion	6	nr	2,500.00	15,000.00
TO COLLECTION					
	COLLECTION				666,140.00
	Collection from page 2/33				3,475,600.00
	Collection from page 2/34				3,632,270.00
	Collection from page 2/35				666,140.00
TO SUMMARY					
				N	8,275,015.00

<u>ELEMENT NR.18 DRIVES AND PARKINGS</u>					
<u><i>Site preparation</i></u>					
A	Clear site of bushes, weeds, grass and undergrowths, grub up all roots and dispose offsite	1582	m2	2,75.00	4,35,000.00
<u><i>Excavation</i></u>					
B	Excavate to reduce level; not exceeding 250mm maximum depth	475	m3	720.00	3,42,000.00
<u><i>Disposal of excavated material:</i></u>					
C	Remove surplus excavated material from site	475	m3	425.00	201,875 24,335.00
<u><i>Interlocking paving Stones:</i></u>					
D	60mm thick interlocking paving stones, concrete laid on and including 50mm thick stone dust filling	1582	m2	5,500.00	8,701,000 8,701,000.00
<u><i>Precast Concrete Kerbs</i></u>					
E	Provide precast concrete grade 20 kerbs, apply primer and two coats of special paint on exposed faces, bedded, jointed and pointed with cement mortar (1:3) haunched up front, size 450x200mm thick, on 50mm thick concrete blinding including all necessary excavation, disposal	236	m	1,950.00	932,200.00
F	Ditto; but curved to various radii	17	m	4,050.00	69,250.00
TO SUMMARY				N	10,620,935.00

<u>ELEMENT NR.19 PEDESTRIAN WALKWAY</u>					
	<i>Site preparation</i>				
A	Clear site of bushes, weeds, grass and undergrowths, grub up all roots and dispose	576	m ²	225.00	159,400.00
	<i>Excavation</i>				
B	Topsoil for preservation; average depth 150mm	576	m ²	240.00	120,960.00
	<i>Disposal of excavated material:</i>				
C	Remove surplus excavated material from site	144	m ³	425.00	61,700.00
	<i>Interlocking paving Stones:</i>				
D	45mm thick interlocking paving stones, concrete laid on and including 50mm thick stone dust filling	576	m ²	3,250.00	2,217,600.00
	<i>Precast Concrete Kerbs</i>				
E	Kerbs; precast concrete grade 20; exposed faces; bedded, jointed and pointed with cement mortar (1:3), haunched up at front size 350x100mm	412	m	3,450.00	1,427,420.00
F	Ditto; but curved to various radii	25	m	4,200.00	105,000.00
TO SUMMARY				N	4,790,560.00

<u>ELEMENT NR.20 LANDSCAPING (ALL PROVISIONAL)</u>						
A	<u>Excavation</u> Topsoil for preservation; average depth 150mm	242	m ²	275.00	66,550.00	
B	<u>Disposal of excavated material:</u> Spread on site	61	m ³	135.00	7,625.00	
C	<u>Soiling and Cultivating:</u> Filling; oversite thickness not exceeding 0.25m; manured soil obtained off site; spread and level to 75mm thick; and prepare for planting (measured separately)	242	m ²	60.00	15,720.00	
D	<u>Planting:</u> "Bahama" grass in turfs not more than 75mm in any direction well watered and maintained until properly established and evenly covered with health growth and leave in healthy condition on completion	242	m ²	740.00	227,480.00	
E	Herbaceous, yellow bush dwarf azura plants; rose flower or other approved; not exceeding 0.20m high; 10nx/m ²	242	m ²	250.00	121,500.00	
F	<u>Planting of Shading Trees</u> Masquerade trees or other approved; well watered and maintained until properly established and evenly covered with health growth and leave in healthy condition on completion	16	nr	12,500.00	200,000.00	
G	Eucaritus wind breaker; or other equal approved; well watered and maintained until properly established and evenly covered with health growth and leave in healthy condition on completion	10	nr	12,400.00	124,000.00	
H	<u>Water Sprinklers and reinforced hose (provisional)</u> Supply and install unic or equal approved whirling impact rotating sprinklers with connector for watering of landscaped areas comprising; 3 arm sprinkler brass head with spraying diameter of 27m	5	nr	15,400.00	72,000.00	
J	Supply and install 13mm diameter reinforced water hose connected to water sprinklers (measured separately) to cover all the landscaped areas	280	m	450.00	210,000.00	
<u>TO SUMMARY</u>						N 1,231,455.00

SUMMARY		
ELEMENT	PAGE NR.	TOTAL
ELEMENT NR. 1 SUBSTRUCTURE	PAGE 2/3	75,617, 236.00
ELEMENT NR. 2 FRAME	PAGE 2/4	90,100, 230 =
ELEMENT NR. 3 UPPER FLOOR	PAGE 2/5	36, 286, 192.00
ELEMENT NR. 4 STAIRCASES	PAGE 2/7	10, 443, 212.50
ELEMENT NR. 5 ROOF	PAGE 2/10	57, 987, 844.00 ✓
ELEMENT NR. 6 EXTERNAL AND INTERNAL	PAGE 2/11	29, 135, 530.67
ELEMENT NR. 7 DOORS	PAGE 2/12	15, 960, 470.00
ELEMENT NR. 8 WINDOWS	PAGE 2/13	11, 765, 120.67 ✓
ELEMENT NR. 9 WALL FINISHES	PAGE 2/14	13, 362, 961.00
ELEMENT NR. 10 FLOOR FINISHES	PAGE 2/15	12, 774, 310.00
ELEMENT NR. 11 CEILING FINISHES	PAGE 2/16	9, 422, 292.00
ELEMENT NR. 12 PAINTING AND DECORATING	PAGE 2/17	6, 637, 025.00
ELEMENT NR. 13 PLUMBING AND MECHANICAL INSTALLATIONS	PAGE 2/25	21, 664, 814.67
ELEMENT NR. 14 ELECTRICAL	PAGE 2/29	17, 602, 980.00
ELEMENT NR. 15 STORM WATER DRAINAGE	PAGE 2/30	3, 015, 577.00
ELEMENT NR. 16 DRAINAGE BELOW GROUND	PAGE 2/32	2, 622, 700.00
ELEMENT NR. 17 FITTINGS	PAGE 2/35	8, 125, 015.00
ELEMENT NR. 18 DRIVES AND PARKINGS	PAGE 2/36	10, 620, 775.00
ELEMENT NR. 19 PEDESTRIAN WALKWAY	PAGE 2/37	4, 290, 560.00
ELEMENT NR. 20 LANDSCAPING (ALL PROVISIONAL)	PAGE 2/38	1, 231, 453.00
TO GENERAL SUMMARY	N	365, 977, 422.00

A
 365, 983, 733.19
 365, 983, 733.19

GENERAL SUMMARY

BILL NR.	ITEM	PAGE NR.	TOTAL (=N=)
1	PRELIMINARIES AND GENERAL CLAUSES		7,500,000.00
2	INTERNATIONAL STUDENTS' HOSTEL	PAGE 2/39	365,893,723.19
3	<u>CONTINGENCIES:</u> ALLOW A PROVISIONAL SUM OF N 2,000,000.00 FOR THE CONTINGENCIES TO BE EXPENDED AS DIRECTED		365,883,733.19 2,000,000.00
	SUB-TOTAL		375,383,733.19
5	VALUE ADDED TAX (VAT)	7.5%	375,383,733.19 28,153,179.99 31,134,512.00
	TOTAL CONTRACT SUM		N 403,537,513.18

COMPLETION PERIOD:

Within 4 Weeks of officially taking possession of Site. 4/5

Signed for and on behalf of:

SEAGULL ENGINEERING
LIMITED

Dated this 22 day of December

2022